UNIVERSITI TEKNOLOGI MARA

PERCEPTION AND MOTIVATION ON PLANT-BASED MEAT PRODUCT CONSUMPTION PATTERNS AMONG YOUTHS IN TERTIARY INSTITUTIONS IN MALAYSIA

MUHAMMAD FAIZ BIN SAEDUN

MSc

August 2026

UNIVERSITI TEKNOLOGI MARA

PERCEPTION AND MOTIVATION ON PLANT-BASED MEAT PRODUCT CONSUMPTION PATTERNS AMONG YOUTHS IN TERTIARY INSTITUTIONS IN MALAYSIA

MUHAMMAD FAIZ BIN SAEDUN

Thesis submitted in fulfilment
of the requirements for the degree of
Master of Science
(Foodservice Management)

Faculty of Hotel and Tourism Management

August 2026

CONFIRMATION BY PANEL OF EXAMINERS

I certify that a Panel of Examiners has met on 17 April 2026 to conduct the final examination of Muhammad Faiz bin Saedun on his Master of Science thesis entitled "Perception and Motivation on Plant-Based Meat Product Consumption Patterns Among Youths in Tertiary Institutions in Malaysia" in accordance with Universiti Teknologi MARA Act 1976 (Akta 173). The Panel of Examiners recommends that the student be awarded the relevant degree. The Panel of Examiners was as follows:

Arni Abdul Gani, PhD
Associate Professor
Faculty of Hotel & Tourism Management
Universiti Teknologi MARA
(Chairman)

Lovelyna Benedict Jipiu, PhD
Senior Lecturer
Faculty of Hotel & Tourism Management
Universiti Teknologi MARA
(Internal Examiner)

Juliana Anak Langgat, PhD
Senior Lecturer
Faculty of Business, Economics and Accountancy
Universiti Malaysia Sabah
(External Examiner)

PROFESSOR DR HJH ZURAEDA IBRAHIM
Dean
Institute of Postgraduate Studies
Universiti Teknologi MARA

Date: 14 August 2026

AUTHOR'S DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Postgraduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

Name of Student	:	Muhammad Faiz bin Saedun
Student I.D. No.	:	2024929767
Programme	:	Master of Science (Foodservice Management) – HM752
Faculty	:	Hotel and Tourism Management
Thesis Title	:	Perception and Motivation on Plant-Based Meat Product Consumption Patterns Among Youths in Tertiary Institutions in Malaysia
Signature of Student	:	
Date	:	August 2026

ABSTRACT

The global food sector is experiencing a transition influenced by health, sustainability, and ethical concerns. Consequently, plant-based meat products have arisen as a viable alternative, providing customers with a protein source that resembles meat. Despite global research emphasising the health, ethical, and environmental advantages of plant-based diets, there has been insufficient focus on the perceptions of Malaysian youths regarding these items within their cultural and social context. Addressing this deficiency is crucial, since youth significantly impact the development of future food habits that affect both public health and sustainability. This study explored the perceptions, motivations, and consumption patterns of Malaysian youth about plant-based meat products, emphasising aspects that promote or hinder acceptance. A qualitative study approach was employed, including nineteen informers aged 19 to 29 years selected from various public and private institutions and colleges around Malaysia. Face-to-face and online interviews were performed use semi-structured questions, and the results were thematically processed with Atlas.ti. The findings indicate that although youths acknowledge the health, sustainability, and ethical benefits of plant-based meat products, apprehensions remain concerning high costs, limited accessibility, and unsatisfactory taste or texture imitation. Cultural, religious, peer, and family influences also affected perceptions of these products. Curiosity, health awareness, and sustainability issues prompted the original trial. Nonetheless, cost and sensory satisfaction were ultimately pivotal in influencing habitual consumption. This study theoretically enhances the understanding of consumer decision-making processes regarding food choices by elucidating the motivations and perceptions of Malaysian youth towards plant-based meat products, while also advancing the application of the Theory of Planned Behaviour (TPB) in the context of plant-based meat consumption. The findings provide valuable consumer insights that can assist manufacturers, marketers, and policymakers in formulating targeted marketing strategies, innovative products, and public health initiatives that resonate with youth values and encourage healthier, more sustainable dietary choices. This research enhances academic understanding and practical approaches by elucidating the viewpoints of Malaysian youths, thereby promoting healthier, more ethical, and environmentally sustainable food systems.

Keywords: Plant-Based Meat Products, Perception, Motivation, Malaysian Youth, Tertiary Institutions, Theory of Planned Behaviour

ACKNOWLEDGEMENT

In the name of Allah, the Most Gracious, the Most Merciful.

First and foremost, I would like to express my heartfelt gratitude to Allah SWT for granting me the strength, patience, and determination to complete this thesis. Without His endless blessings and guidance, none of this would have been possible.

I would like to extend my deepest appreciation to my supervisor, Dr. Rosmaliza binti Muhammad, for her invaluable support, encouragement, and guidance throughout the research process. She provided constructive feedback, useful materials, and personal attention that greatly contributed to the completion of this work.

I am forever grateful to my beloved parents, Saedun bin Ab Samad and
for their unconditional love, sacrifices, and constant prayers. Your unwavering support has been the foundation of my journey. I also wish to express my sincere appreciation to my family members: Muhammad Shahrul Ridhwan bin Saedun, Muhammad Shahrul Ashraf bin Saedun, and Nurul Ain binti Ab Rahim, whose encouragement and belief in me have been a constant source of motivation.

To my dear friends, thank you for your continued support, motivation, and assistance during this process. Your help and encouragement, especially during difficult times, meant a great deal to me.

In addition, this research is funded through the research grant obtained from Fundamental Research Grant Scheme (FRGS), (Grant No: 600-RMC/FRGS 5/3 (050/2023).

Lastly, I am thankful to Universiti Teknologi MARA (UiTM) for the opportunity to pursue my studies and for providing a conducive environment for academic and personal growth.

Alhamdulillah.

TABLE OF CONTENTS

		page
CONFIRMATION BY PANEL OF EXAMINERS		**ii**
AUTHOR'S DECLARATION		**iii**
ABSTRACT		**iv**
ACKNOWLEDGEMENT		**v**
TABLE OF CONTENTS		**vi**
LIST OF TABLES		**xi**
LIST OF FIGURES		**xii**
LIST OF ABBREVIATIONS		**xiii**
CHAPTER 1 INTRODUCTION		**1**
1.1	Introduction	1
1.2	Research Background	1
1.3	Problem Statement	5
1.4	Research Objectives	7
1.5	Research Questions	8
1.6	Scope of Study	8
1.7	Limitation of the Study	9
1.8	Significance of the Study	11
	1.8.1 Practical	11
	1.8.2 Theoretical	11
1.9	Definition of Key Terms	12
1.10	Summary	14
CHAPTER 2 LITERATURE REVIEW		**15**
2.1	Introduction	15
2.2	Plant-Based Meat Products	15
2.3	The Factors of the Plant-Based Meat Products Consumption	17

2.4 Perception of Plant-Based Meat Products 20
2.4.1 Sensory Attributes 21
2.4.2 Nutritional Profiles 23
2.4.3 Social Norms 24
2.4.4 Consumer Attitudes 25
2.5 Motivation of Plant-Based Meat Products 27
2.5.1 Animal Welfare 29
2.5.2 Health Concerns 30
2.5.3 Environmental Concerns 31
2.5.4 Ethical Considerations 33
2.5.5 Sensory Attributes 34
2.6 Consumption Patterns of Plant-Based Meat Products Among Youth 35
2.7 Barriers to Plant-Based Meat Products Consumption 37
2.8 Theory of Planned Behaviour 39
2.9 Research Framework 41
2.10 Summary 42

CHAPTER 3 RESEARCH METHODOLOGY 43
3.1 Introduction 43
3.2 Qualitative Research Approach 43
3.3 Sample and Population for Qualitative Research Approach 44
3.4 Research Instrument Design for Qualitative Research 46
3.5 Pilot Study 48
3.6 Procedure of Data Collection for Qualitative Approach 48
3.7 Procedure of Data Analysis for Qualitative Research 49
3.8 Trustworthiness and Credibility 50
3.9 Summary 51

CHAPTER 4 FINDINGS AND ANALYSIS 53
4.1 Introduction 53
4.2 Contemplation Concerning the Method of Analysis 53
4.3 Informer's Profile 55

4.4 Perceptions of Plant-Based Meat Products Among Youths in Tertiary Institutions in Malaysia 60
4.4.1 Understanding of Plant-Based Meat 60
4.4.2 Advantages and Disadvantages of Plant-Based Meat Products 69
4.4.3 Nutritional Value of Plant-Based Meat Products 77
4.4.4 Overall Perception and Flavour 84
4.4.5 Factors Influencing Perception 89
4.4.6 Cultural and Religious Influences 94
4.4.7 Summary on Perceptions of Plant-Based Meat Products 101
4.5 Motivations of Plant-Based Meat Products Among Youths in Tertiary Institutions in Malaysia 105
4.5.1 Motivation to Purchase Plant-Based Meat Products 105
4.5.2 Motivation to Purchase Plant-Based Meat Products Considering Environmental Concerns 112
4.5.3 Perceived Benefits of Purchasing Plant-Based Meat Products 119
4.5.4 Motivation to Try or Consume Plant-Based Meat Products 126
4.5.5 Ethical and Animal Welfare Concerns When Choosing Plant-Based Meat Products 132
4.5.6 Influence of Social Circle on Willingness to Consume Plant-Based Meat Products 137
4.5.7 Summary of Motivations for Plant-Based Meat Products 143
4.6 Consumption Patterns of Plant-Based Meat Products Among Youths in Tertiary Institutions in Malaysia 146
4.6.1 Consumption Experience and Context 146
4.6.2 Barriers to Consuming Plant-Based Meat Products 154
4.6.3 Willingness to Increase Consumption of Plant-Based Meat Products 159
4.6.4 Summary on Consumption Patterns of Plant-Based Meat Products 165
4.7 Impact of Consuming Plant-Based Meat Products Among Youths in Tertiary Institutions in Malaysia 167
4.7.1 Impact of Consuming Plant-Based Meat Products on Nature and the Environment 168

4.7.2 Impact of Consuming Plant-Based Meat Products on Public Health 172
4.7.3 Impact of Consuming Plant-Based Meat Products on Animals 177
4.7.4 Summary on the Impact of Consuming Plant-Based Meat Products 182
4.8 Summary 184

CHAPTER 5 DISCUSSION 185
5.1 Introduction 185
5.2 Perception of Plant-Based Meat Products Among Malaysian Youths 185
5.2.1 Understanding of Plant-Based Meat 186
5.2.2 Advantages and Disadvantages of Plant-Based Meat Products 188
5.2.3 Nutritional Value of Plant-Based Meat Products 190
5.2.4 Overall Perception and Flavour 192
5.2.5 Factors Influencing Perception 194
5.2.6 Cultural and Religious Influences 196
5.2.7 Summary of Discussion on Perception of Plant-Based Meat Products 198
5.3 Motivation of Plant-Based Meat Products Among Malaysian Youths 199
5.3.1 Opinions and Feelings About Purchasing Plant-Based Meat Products 199
5.3.2 Importance of Purchasing Plant-Based Meat Products Considering Environmental Concerns 201
5.3.3 Perceived Benefits of Purchasing Plant-Based Meat Products 203
5.3.4 Motivation to Try or Consume Plant-Based Meat Products 205
5.3.5 Ethical and Animal Welfare Concerns When Choosing Plant-Based Meat Products 207
5.3.6 Influence of Social Circle on Willingness to Consume Plant-Based Meat Products 209
5.3.7 Summary on Discussion on Motivation of Plant-Based Meat Products 211
5.4 Consumption Patterns of Plant-Based Meat Products Among Malaysian Youths 213
5.4.1 Consumption Patterns and Attitudes 213

5.4.2 Barriers to Frequent Consumption 215
5.4.3 Willingness to Increase Consumption 217
5.4.4 Summary of Discussion on Consumption Patterns of Plant-Based Meat Products 218
5.5 Impact of the Consumption of Plant-Based Meat Products Among Malaysian Youth 220
5.5.1 Impact on Nature and the Environment 220
5.5.2 Impact on Public Health 222
5.5.3 Impact on Animals 224
5.5.4 Summary of Discussion on Impact of the Consumption of Plant-Based Meat Products Among Malaysian Youth 227
5.6 Summary 229

CHAPTER 6 CONCLUSIONS AND RECOMMENDATIONS 230
6.1 Introduction 230
6.2 Recapitulation of Findings of the Study 230
6.3 Discussion and Implications of the Study 232
6.4 Limitations and Suggestions for Future Research 235
6.5 Summary 239
REFERENCES 241
APPENDICES 266
AUTHOR'S PROFILE 271

LIST OF TABLES

Tables	Title	Page
Table 2.1	Approximate Retail Prices of Plant-Based Meat Alternatives in the Malaysian Market	18
Table 3.1	Phases of Thematic Analysis Following Braun and Clarke	49
Table 4.1	Informer's Profile	56
Table 4.2	Summary of Data Interpretation on Perceptions of Plant-based Meat Products	102
Table 4.3	Summary of Data Interpretation on the Motivations for Plant-based Meat Products	143
Table 4.4	Summary Data Interpretation of Consumption Patterns of Plant-based Meat Products	165
Table 4.5	Summary of Data Interpretation on the Impact of Consuming Plant-based Meat Products	182

LIST OF FIGURES

Figures	Title	Page
Figure 2.1	The Model of the Theory of Planned Behaviour	39
Figure 2.2	The Research Framework for this Study	41

LIST OF ABBREVIATIONS

Abbreviations

CVD	Cardiovascular Disease
JAKIM	Department of Islamic Development Malaysia
FREC	Faculty Ethics Review Committee
IIUM	International Islamic University Malaysia
NHMS	National Health and Morbidity Survey
PBC	Perceived Behavioural Control
TPB	Theory of Planned Behaviour
UK	United Kingdom
USA	United States of America
UKM	Universiti Kebangsaan Malaysia
UMPSA	Universiti Malaysia Pahang Al-Sultan Abdullah
UMS	Universiti Malaysia Sabah
UiTM	Universiti Teknologi MARA
UTHM	Universiti Tun Hussein Onn Malaysia
UM	University of Malaya
UTS	University of Technology Sarawak
WHO	World Health Organisation

CHAPTER 1
INTRODUCTION

1.1 Introduction

The introduction provides the context for exploring the perceptions and motivations behind the consumption of plant-based meat products among youths in Malaysia. It summarises the worldwide trend towards plant-based diets and alternative protein sources, emphasising the growing fascination with sustainable and ethical food options. The chapter provides an overview of the study background, highlighting the importance of comprehending the preferences and behaviours of youths towards plant-based meat products, specifically concerning environmental sustainability and public health. Moreover, it provides the research objectives, questions, and the practical and theoretical importance of the study, intending to add to the discussion on sustainable food practices and consumer behaviour, specifically in the Malaysian context.

1.2 Research Background

A plant-based diet emphasises foods derived from plants, including vegetables, whole grains, legumes, nuts, and seeds. Plant-based meat, commonly referred to as vegetarian or plant meat, is a food product solely made from plant-based proteins sourced from peas, wheat, and soybeans. It sometimes includes compounds and additives, such as flavourings and colourants, to replicate the texture, taste, and overall appearance of traditional meat products (Dai et al., 2022; Wang et al., 2022; Szejda et al., 2021). This dietary regimen is gaining global popularity due to its multiple associated health benefits, including enhanced weight management and a reduced risk of chronic diseases (Gupta et al., 2022).

Youths are increasingly adopting plant-based diets, driven by heightened understanding of its health, environmental, and ethical implications. The World Health Organization (WHO) defines this group as individuals aged 15 to 24, who are frequently more open to dietary modifications that align with their personal values (World Health

Organization, 2021). The National Youth Development Policy defines Malaysian youth as those aged 15 to 40 (Faizah, 2007). Research indicates that youths are significantly affected by issues related to personal health, animal welfare, and environmental effects of animal agriculture, perceiving plant-based diets as an effective means to aid in climate change mitigation (Raptou et al., 2024; Bassaganya-Riera et al., 2021). The emergence of digital and social media influences this transition, framing plant-based diets as both a nutritional choice and a manifestation of youth identity and culture in different societies.

A primary driver for this transformation is the growing prevalence of plant-based meat substitutes and highly processed food products (Ohlau et al., 2022). Moreover, ethical issues linked to cow production generate concerns about individual wellbeing and environmental sustainability (Shriver, 2024).

A study in Malaysia revealed that younger urban individuals favour chicken, eggs, and dairy, while the consumption of red meat has significantly declined (Khusun et al., 2022). This trend corresponds with studies from other Asian nations, where over 60% of young consumers in Japan and China hold favourable views towards alternative meats, indicating an increasing acceptance of plant-based diets (Huang et al., 2023). Key causes for this transition among Malaysian youth encompass health considerations, as many cite health benefits as a principal factor for decreasing meat intake (Lentz et al., 2018). Environmental sustainability significantly influences plant-based meat consumption, as a study among Beijing consumers revealed that approximately 65% expressed a greater likelihood to purchase plant-based meats when made aware of their reduced environmental impact, illustrating a wider trend of environmental consciousness among young consumers in Asia (Wang et al., 2022).

Social influences markedly alter dietary choices, with about 75% of young adults in a United Kingdom (UK) survey indicating that their peers' eating behaviours influence their consumption of plant-based meals (Sharps et al., 2023). The market for plant-based alternatives is expanding swiftly, as demonstrated by more than 6,485 new product releases worldwide since 2015, indicating a transition towards mainstream adoption (Ihsan et al., 2024). Moreover, there is a rising consciousness of the ethical implications of meat consumption, as an increasing number of youths express worries about animal welfare (Safdar et al., 2022; Boukid, 2020).

Consuming significant amounts of meat, especially red and processed meat, is associated with several health risks including obesity, Type 2 diabetes, cardiovascular

disease (CVD), and cancer (Muschalik et al., 2020; Profeta et al., 2020). Conversely, by decreasing meat consumption and substituting it with plant-based meat alternatives, individuals may achieve numerous health benefits. This encompassed a reduction in saturated fat consumption, an elevation in the intake of fruits and vegetables, and a decreased probability of developing chronic diseases (Bianchi et al., 2022; Erhardt et al., 2021; C. Bryant, 2019). Accepting a predominantly plant-based diet that incorporates a diverse array of vegetables, fruits, whole grains, legumes, and nuts, while reducing the intake of red and processed meats, is broadly recognised as an essential strategy to address critical health and sustainability challenge (Wolstenholme et al., 2020).

Globally, rising incomes and population expansion have heightened the demand for red meat, raising significant worries regarding its health and environmental implications, especially its links to cancer and CVD (Ambedkar, 2023; Azizi, 2020). The environmental implications of extensive meat production, encompassing waste management and biodiversity loss, underscore the urgent necessity for more sustainable food consumption practices (Ambedkar, 2023).

Scholars have emphasised the need to reevaluate existing consumption patterns, as the discourse around meat consumption encompasses health, environmental, and ethical aspects (Ambedkar, 2023; Azizi, 2020). A growing contingent of consumers is choosing plant-based dietary options, motivated by environmental considerations and changing dietary preferences. (Bunge et al., 2024; Bochkarev, 2023).

Concerns over health, animal welfare, and environmental sustainability have driven the expansion of plant-based meat alternatives, resulting in a diverse array of products available globally (Andreani et al., 2023; Rizzolo-Brime et al., 2023). These alternatives, typically classified as ultra-processed foods, employ plant-based ingredients to replicate the taste and texture of conventional meat (Moonaisur et al., 2024; Estell et al., 2021). Concerns have been expressed about the heavily processed characteristics of these products, with some researchers questioning the health benefits of plant-based meat alternatives compared to conventional meat, especially regarding sodium levels, additives, and overall nutritional quality (Rizzolo-Brime et al., 2023). Manufacturers can create plant-derived meat alternatives that closely resemble animal-based products in texture, flavour, and appearance through advanced processing methods such as fermentation, extrusion, and spinning (Boukid et al., 2023; Ning et al., 2023; Wang et al., 2023).

Globally, consumers are increasingly favouring plant-based meat, mostly due to health, sustainability, and animal welfare concerns (Andreani et al., 2023). Studies indicate that favourable customer perceptions of plant-based meat correlate with a propensity to buy these alternatives (Ma et al., 2022). Countries display varying levels of acceptance for plant-based meat, with China and India showing greater adoption rates than the United States of America (USA) (Thavamani et al., 2020). The perception of plant-based meat is influenced by multiple factors, including health concerns, environmental awareness, and the sensory appeal of these products (Circus et al., 2019).

In Malaysia, vegetarianism and veganism are gaining popularity, illustrating a fusion of tradition and innovation in dietary habits (Cerami, 2023; Mohd Azman et al., 2023). Sustainable eating is increasingly popular and expanding from urban to rural regions (Gao et al., 2023). Malaysian youth select their food based on health considerations, cultural practices, and environmental awareness (Mukanu et al., 2022). Nonetheless, cultural affinity for meat persists as a substantial obstacle. In Malaysia, meat consumption is tightly knit into social, religious, and cultural norms, rendering the shift to plant-based alternatives especially difficult for certain segments of the youth demographic (Drewnowski et al., 2020). The prevalence of meat-centric diets has underscored health concerns, highlighting the importance of promoting plant-based alternatives (Mohd Azman et al., 2023). Unhealthy dietary practices, particularly the overconsumption of meat and animal-based products, correlate with a rise in chronic diseases in Malaysia, including CVD and diabetes. In Malaysia, the prevalence of non-communicable diseases associated with poor dietary practices is significant. The National Health and Morbidity Survey (NHMS) 2023 reports that the prevalence of diabetes among Malaysian adults has risen to 15.6%, up from 11.2% in 2011, while CVD accounts for 67% of premature deaths in the nation (Mat Rifin et al., 2025). These statistics highlight the necessity of modifying dietary habits, especially the elevated intake of red meat and processed foods, which are recognised risk factors for both conditions (Iqbal et al., 2020; Boonchooduang et al., 2019). CVD are compounded by elevated saturated fat intake from red meat and processed foods, a significant issue in Malaysia, where CVD has accounted for 73% of non-communicable disease mortality in the past decade (Boonchooduang et al., 2019; Karupaiah et al., 2019). Additionally, obesity is a significant concern, often associated with high meat consumption and inadequate fruit and vegetable intake, leading to metabolic syndrome and Type 2

diabetes (Iqbal et al., 2020). This underscores the necessity of adopting plant-based diets to mitigate these risks.

Despite the increasing evidence favouring plant-based diets, various limitations and disputed findings require recognition. Concerns about the nutritional sufficiency of plant-based diets, especially regarding protein quality, vitamin B12, iron, and omega-3 fatty acids, persist as a topic of continuous discussion (Neufingerl et al., 2022). Moreover, scepticism regarding heavily processed plant-based meat alternatives remains among certain consumers, who doubt whether these products constitute a truly healthier or more sustainable choice in comparison to whole food plant-based diets (Bogueva et al., 2023). Consequently, it is crucial to comprehend how Malaysian youth perceive and interact with plant-based meat alternatives. Research indicates that acceptance, purchase intentions, and consumption are significantly affected by key attributes such as flavour, texture, and nutritional value (Profeta et al., 2020). It is important to acknowledge that these preferences are influenced by cultural, religious, and socioeconomic factors that are particularly significant in the Malaysian context (Abu Bakar et al., 2023).

In conclusion, comprehending the motivations and perceptions of Malaysian youth regarding plant-based meat alternatives is crucial for promoting informed dietary decisions that enhance sustainability and health. Although adopting plant-based diets may reduce the risk of chronic diseases associated with high meat consumption (Mohd Azman et al., 2023), the intricacies of dietary transition must not be overlooked, as cultural, economic, and sensory influences persist in shaping the consumption patterns of Malaysian youth. Moreover, flavour, texture, and nutritional composition significantly affect consumer acceptance and purchasing intentions (Profeta et al., 2020). Malaysian youth can be empowered to make dietary choices that reflect health, environmental, and ethical considerations through enhanced access to information and education regarding plant-based meat alternatives, thereby contributing to a wider movement towards sustainable eating practices.

1.3 Problem Statement

The worldwide transition to plant-based diets has significantly accelerated in recent years, propelled by increasing awareness of health, environmental, and ethical

issues related to traditional meat consumption (Andreani et al., 2023; Graça et al., 2019). In Malaysia, this transition is especially urgent due to the increasing prevalence of non-communicable diseases associated with meat-centric dietary practices. The NHMS 2023 indicates that the prevalence of diabetes among Malaysian adults is 15.6%, while CVD accounts for 67% of premature deaths in the nation (Mat Rifin et al., 2025). Despite the presence of plant-based meat alternatives in the Malaysian market, their adoption among youth is constrained, and the determinants influencing their perceptions and motivations regarding these products remain inadequately comprehended.

The adoption of plant-based meat products in Malaysia encounters multiple interrelated challenges, especially among the youth demographic. In Malaysia, meat consumption is tightly knit into social, religious, and cultural norms, rendering dietary transition difficult for numerous young Malaysians (Drewnowski et al., 2020). Plant-based meat alternatives are frequently priced higher than traditional meat products, creating a major challenge for young individuals with restricted purchasing power (Lee, 2023; Zhong et al., 2023). From a nutritional perspective, although plant-based diets provide health benefits, replacing red and processed meat with plant-based alternatives may lead to a diminished intake of essential micronutrients such as protein, zinc, and vitamin B12. Additionally, the bioavailability of iron in numerous plant-based products is often limited due to high phytate concentrations (Labba et al., 2022; Vatanparast et al., 2020). Moreover, many consumers lack adequate understanding of the nutritional characteristics of plant-based meat products compared to traditional meat, possibly hindering informed dietary choices (Wang et al., 2022; Luciano et al., 2019). Sensory expectations pose a challenge, as challenges in replicating the flavour, texture, and overall dining experience of traditional meat persistently impact consumer acceptance (Alcorta et al., 2021; Boukid, 2020). Although these barriers are present worldwide, affordability and limited awareness are likely to be more pronounced in Malaysia, where plant-based products are at least twice as costly as conventional meat and are less accessible outside major urban areas (Lou et al., 2024).

Despite increasing academic interest in plant-based meat alternatives, current research is primarily quantitative and predominantly focused on Western or East Asian consumer demographics (dos Santos et al., 2024; He et al., 2020). There has been insufficient scholarly focus on the lived experiences and perspectives of Malaysian youth, indicating a significant gap in the current body of knowledge. Quantitative

methods, although effective in assessing trends and intentions, fail to adequately capture the complex cultural, social, and personal motivations influencing dietary behaviour among Malaysians youth. A qualitative approach is essential for examining the perceptions, motivations, and consumption patterns that inform youth engagement with plant-based meat products, as qualitative methods effectively reveal the personal, social, and cultural dimensions of dietary behaviour among young individuals (McInnes et al., 2023). Addressing this gap is crucial for comprehending the determinants of plant-based meat consumption among Malaysian youth, while also fostering health and advocating for sustainable food choices (Luciano et al., 2019). In the absence of such comprehension, initiatives by manufacturers, marketers, and policymakers to advocate for plant-based alternatives among Malaysian youth may be inconsistent with the values, concerns, and realities of this demographic. This study seeks to fill this gap by qualitatively examining the perceptions and motivations of Malaysian youths in tertiary institutions regarding the consumption of plant-based meat products, aiming to generate insights that can guide culturally relevant and effective strategies for promoting sustainable dietary transitions in Malaysia.

1.4 Research Objectives

This study qualitatively investigates the consumption of plant-based meat products among youth in Malaysia. The following objective supports the main objective:

a) To explore the influence of perception on plant-based meat product consumption among youths in tertiary institutions in Malaysia.
b) To explore the influence of motivation on plant-based meat product consumption among youths in tertiary institutions in Malaysia.
c) To explore the consumption patterns and contexts of plant-based meat products among youths in tertiary institutions in Malaysia.

1.5 Research Questions

In supporting the objectives and direction for this study, the following research question have been formulated:

1) How does the perception influence plant-based meat product consumption among youths in tertiary institutions in Malaysia?
2) How does the motivation influence plant-based meat product consumption among youths in tertiary institutions in Malaysia?
3) In what ways do Malaysian youths in tertiary institutions engage with plant-based meat products in their dietary practices?

1.6 Scope of Study

This study aims to explore the perceptions and motivations influencing the consumption of plant-based meat products among Malaysian youths, focusing on students in tertiary institutions across the country. The study focuses on specific public and private universities and colleges situated in urban and semi-urban regions of Peninsular and East Malaysia. Urban institutions include University of Malaya (UM) in Kuala Lumpur, UNITAR International University and Lincoln University College in Petaling Jaya, Sunway College in Subang Jaya, Universiti Teknologi MARA (UiTM) in Shah Alam, Universiti Kebangsaan Malaysia (UKM) in Bandar Baru Bangi, and International Islamic University Malaysia (IIUM) in Kuantan. Semi-urban institutions include Universiti Teknologi MARA (UiTM) in Puncak Alam, Universiti Tun Hussein Onn Malaysia (UTHM) in Batu Pahat, Universiti Malaysia Pahang Al-Sultan Abdullah (UMPSA) in Pekan, Universiti Teknologi MARA (UiTM) in Permatang Pauh, University of Technology Sarawak (UTS) in Sibu, and Universiti Malaysia Sabah (UMS) in Kota Kinabalu. Rural institutions are intentionally excluded from this study due to the restricted commercial availability of plant-based meat products in these areas, rendering a substantive examination of youth consumption patterns and perceptions impractical. The demographic scope follows to the National Youth Development Policy's definition of Malaysian youth, encompassing individuals aged 15 to 40. Nonetheless, it is operationally specific to students enrolled in tertiary institutions, as

this demographic is more inclined to engage in independent dietary decision-making, possesses heightened exposure to global food trends and digital media, and has access to plant-based products in urban and semi-urban campus settings.

The study examines two fundamental dimensions. The initial aspect is perception, encompassing sensory expectations such as flavour, texture, appearance, health beliefs about the nutritional value of plant-based meat compared to conventional meat, environmental awareness, ethical considerations, and cultural alignment. The second factor is motivation, encompassing health as a behavioural drive for consumption choices, environmental sustainability, animal welfare, social and peer influence, affordability, and product accessibility. Health is addressed separately in both dimensions, as a belief within perception and as a behavioural motivator within motivation, to maintain analytical clarity. The product scope encompasses commercially available processed plant-based meat alternatives, including burgers, nuggets, sausages, and minced plant "meat," specifically engineered to imitate traditional meat. This excludes plant-based diets and conventional animal-free meals.

The research employs a qualitative methodology, utilising face-to-face online interviews to obtain nuanced and subjective insights into youth decision-making processes, attitudes, and lived experiences. Informers were chosen through purposive sampling to ensure diverse representation across institutions, backgrounds, and degrees of familiarity with plant-based meat products. By sustaining this concentrated scope, the study seeks to produce significant and contextually relevant findings that guide industry practices, policy interventions, and educational initiatives designed for the Malaysian youth market.

1.7 Limitation of the Study

This study offers significant insights into the determinants influencing plant-based meat product consumption among Malaysian youths, yet several limitations should be recognised. The limitations are addressed in five primary areas: geographical, methodological, conceptual, market dynamics, and cultural and religious factors.

The emphasis on tertiary institutions in urban and semi-urban areas may not accurately represent the views of youths in rural or underdeveloped regions, where access to plant-based meat products and engagement with sustainability discussions

may vary significantly. The exclusion was a calculated and practical choice, as plant-based meat products have restricted commercial availability in rural regions, rendering significant analysis of consumption patterns impractical in those environments.

Methodologically, this qualitative study utilises purposive sampling, resulting in findings derived from a limited, non-random sample of nineteen informers, thereby constraining generalisability to the wider Malaysian youth demographic encompassing various socioeconomic, ethnic, and religious groups. The dependence on self-reported data creates the potential for social desirability bias, wherein informers may exaggerate their motivations or consumption behaviours to align with perceived societal norms regarding health consciousness or environmental responsibility. These are inherent attributes of qualitative research design and are not detracted from the depth and richness of the insights produced.

The study specifically concentrates on commercially processed plant-based meat alternatives, intentionally excluding whole-food vegetarian diets and conventional meat-free meals. This was a deliberate scope decision rather than a deficiency, as the study specifically focuses on a unique and underexamined product category. The study does not evaluate the actual nutritional or health outcomes of plant-based meat consumption, concentrating instead on perceptions and motivations, as physiological factors are beyond the study's conceptual scope.

The plant-based food market in Malaysia is rapidly evolving, characterised by new products, fluctuating prices, and increasing consumer awareness. Therefore, the findings may possess a restricted duration of relevance and may necessitate future re-evaluation as market conditions evolve.

Cultural and religious influences, including Halal certification for Muslim consumers and vegetarian practices among Hindu communities, are acknowledged as significant determinants of food choices. Although these dimensions are examined in the study, the qualitative design may inadequately encapsulate the intricacies of their interaction with dietary decision-making among all ethnic and religious groups in Malaysia.

Despite these limitations, this study significantly enhances the comprehension of Malaysian youth perspectives on plant-based meat products. Qualitative inquiry is especially effective at examining the intricate perceptions, motivations, and lived experiences that quantitative methods cannot adequately encompass. The findings establish a crucial basis for guiding product development, marketing strategies, public

health initiatives, and policies designed to encourage sustainable dietary transitions among Malaysian youth, while also paving the way for future research in this inadequately studied domain.

1.8 Significance of the Study

The results from this study will contribute to the significance in two aspects as below:

1.8.1 Practical

This study offers valuable consumer insights that can inform manufacturers and marketers about the attitudes and behaviours of Malaysian youth regarding plant-based meat products. By comprehending the determinants affecting the consumption of plant-based alternatives, businesses can formulate targeted marketing strategies and create innovative products that align with the interests of the younger generation. This research encourages healthier and more sustainable dietary choices among youth, potentially impacting public health initiatives and policies designed to enhance overall dietary patterns and mitigate the environmental effects of food consumption. The study identifies factors that facilitate or hinder the consumption of plant-based meat, elucidating potential market opportunities for the plant-based food industry and fostering the expansion and diversification of consumer food choices.

1.8.2 Theoretical

This study provides significant insights into consumer behaviour related to food consumption, enhancing the comprehension of the motivations and perceptions of youths towards plant-based meat products. This research enhances the understanding of decision-making processes concerning food selection by examining these factors. It enriches theoretical frameworks, including the Theory of Planned Behaviour (TPB), in relation to plant-based meat consumption. The study specifically expands the application of the TPB within the Malaysian youth context by correlating perception

with the attitude construct, illustrating how youth assess plant-based meat products. Additionally, motivation incorporates subjective norms and perceived behavioural control (PBC), encapsulating the social influences and practical obstacles that influence consumption intentions and behaviours. The findings extend beyond the TPB, contributing to wider academic discussions on sustainable consumption patterns, youth food identity, and the impact of cultural factors on dietary changes in developing economies. Furthermore, examining the consumption patterns of plant-based alternatives among youths enriches the comprehension of generational food preferences and trends, offering insights into the changing dietary habits of the youth. The findings also present opportunities for future research, such as comparative studies analysing differences between urban and rural youth, longitudinal studies monitoring shifts in perceptions over time, and cross-cultural studies investigating plant-based meat consumption in various Southeast Asian contexts.

1.9 Definition of Key Terms

Some of the terms used frequently in this study are defined in this section. The following are the definitions of important terms that served as a basic framework for this investigation:

Plant-Based Diet

A plant-based diet is a type of diet that focuses on consuming foods derived from plants, such as fruits, vegetables, grains, and legumes, with minimal or no consumption of animal products like meat, dairy, and eggs (Zhu, 2022; Zugravu et al., 2022; Cote, 2013).

Plant-Based Meat Substitutes

Products made from plants, such as grains, legumes, and vegetables, that are intended to resemble the flavour and texture of meat are known as plant-based meat substitutes, and they are frequently used in place of conventional meat products (Szenderák et al., 2022; Santo et al., 2020; Curtain et al., 2019).

Ultra-Processed Foods

Industrially processed foods may harm your health due to their chemicals and preservatives (Seltenrich, 2020).

Fermentation

This metabolic process involves the transformation of carbs into alcohol or organic acids by microbes such as yeast and bacteria (Kim et al., 2020).

Biodiversity Loss

Decline or disappearance of diverse species, ecosystems, and genetic variation due to human actions, including habitat destruction, pollution, and climate change (Solórzano-Kraemer et al., 2020).

Sustainable eating

A way of eating that supports health, the environment, and social duty by focusing on plant-based foods, cutting down on meat and dairy, lowering food waste, and encouraging local and seasonal food supply (Zor et al., 2024; Carfora et al., 2021; Niva et al., 2019; Macdiarmid, 2014).

Environmental sustainability

Environmental sustainability encompasses integrating human activities with ecological interdependence, acting as a primary objective for environmental management (Morelli, 2011).

Consumer Preferences

Consumer preferences include the personal decisions and inclinations that individuals make when choosing items or services, which are impacted by personal taste, price, quality, and marketing strategies (Todt et al., 2021).

Motivation

Motivation may be understood in several ways, such as internal drives, lasting characteristics, behavioural reactions to stimuli, and combinations of ideas and emotions. Early perspectives often associated motivation with internal forces like instincts, qualities, volition, and will (Drawsheh, 2016).

Perception

Perception is the cognitive process by which an individual consciously chooses, arranges, recognises, and comprehends the sensory input they receive in order to gain understanding of their surroundings (Kenyon et al., 2015).

Dietary Transitions

Dietary transitions include changes in dietary habits and preferences that occur over time and are often affected by cultural, economic, and environmental variables. These transitions may have substantial effects on public health and food security (Jessie Satia, 2003)

Health Behaviour Change

Health behaviour change involves modifying habits, attitudes, or behaviours to enhance health outcomes. Various elements typically impact this process, including environmental, social, and psychological aspects (Ludden et al., 2017).

1.10 Summary

This chapter provides an outline for investigating the perceptions and motivations of Malaysian youths about plant-based meat products. It offers an overview of the study background, emphasising the significance of understanding the factors influencing the adoption of plant-based alternatives among youths. This chapter introduces the research objectives, which include studying the consumption of plant-based meat among youths in Malaysia and analysing how perceptions and motivations influence their dietary choices. Moreover, the chapter highlights the importance of the study in practical and theoretical terms, suggesting its potential to contribute to consumer understanding, health promotion, market prospects, and theoretical advancements in food consumption research. This chapter provides an in-depth introduction to the research topic, establishing the foundation for further investigation into the perceptions and motivations of Malaysian youth regarding the consumption of plant-based meat. The following chapter presents the literature review of the study.

CHAPTER 2
LITERATURE REVIEW

2.1 Introduction

The literature review focuses on plant-based meat products and consumption, specifically among youth. This chapter discusses the worldwide movement towards diets primarily consisting of plant-based foods and the various elements driving this change, including health concerns, environmental sustainability, and ethical considerations. The increasing prominence of plant-based meat alternatives in response to these concerns highlights the need to understand consumer preferences and attitudes towards these products, which are explored throughout this chapter. This chapter also discusses the motivations and perceptions driving the consumption of plant-based meat products among youths in Malaysia. Its goal is to offer meaningful insights into the elements that influence their perception, motivation, and dietary decisions in order to encourage sustainable food practices in the region.

2.2 Plant-Based Meat Products

The rising global interest in plant-based meat products is fuelled by their capacity to provide sustainable and ethical alternatives to traditional meat consumption. Plant-based meat products are designed to mimic the flavour, texture, and appearance of conventional meat. Nevertheless, they are composed of plant-derived ingredients (Ismail et al., 2020). Typically consisting of ingredients such as wheat gluten, legumes (including chickpeas and soybeans), and mycoproteins, these goods offer a varied selection for those seeking protein substitutes for animal-derived sources (Mihalache et al., 2022).

The evolution of plant-based meats has been influenced by various factors, including advancements in food processing technologies, consumer demand for sustainable and ethical dietary options, health considerations, and apprehensions about the environmental impact of traditional meat production (Andreani et al., 2023). In

recent years, plant-based meat products have transitioned from specialised markets to widespread popular acceptance. For example, the American company Beyond Meat has launched entirely plant-based meat alternatives that have gained significant popularity (Szczebyło et al., 2019).

The market for plant-based meat products in Malaysia include brands such as Nanka and Phuture Daging, a domestic plant-based food company. In line with trends noted in various other countries, the Malaysian market has experienced growth driven by factors such as increasing consumer awareness of health and environmental issues, coupled with the extensive availability of plant-based meat alternatives (Blézins Moreira et al., 2021). Social media marketing has significantly impacted the perceptions and purchasing considerations of plant-based meats among younger demographics (Li et al., 2022). Moreover, manufacturers have recognised flavour deficiencies and the need for continuous improvements in taste and texture as critical factors for enhancing the appeal of plant-based meat products (Wang et al., 2022).

Consumer trials are underway to examine the market potential of plant-based protein alternatives, including meat analogues, to get insights into consumer demand and preferences (Tonsor et al., 2022). The transition to plant-based alternatives is driven by consumer choices and concerns regarding the environmental impacts of traditional meat production (Zhao et al., 2022).

Nonetheless, the increasing importance of plant-based meat products is not without controversy. Although these products are often marketed as healthier and more sustainable substitutes for traditional meat, several significant issues merit recognition. From a nutritional perspective, numerous plant-based meat alternatives are classified as ultra-processed foods, prompting enquiries regarding the actual significance of their health benefits, especially considering their high sodium levels and the incorporation of additives (Rizzolo-Brime et al., 2023). Moreover, life-cycle assessments indicate that whereas plant-based alternatives often generate lower greenhouse gas emissions than traditional meat, their environmental benefits may be less significant when compared with sustainably sourced animal products (Vliet et al., 2020). Affordability continues to be a major issue, since plant-based meat products are sometimes priced higher than traditional alternatives, restricting access for cost-sensitive customers (Lou et al., 2024). Cultural opposition poses a further challenge, as entrenched dietary customs and meat-focused behaviours in some nations, including Malaysia, persist in obstructing broader acceptance (Drewnowski et al., 2020).

Ultimately, plant-based meat products have revolutionised the food sector by offering environmentally sustainable and ethically responsible alternatives to traditional meat consumption. The shift of plant-based meats from a niche market to a broadly accepted mainstream market, along with the rising global demand for these products, underscores the potential for continued growth and development in the plant-based meat industry. Nonetheless, despite this worldwide momentum, there has been insufficient research focus on how Malaysian youths specifically perceive and interact with these products within their own cultural, religious, and social contexts. This gap necessitates the current study, which aims to investigate the perceptions, motivations, and consuming behaviours of Malaysian youths regarding plant-based meat products.

2.3 The Factors of the Plant-Based Meat Products Consumption

The factors influencing the consumption of plant-based meat products are complex and encompass various dimensions. Individuals who choose for plant-based meat alternatives primarily do so for health benefits and additional advantages. Research indicates that the selection of plant-based foods is primarily motivated by health factors, particularly the decrease of chronic disease risk (Hagmann et al., 2019). Furthermore, the consumption of plant-based foods has been associated with numerous health benefits, including enhanced weight management and cardiovascular health, particularly in youth (Havermans et al., 2021). Nonetheless, it is important to recognise that not all plant-based meat alternatives possess equivalent nutritional value, and apprehensions regarding their ultra-processed characteristics and high sodium levels have prompted some researchers to analyse the degree of their health advantages (Rizzolo-Brime et al., 2023).

Furthermore, sustainability and environmental issues have emerged as crucial determinants influencing the consumption of plant-based meat alternatives. Studies indicate that individuals are progressively more inclined to select plant-based alternatives in order to mitigate their environmental impact, as these options possess a reduced ecological footprint (Austgulen et al., 2018). Research indicates that the incorporation of plant-based foods can reduce greenhouse gas emissions, demonstrating a positive impact on climate change (Schorr et al., 2023; Guedes et al., 2021). Researchers advocate for a shift towards plant-based food sources to enhance

sustainable and healthful diets (Ghammachi et al., 2022; Päivärinta et al., 2020). Nonetheless, the extent of these environmental advantages is disputed, as life-cycle assessments suggest that the benefits of plant-based alternatives compared to sustainably sourced animal products may be less substantial than widely believed (Vliet et al., 2020).

The cost and availability of plant-based meat products are crucial elements influencing consumption trends, especially among price-sensitive youths in Malaysia. Plant-based meat products are significantly more expensive than animal-based alternatives, with research demonstrating a greater cost for plant-based options relative to traditional meat in common dishes (Reis, 2022; Lemken, 2021). To illustrate this price disparity within the Malaysian market, Table 2.1 presents an approximate comparison of retail prices across three market segments.

Table 2.1
Approximate Retail Prices of Plant-Based Meat Alternatives in the Malaysian Market

Tier	Product Type	Brand	Approximate Price	Source
Tier 1: Mass Market	Economy conventional patties	Ramly	RM8 - RM10 per pack of 6 patties	(Lee, 2021)
Tier 2: Mid-Range Local	Plant-based patties	Nanka	RM18 - RM20 per pack of 4 patties	(Lee, 2021)
	Plant-based products	Phuture Daging	RM19 - RM26 per 400g	(The Sun, 2022)
Tier 3: Premium Imported	Plant-based products	Beyond Meat	RM39.9 - RM59.90	(Heng Hong, 2020)

Note: Prices are approximate and based on available market data at the time of reporting. Retail prices may vary by outlet and are subject to change.

As illustrated in Table 2.1, a significant tiered price gap exists in the Malaysian plant-based meat market. Economy-grade conventional patties, represented by Ramly products, are the most affordable choice for Malaysian youth, with prices ranging from RM8 to RM10 per pack. Conversely, local plant-based products like Nanka and Phuture Daging are expensive at almost double that of traditional alternatives, and premium foreign goods such as Beyond Meat remain entirely unattainable for the majority of young consumers. Although some researchers propose that the price disparity between plant-based and conventional meat products might decrease as production increases and technology advances, affordability continues to be a significant issue in Malaysia, where plant-based products are reportedly at least twice as costly as conventional meat

(Lou et al., 2024). Despite interest in plant-based alternatives, the financial barrier persists, hindering regular consumption, especially among lower-income groups (Cook, 2023).

Ethical considerations and animal welfare issues significantly impact individuals' choices to consume plant-based meat alternatives. Advocacy groups often utilise ethical appeals to underscore the moral issues associated with meat consumption, hence influencing consumer decisions (Smillie et al., 2023). Cultural and religious factors can affect the consumption patterns of plant-based meat products. Cultural norms influence meat consumption habits and the acceptance of plant-based alternatives in countries like Ethiopia (Seleshe et al., 2014). Moreover, the acceptance of plant-based meat alternatives within certain groups is shaped by religious dietary regulations, including Halal criteria (Ho et al., 2023). In Malaysia, cultural affinity for meat and religious dietary customs constitute significant challenges, as meat eating is thoroughly integrated into the social and festive practices of several ethnic groups (Drewnowski et al., 2020).

The promotion of plant-based meat alternatives significantly depends on marketing and branding strategies. Persuasive communications highlighting the benefits of plant-based meat products, such as taste, sustainability, and health factors, can shape consumer attitudes and decisions. Peer pressure and societal influences are additional factors affecting the consumption habits of plant-based meat products. Studies have shown that dietary choices, especially the embrace of plant-based diets, can be affected by social norms and peer interactions (Hwang et al., 2020). Although these social influences are considerable, taste resistance and scepticism about the sensory quality of plant-based meat products persist as critical counterarguments, as numerous consumers still perceive plant-based alternatives as less satisfying than traditional meat concerning flavour and texture (Caputo et al., 2022).

Diverse social, cultural, ethical, economic, marketing, health, and environmental issues influence the acceptance of plant-based meat replacements across distinct populations. This study aims to address the underexplored subject of how global consumer variables specifically materialise among Malaysian youth, who face distinct cultural, religious, and economic realities, despite considerable previous work focusing on global consumer populations.

2.4 Perception of Plant-Based Meat Products

The impression of plant-based meat alternatives is influenced by sensory characteristics, nutritional content, societal norms, and individual consumer preferences. Therefore, comprehending these attitudes is crucial for enhancing consumer acceptance and facilitating the adoption of plant-based diets. This study defines a perception as it pertains to the attitude component of the Theory of Planned Behaviour (TPB), wherein youth perceptions of plant-based meat products embody their evaluative beliefs, whether positive or negative, regarding the consumption of these products (Graça et al., 2015; Ajzen, 2005).

The perception of plant-based meat products is mostly determined by their sensory characteristics, including flavour, texture, and appearance. Research indicates that consumers frequently possess decreased sensory perceptions of plant-based meat compared to traditional meat, potentially hindering acceptance (Katare et al., 2022). Studies demonstrate that the visual and textural attributes of plant-based meat products often do not meet consumer expectations, leading to lower satisfaction compared to animal-based options (Erfanian, 2024). This is especially significant for consumers used to the sensory experience of meat consumption, as they may find it challenging to embrace alternatives that do not adequately match these experiences (Wang et al., 2022).

Consumer views towards plant-based meat alternatives are substantially influenced by nutritional considerations. Studies demonstrate that the caloric value of plant-based meat alternatives often parallels that of traditional meat products (Costa-Catala et al., 2023). The health halo effect commonly associated with plant-based choices leads individuals to perceive these goods as inherently healthier, despite the possibility of elevated sodium levels in certain formulations (Curtain et al., 2019). The health halo effect may mislead consumers into making dietary decisions based on perceived rather than actual nutritional advantages, highlighting the necessity for improved product labelling and consumer education (Estell et al., 2021).

Social norms and peer influences significantly affect consumer views and behaviours regarding plant-based diets. Research indicates that individuals are more likely to embrace plant-based diets when they perceive that their peers and family members do, highlighting the impact of descriptive norms on dietary choices (Sharps et al., 2020). In collectivist cultures like Malaysia, where communal dining and family

food practices are ingrained, the impact of injunctive norms, indicative of perceived social disapproval, may be equally or more significant in hindering the acceptance of plant-based alternatives (Raghoebar et al., 2020).

Additionally, broader cultural trends and individual values influence consumer perceptions of plant-based meat products. Ethical factors, including as animal welfare and environmental sustainability, are gaining prominence among consumers, shaping their perceptions of plant-based alternatives as more compassionate and ecologically sound (Circus et al., 2019). Nonetheless, despite these positive correlations, a segment of the population persists in opposing the adoption of plant-based diets, often due to entrenched attachments to traditional meat eating (Circus et al., 2019). The prominence of meat consumption is especially evident in Malaysia, where traditional meat holds substantial cultural, religious, and social importance, resulting in a complicated conflict between rising ethical consciousness and established dietary practices (Drewnowski et al., 2020).

The perception of plant-based meat alternatives is influenced by a complex interplay of sensory qualities, nutritional beliefs, societal standards, and personal values. Understanding these variables is essential for alleviating customer apprehensions and augmenting the attractiveness of plant-based meat products. Although global research offers a robust basis for comprehending these perceptions, the particular interaction of these elements among Malaysian youth has not been adequately examined, underscoring the necessity for the current qualitative investigation.

2.4.1 Sensory Attributes

The perception of plant-based meat alternatives is profoundly influenced by its sensory characteristics, such as flavour, texture, scent, and visual appearance. Texture is a crucial sensory characteristic that customers assess, often defined by juiciness and tenderness, which are vital qualities of high-quality animal meat (Forster, 2024). Research highlights that the sensory goals for meat alternatives must focus on emulating these attributes to meet customer expectations (Forster, 2024). The ability to emulate the mouthfeel and chewiness of meat is essential, as these factors significantly influence customer preferences and perceptions of quality (Godschalk-Broers et al., 2022).

Flavour is a vital sensory attribute affecting the perception of plant-based meat alternatives. Many consumers link distinctive aromas to traditional meat, and the challenge for plant-based substitutes is to accurately mimic these flavours (Fiorentini et al., 2020). Despite progress in flavour technology, many customers still choose traditional meat products due to their recognisable taste characteristics (Caputo et al., 2022). Recent innovations in plant-based meat products aim to replicate both the taste and the overall sensory experience of meat consumption, including scent and visual appeal (Sogari, 2024).

The aesthetic quality profoundly affects the impression of plant-based meat products. Consumers often link particular colours and presentations with freshness and quality in meat products. The red-purple hue of fresh meat is often considered a quality indicator, while browning may indicate rotting (Ciobanu et al., 2023). Manufacturers are progressively prioritising the visual appeal of plant-based meats to enhance their perceived value and better link them with traditional meat products (Pointke et al., 2022).

Importantly, while technological advancements like extrusion, fermentation, and the incorporation of soy leghemoglobin have markedly enhanced the sensory attributes of plant-based meat products, a crucial inquiry persists regarding whether consumers genuinely desire plant-based alternatives to closely replicate meat, or if there is an increasing acceptance of products with a unique plant-based sensory identity (Andreani et al., 2023; Vliet et al., 2021). Certain studies indicate that continuous exposure to plant-based products may progressively alter consumer expectations, reducing dependence on meat-like sensory imitation as the principal standard for approval (Godschalk-Broers et al., 2022).

In Malaysia, sensory expectations are influenced by local culinary traditions that prioritise strong tastes, spices, and distinct textures characteristic of meals like rendang and satay. The lack of local research investigating whether Malaysian youths value flavour over texture, or if Halal-certified visual signals affect acceptability, signifies a significant gap in the current literature that this study aims to fill.

The impression of plant-based meat substitutes is significantly affected by their sensory attributes. As consumers become more selective and health-oriented, the demand for plant-based meat alternatives that closely mimic the sensory characteristics of traditional meat will continue to increase. Understanding and enhancing these

sensory characteristics will be crucial for manufacturers seeking to enhance customer acceptance and promote the adoption of plant-based diets.

2.4.2 Nutritional Profiles

The nutritional profiles of plant-based meat substitutes significantly affect customer perception and acceptance. A key problem is their ability to provide vital nutrients typically found in animal products. While plant-based meat alternatives may have lower saturated fat and calorie content, they often lack vital micronutrients such as vitamin B12, iron, and zinc (Costa-Catala et al., 2023). Furthermore, the bioavailability of iron and zinc in plant-derived meat alternatives is sometimes lowered due to the presence of phytic acid, which inhibits absorption (Labba et al., 2022). Nutritional deficiencies may affect consumer views, leading some to see plant-based meat products as inferior to their animal counterparts.

Conversely, other research suggest that plant-based meat products may offer health advantages relative to conventional meats. Plant-based meat alternatives are often regarded as healthier due to their lower saturated fat and higher fibre content (Lee, 2023). This perspective aligns with studies indicating that substituting meat with plant-based alternatives can improve health outcomes (Ritchie et al., 2018). The health halo effect linked to plant-based meat products can enhance their appeal, particularly among health-conscious customers (Estell et al., 2021).

Nonetheless, a rigorous analysis of the health halo effect uncovers a significant issue, consumers may consistently overrate the healthfulness of plant-based meat products solely due to their plant origin, failing to evaluate their true nutritional content (Curtain et al., 2019). This cognitive bias is especially concerning as numerous commercially available plant-based meat products are heavy in sodium, saturated fat from coconut oil, and various food additives (Rizzolo-Brime et al., 2023). The risk lies in consumers altering their diets under the impression of choosing healthier choices, whereas the nutritional benefits compared to traditional meat may be minimal or dependent upon context.

The classification of plant-based meats as ultra-processed foods may negatively influence customer perceptions. A multitude of customers associate plant-based meats with inferior, heavily processed products, leading to concerns about their nutritional

quality (Crimarco et al., 2022). Moreover, the nutritional profiles of plant-based meats can differ markedly between products, leading to consumer perplexity (Vliet et al., 2021). This mismatch highlights the need for enhanced transparency in labelling and consumer education to empower individuals to make educated choices.

The nutritional characteristics of plant-based meat substitutes greatly affect customer perceptions and attitudes. Although fortification solutions are widely utilised to combat micronutrient deficits in plant-based goods, the effectiveness of these tactics in appropriately addressing nutritional issues remains contentious (Elhalis et al., 2023). Addressing these issues through transparent labelling and focused consumer education is crucial for enhancing adoption, especially among Malaysian youth who may lack comprehensive awareness of the nutritional distinctions between plant-based and conventional meat products (Wang et al., 2022).

2.4.3 Social Norms

The perception of plant-based meat alternatives is significantly influenced by social norms, encompassing the views and behaviours of individuals within a society regarding dietary choices. Social norms can be categorised as descriptive norms, which indicate perceptions of the behaviours of others, and injunctive norms, which represent perceptions of others' approvals or disapprovals (Talegawkar et al., 2021).

Descriptive norms substantially affect customer perceptions of plant-based meat products. Research indicates that individuals are more likely to endorse plant-based diets when they perceive that their peers and social networks are also participating (Veen et al., 2023; Sharps et al., 2020). The frequency of plant-based meal intake among adults in the United Kingdom (UK) was influenced by perceived social acceptability, suggesting that persons who perceive support from friends and family for plant-based eating are more likely to engage in such activities (Sharps et al., 2020).

Conversely, injunctive norms may impede the acceptability of plant-based meat products. If individuals perceive disapproval of plant-based diets within their social groups, they may exhibit decreased motivation to embrace these options, despite personal interest (Raghoebar et al., 2020; Sharps et al., 2020). In societies where meat eating is widespread, individuals may feel obliged to adhere to these standards, leading to reluctance in embracing plant-based diets (Veen et al., 2023).

Social identity and group identification profoundly affect views of plant-based meat products. Individuals who strongly identify with particular dietary groups, such as vegetarians or flexitarians, may experience social reinforcement that enhances their commitment to plant-based diets (Cho et al., 2019). In contrast, individuals from carnivorous cultures may encounter societal pressure when considering plant-based options (Zaal et al., 2023).

Importantly, although the current work on social norms and plant-based consumption primarily originates from Western contexts like the UK and Europe, the relevance of these findings to Malaysian youth requires thorough examination. In Malaysia, communal dining customs, family-oriented culinary traditions, and religious dietary regulations, especially regarding Halal food standards and celebratory meat consumption, may distinctly influence both descriptive and injunctive norms compared to Western populations (Ho et al., 2023; Drewnowski et al., 2020). The lack of Malaysian-specific research on the influence of social norms on young views of plant-based meat is a significant gap that this study aims to fill.

The increasing influence of social media in normalising plant-based diets among younger populations merits recognition. Research indicates that digital peer influence and online food communities may enhance descriptive norms among young in ways that conventional face-to-face social contacts do not (Li et al., 2022), but the degree to which this is applicable to Malaysian youth is still being investigated.

Social norms significantly influence the perception of plant-based meat alternatives. To effectively advocate for plant-based diets, it is essential to leverage social norms through community participation, education, and the normalisation of plant-based foods across many social contexts. By addressing these societal variables, stakeholders can enhance the acceptance and consumption of plant-based meat products.

2.4.4 Consumer Attitudes

Consumer views of plant-based meat alternatives are shaped by a complex interplay of elements, including health beliefs, environmental issues, ethical considerations, and sensory characteristics. According to the TPB, consumer attitudes towards plant-based meat products are evaluative beliefs that directly influence

behavioural intentions, specifically the probability that a consumer will choose to purchase or consume these products (Graça et al., 2015; Ajzen, 2005).

Health perceptions significantly influence customer attitudes toward plant-based meat products. Many consumers regard these alternatives as healthier than traditional meats, often associating them with lower fat content and superior nutritional value (Ohlau et al., 2022; Bryant et al., 2021). This impression is intricate; while health benefits motivate some customers, others may question the nutritional adequacy of plant-based alternatives, especially if deemed excessively processed (Ohlau et al., 2022). This ambivalence indicates that health-related perceptions of plant-based meat are not consistently favourable and are influenced by consumers' levels of nutritional understanding.

Environmental concerns profoundly affect consumer perceptions. As awareness of the environmental ramifications of meat production grows, many customers express a willingness to decrease their meat consumption in favour of more sustainable alternatives (Marinová et al., 2019; Love et al., 2018). The effectiveness of environmental messaging in influencing attitudes differs among demographic groupings and cultural contexts. In areas where affordability and food security are prioritised over environmental sustainability, environmental considerations may have reduced influence on consumer perceptions of plant-based alternatives (Sánchez-Sabaté et al., 2019).

Ethical factors, especially regarding animal welfare, profoundly influence customer perceptions. A significant number of consumers are motivated by the desire to reduce animal suffering associated with conventional meat production (Niewiadomska et al., 2020; Bryant et al., 2019). However, a significant gap persists in consumer viewpoints, as certain individuals adhere to traditional meat intake due to cultural or habitual factors (Niewiadomska et al., 2020). The conflict between ethical awareness and habitual behaviour is especially pertinent in Malaysia, where religious slaughter practices like Halal and cultural festivities focused on meat consumption may hinder the uncomplicated integration of ethical motivations as motivating factors for plant-based meat acceptance.

Sensory characteristics, including flavour, texture, and visual aesthetics, affect consumer impressions of plant-based meat alternatives. Studies indicate that consumers often evaluate these items based on their sensory experiences, and shortcomings in these areas might lead to unfavourable views (Davitt et al., 2021; Tegegne et al., 2017). This

highlights the importance of product development that prioritises sensory quality to enhance consumer acceptability.

In conclusion, health views, environmental issues, ethical factors, and sensory characteristics influence consumer attitudes toward plant-based meat alternatives. Although these aspects are extensively recorded in worldwide literature, their relative significance and interaction among Malaysian young, who exist at a distinctive convergence of cultural heritage, religious practice, and growing sustainability awareness, remain inadequately explored. This underscores the justification for the current qualitative study, which aims to investigate these attitude characteristics within the specific context of Malaysian youth.

2.5 Motivation of Plant-Based Meat Products

The motivation for the use of plant-based meat products is multifaceted, encompassing health, environmental issues, ethical factors, and sensory characteristics. Comprehending these motives is crucial for companies aiming to effectively sell plant-based alternatives. In the TPB framework, motivation is primarily associated with subjective norms and perceived behavioural control, reflecting the social influences and practical variables that influence consumption intentions among young (Graça et al., 2015; Ajzen, 2005).

Health concerns are a primary impetus for customers transitioning to plant-based meat alternatives. Research indicates that many consumers perceive plant-based diets as healthier than traditional meat diets, with studies showing that health is often a primary motivation for adopting a plant-based diet (Abu Bakar et al., 2023; Bryant et al., 2020; Tárrega et al., 2020). Furthermore, the impression of plant-based meats as beneficial for disease prevention enhances their appeal, particularly among health-conscious customers (Abu Bakar et al., 2023; Vatanparast et al., 2020). This aligns with research suggesting that customers are more inclined to choose items associated with health benefits, especially those abundant in plant proteins (Eckl et al., 2021). Nonetheless, health motivation alone does not ensure consistent intake, since practical obstacles such as cost and restricted product availability persist in influencing the connection between health intentions and actual eating behaviour (Lou et al., 2024).

Environmental sustainability is a crucial element propelling the shift towards the use of plant-based meat alternatives. The production of conventional meat is associated with significant greenhouse gas emissions and resource depletion, prompting consumers to seek alternatives perceived as more sustainable (Lusk et al., 2022; Kaczmarska et al., 2021; Austgulen et al., 2018). Moreover, research indicates that environmentally aware customers are more likely to choose plant-based alternatives, viewing these goods as a method to diminish the ecological impact of their food consumption (Hwang et al., 2020; Austgulen et al., 2018). However, environmental motivation as a driver for plant-based meat consumption may be less significant in developing economies like Malaysia, where cost and sensory appeal often outweigh ecological concerns among young consumers (Sánchez-Sabaté et al., 2019).

Ethical factors, especially regarding animal suffering, profoundly impact customers' choices to choose for plant-based meat products. An increasing number of persons are apprehensive about the ethical implications of animal agriculture, leading them to seek alternatives that align with their values (Chen, 2023; Bryant et al., 2021). This ethical motivation is often associated with health and environmental concerns, providing a robust rationale for the adoption of plant-based diets (Sánchez-Sabaté et al., 2019). Although ethical motivations are extensively documented in Western literature, their significance among Malaysian youth may vary due to the cultural and religious normalisation of specific animal farming practices, such as Halal slaughter, which is broadly accepted rather than viewed as ethically contentious within the local context (Ho et al., 2023).

The sensory characteristics, including flavour and texture, significantly influence consumer acceptance of plant-based meat products. Instead of repeating the comprehensive sensory analysis presented in Section 2.4.1, it is emphasised that sensory traits serve as motivational drivers; goods that effectively emulate meat-like sensory characteristics are more likely to encourage first trials and subsequent consumption (Caputo et al., 2022). Competitive pricing and product specifications, including ingredient supply, are essential factors that can enhance customer willingness to sample and embrace plant-based meats (Wang et al., 2022; Zhou et al., 2022).

The motivations for consuming plant-based meat products are diverse and interrelated, encompassing health benefits, environmental issues, ethical factors, and sensory sensations. The significance of these motivating elements is expected to differ across cultural and demographic circumstances. In Malaysia, where affordability,

cultural food identity, and religious dietary norms possess significant influence, motivational drivers may markedly differ from those documented in Western or East Asian studies, underscoring the necessity for locally based qualitative research (Lou et al., 2024; Drewnowski et al., 2020).

2.5.1 Animal Welfare

Concerns about animal welfare substantially impact the inclination to embrace plant-based meat substitutes. Research indicates a substantial association between positive views towards animal welfare and decreased meat consumption, suggesting that ethical considerations are a primary incentive for many persons adopting plant-based diets (Sánchez-Sabaté et al., 2019; Fuseini et al., 2018).

Animal welfare concerns encompass the conditions of animal husbandry, slaughter practices, and the overall treatment of livestock within the agricultural system. Studies demonstrate that consumers prioritising animal welfare are more likely to choose plant-based alternatives to reduce the ethical concerns associated with conventional meat production (Briscoe, 2022; Bir et al., 2019). A study in Ghana revealed a negative link between views towards animal welfare and meat consumption, highlighting the impact of ethical considerations on consumer behaviour (Fuseini et al., 2018).

Moreover, the rise of alternative proteins, including plant-based and cultured meats, is often framed to promote animal welfare. These products are marketed for their ecological benefits and their ability to alleviate animal suffering associated with traditional meat production (Wang et al., 2023; Tso et al., 2020). The perception of plant-based meats as more humane alternatives has been prevalent, particularly among consumers who are increasingly aware of the ethical implications of their dietary choices (Santo et al., 2020; Paula Valente et al., 2019).

Despite the clear concern for animal welfare, a substantial disparity exists between consumers' stated ideals and their purchasing behaviours. Research indicates that while many consumers are dedicated to animal welfare, this concern typically does not affect their purchase decisions, primarily due to the perceived higher prices associated with welfare-friendly products (Lin-Schilstra et al., 2020). This cognitive dissonance highlights the details of consumer incentives, wherein ethical considerations

may be eclipsed by pragmatic reasons such as cost and convenience (Lin-Schilstra et al., 2020).

The majority of studies on animal welfare as a motivational driver are predominantly derived from Western and African countries. In Malaysia, the notion of animal welfare aligns with religious frameworks, especially the Islamic Halal slaughter mandates, perceived by Muslim customers as humane and divinely endorsed rather than ethically contentious (Ho et al., 2023). The cultural and religious context indicates that animal welfare concerns may hold varying significance for Malaysian Muslim youth in comparison to their Western peers, highlighting a notable gap in the current literature (Drewnowski et al., 2020). This study addresses the gap by examining how Malaysian teenagers express and prioritise animal welfare issues within their cultural and religious contexts.

2.5.2 Health Concerns

Health concerns significantly influence the use of plant-based meat products, including the nutritional value of plant-based alternatives, health risks associated with conventional meat intake, and the perceived benefits of a plant-based diet.

A primary health issue driving customers to select plant-based meat products is the nutritional advantage of these alternatives compared to traditional meat. Research indicates that plant-based meat alternatives offer a healthier profile, marked by lower saturated fats and more dietary fibre, which benefit cardiovascular health and overall well-being (Shireen et al., 2024; Alessandrini et al., 2021). Furthermore, the nutritional assessment of several plant-based meat replacements has revealed that many options are abundant in vital elements, including proteins and micronutrients (Costa-Catala et al., 2023; Melville et al., 2023).

Consumption of red and processed meats correlates with numerous health risks, including increased rates of colorectal cancer and other chronic diseases (Fresán et al., 2021; Vliet et al., 2020). The growing understanding of the negative health impacts of excessive meat eating has compelled consumers to seek healthier alternatives. The EAT-Lancet Commission has advised reducing meat consumption, particularly red and processed types, to improve public health outcomes (Leroy et al., 2019).

In Malaysia, the motivation for adopting plant-based diets is particularly urgent due to the rising prevalence of diet-related non-communicable diseases. The National Health and Morbidity Survey (NHMS) 2023 indicates that the prevalence of diabetes among Malaysian adults is 15.6%, while cardiovascular disease (CVD) accounts for 67% of premature deaths in the nation (Mat Rifin et al., 2025). The consumption of high saturated fat from red meat and processed foods is recognised as a significant dietary risk factor leading to these outcomes in Malaysia (Karupaiah et al., 2019). These statistics present a persuasive local health backdrop that reinforces the argument for investigating plant-based meat adoption among Malaysian youths.

The impression of plant-based meat products as healthier alternatives has been reinforced by the increasing availability of goods fortified with vitamins and minerals (Elhalis et al., 2023). It is essential to critically recognise that not all plant-based meat alternatives possess higher nutritional value compared to traditional meat. Certain items may include additives or have significant processing, which may reduce their health advantages (Bogueva et al., 2023). Consumers are thus urged to practise nutritional literacy while choosing plant-based alternatives instead of depending exclusively on health halo perceptions.

Health considerations substantially impact customers' choices to adopt plant-based meat substitutes. As customers increasingly emphasise health, the market for plant-based meat products is anticipated to grow. Translating health motivation into enduring dietary behaviour change necessitates the resolution of structural constraints, including affordability and product accessibility, especially for Malaysian youth, for whom cost is a significant limitation (Lou et al., 2024).

2.5.3 Environmental Concerns

The rising interest in plant-based meat alternatives is significantly driven by environmental concerns, which are increasingly seen as crucial elements in consumer decision-making. The livestock sector substantially contributes to greenhouse gas emissions and requires large natural resources, including land, water, and energy (Viroli, 2023; Sharma et al., 2021). Traditional meat production constitutes around 14.5% of worldwide greenhouse gas emissions (Sharma et al., 2021). This alarming number has

prompted consumers to reassess their dietary choices, leading to a growing preference for plant-based diets (Erfanian, 2024; Sánchez-Sabaté et al., 2019).

Research indicates that consumers are motivated to adopt plant-based diets due to health benefits and their perceived positive impact on the environment (Erfanian, 2024; Grasso, 2023). Studies demonstrate that knowledge of the ecological consequences of meat eating significantly affects consumer perceptions and their willingness to choose plant-based alternatives (Wang et al., 2022; Katare et al., 2022). A thorough review shown that emotional appeals related to environmental degradation markedly affected intentions to consume meat (Sánchez-Sabaté et al., 2019).

Moreover, the shift towards plant-based diets aligns with global sustainability goals, as outlined in the EAT-Lancet Commission's report, which advocates for a flexitarian diet mostly composed of plant-based foods (Päivärinta et al., 2020). Integrating plant-based proteins into meals is an effective approach for achieving nutritional sufficiency and environmental sustainability (Grasso et al., 2021).

While environmental motivation is extensively recognised as a driver for plant-based meat eating in Western and affluent contexts, its relevance to Malaysian youths necessitates thorough examination. Malaysia has pledged to decrease carbon emissions and has experienced an increase in youth-driven sustainability initiatives in recent years. Research repeatedly indicates that in price-sensitive, developing countries, affordability and sensory satisfaction generally surpass environmental considerations as the principal determinants of food selection (Lou et al., 2024; Sánchez-Sabaté et al., 2019). This study aims to investigate whether Malaysian youth are adequately motivated by environmental issues to surmount economic and cultural obstacles to the adoption of plant-based meat.

Consumer research continually demonstrates that health and environmental issues are interrelated, with many persons preferring plant-based alternatives for their perceived health benefits and diminished environmental effects (Erfanian, 2024; Hopwood et al., 2020). The rising popularity of flexitarianism, defined by diminished meat intake without total exclusion, indicates a broader cultural shift towards more sustainable eating habits (Tso et al., 2021; Ismail et al., 2020).

2.5.4 Ethical Considerations

The ethical implications of the motivation to choose plant-based meat alternatives are gaining prominence in contemporary nutritional discourse. Ethical justifications predominantly stem from concerns related to animal care, environmental sustainability, and the moral implications of meat consumption. Research indicates that persons adopting plant-based diets often cite ethical concerns, especially about animal rights and welfare, as their primary reason (Kim et al., 2022; Ruehlman et al., 2022; Dorard et al., 2021). Ethical vegetarians typically exhibit a stronger commitment to their dietary choices than those motivated primarily by health, suggesting that ethical considerations can lead to a more profound dietary dedication (Ruehlman et al., 2022; Rosenfeld et al., 2019).

Ethical implications of meat consumption are multifaceted, encompassing animal welfare and wider environmental concerns. A significant number of consumers are motivated by the desire to minimise the suffering of animals in industrial farming systems (Kim et al., 2022; Smillie et al., 2022). Moreover, the ethical dimension of food choices includes environmental sustainability, as many persons recognise the negative impacts of meat production on ecosystems and climate change (Chen et al., 2022).

Furthermore, the psychological aspects of ethical motivations substantially affect food choices. Cognitive dissonance theory states that persons who consume meat while holding ethical ideas about animal welfare may experience internal conflict, leading them to seek alternatives that correspond with their values (Bastian, 2018). Studies demonstrate that ethical appeals, particularly those emphasising animal welfare, can significantly influence consumer behaviour (Smillie et al., 2022; Heßler et al., 2020).

This part presents ethical considerations as an integrative construct that encompasses the previously discussed features of animal welfare and environmental ethics, rather than repeating the details from Sections 2.5.1 and 2.5.3. Ethical motivation, when considered comprehensively, includes considerations of animal welfare, ecological responsibility, and the social justice aspects of food systems, offering a broader perspective on why certain consumers adopt plant-based diets beyond mere health or environmental factors (Chen et al., 2022; Kim et al., 2022).

In addition to individual motivations, social and cultural factors can impact ethical concerns in food choices. Research indicates that households adhering to

vegetarian or red-meat-free diets typically demonstrate increased ethical consciousness in their food selections (Dorard et al., 2021; Konttinen et al., 2021). Furthermore, urban consumers often emphasised ethical issues more than their rural counterparts, highlighting the impact of setting on dietary intentions (Chen et al., 2022). The urban-rural disparity in ethical motivation is particularly pertinent to this study, which examines urban and semi-urban postsecondary institution students in Malaysia, a cohort presumably more exposed to global ethical debate via digital media and higher education.

2.5.5 Sensory Attributes

Sensory attributes of plant-based meat alternatives are crucial for customer acceptance and the impetus to transition from traditional animal-based goods. The sensory characteristics of texture, flavour, juiciness, and overall mouthfeel are essential in evaluating the capacity of these alternatives to mimic the sensory experience of meat intake. Research indicates that the sensory attributes of plant-based meats must closely mimic those of animal-based meats to attract consumers, particularly regular meat eaters (Forster, 2024; Fiorentini et al., 2020).

This section reframes sensory attributes as motivational drivers, focusing on how the sensory experience of plant-based meat products affects consumption decisions, rather than repeating the detailed discussion in Section 2.4.1. This section shifts from examining how sensory qualities influence perceptions and evaluative judgements to exploring how sensory satisfaction or dissatisfaction affects actual consumption motivation.

Texture is a crucial sensory attribute that profoundly influences customer preferences for meat substitutes. Effective meat alternatives must emulate essential sensory attributes including juiciness, fibrousness, and softness (Forster, 2024; Fiorentini et al., 2020). The inclusion of soy leghemoglobin in plant-based meat products is acknowledged for its ability to mimic the appearance and flavour of heme proteins found in meat, hence improving the sensory experience (Vliet et al., 2021). Incorporating varied plant proteins and sophisticated processing techniques is essential for achieving the textural attributes expected by customers (Arshad et al., 2022; Samard et al., 2019).

Flavour is a vital sensory attribute affecting consumer acceptability of plant-based meat products. The challenge is in reducing the unpleasant flavours typically associated with legumes and other plant proteins (Wang et al., 2022; Fiorentini et al., 2020). Research indicates that the flavour profile of plant-based meats must be carefully crafted to replicate the savoury and umami characteristics of animal meats (Vliet et al., 2021). Importantly, although consumers may initially favour plant-based meat alternatives that closely resemble traditional meat, research indicates that consumer expectations may change over time, leading to greater acceptance of unique plant-based flavour profiles as familiarity with these products increases (Andreani et al., 2023; Wang et al., 2022). This alteration in sensory expectations constitutes a significant factor for manufacturers and marketers aiming at Malaysian youth, who may possess varying levels of knowledge with plant-based meat products.

Previous encounters with meat shape consumer perceptions of sensory characteristics. A significant number of customers associate happiness and contentment with meat-centric dishes, resulting in a bias against plant-based alternatives perceived as less satisfying (Erfanian, 2024). This view can be alleviated through good marketing techniques that emphasise the sensory qualities of plant-based meat products (Andreani et al., 2023).

In the Malaysian culinary environment, sensory motivation is significantly influenced by pronounced taste preferences linked to local cuisine. The anticipation for hearty, spicy, and richly flavoured meat dishes like rendang and satay necessitates that plant-based replacements not only mimic general animal flavour but also satisfy the distinct sensory criteria of Malaysian cuisine. The lack of locally adapted plant-based products that meet these sensory expectations may provide a substantial motivational obstacle for Malaysian youth, indicating that product localisation efforts could be essential for enhancing market adoption.

2.6 Consumption Patterns of Plant-Based Meat Products Among Youth

Understanding the demographic characteristics of Malaysian youth is essential for contextualising their purchase patterns. Research has revealed prevailing food consumption patterns among Malaysian young, influenced by many sociocultural and economic aspects (Goh et al., 2020). The health and dietary habits of Malaysian youths

are shaped by contemporary influences, traditions, and an increasing awareness of sustainability and health concerns (Mamun et al., 2020).

The consumption behaviours of Malaysian youths are markedly shaped by their demographic characteristics. Research indicates that assessing the dietary habits of Malaysian youth necessitates consideration of variables such as age, gender, socioeconomic status, and cultural background (Goh et al., 2020). Dietary patterns among Malaysian youth have evolved, emphasising sustainable food choices and healthy eating habits (Kee et al., 2023).

Understanding Malaysian youth's food habits and health results is essential for encouraging a balanced lifestyle. Research indicates that healthy food choices at home substantially affect dietary intake, particularly among young individuals (Liu et al., 2022). Research suggests that parents with positive views towards healthy eating are more likely to encourage comparable beliefs in their children (Kocaadam-Bozkurt et al., 2023).

The need for plant-based meat alternatives is escalating, as these substitutes gain popularity (Tóth et al., 2021). In Malaysia, chicken is the primary meat selection, demonstrating a preference for white meat over red meat (Zayadi, 2021; Drewnowski et al., 2020). Various situational contexts, including domestic settings, dining establishments, and social events, influence the plant-based meat intake patterns of youths (Ohlau et al., 2022; Wang et al., 2022). Research indicates that those who frequently consume plant-based foods, harbour unfavourable perceptions of meat, and express environmental concerns are more inclined to intend to increase their plant-based food consumption (Jeżewska-Zychowicz et al., 2024).

An examination of plant-based meat consumption trends in Malaysia reveals differences in preferences and behaviours among young and various age demographics (Zayadi, 2021; Drewnowski et al., 2020). The consumption of plant-based meat is markedly shaped by millennials, who often adopt flexitarian diets that prioritise plant-based dishes (Knaapila et al., 2022; Ma et al., 2022). Studies indicate that altering consumption habits, such as substituting meat with sustainable options like plant-based alternatives, might significantly mitigate the environmental and health impacts associated with traditional meat production (Katare et al., 2022).

While global trends show an increasing youth interest in plant-based alternatives, consumption patterns in Malaysia are probably influenced by a unique mix of circumstances. Financial limitations, restricted product accessibility beyond primary

urban areas, cultural and religious dietary customs, and a pronounced inclination towards familiar local cuisines may collectively influence the degree to which Malaysian youth incorporate plant-based meat products into their daily diets (Lou et al., 2024; Drewnowski et al., 2020). The current study primarily focuses on comprehending contextually unique consuming behaviours, encompassing frequency, context, and barriers.

Moreover, it is important to recognise that consumption trends among Malaysian youth are dynamic. With the increasing exposure to digital media, heightened health awareness, and ongoing discussions about sustainability among younger populations, dietary attitudes and behaviours are likely undergoing transformation, presenting a timely opportunity for qualitative research to elucidate the complexities of this changing environment (Kee et al., 2023; Li et al., 2022).

2.7 Barriers to Plant-Based Meat Products Consumption

Numerous psychological, social, taste, knowledge-related, and economic factors may hinder individuals from consuming plant-based meat alternatives. Psychological and emotional barriers, such as the enjoyment of meat consumption, considerably hinder the adoption of plant-based diets (Papies et al., 2020). Individuals seeking to reduce their meat intake may encounter challenges that arise from social and cultural opposition, marked by entrenched norms that advocate for meat consumption and an aversion to exploring alternative cuisines (Cook, 2023).

Instead of repeating the comprehensive analyses of taste and texture impediments previously addressed in Sections 2.4.1 and 2.5.5, it is acknowledged that sensory dissatisfaction serves as a motivational barrier, the failure of plant-based meat products to fulfil consumer sensory expectations deters both trial and repeat consumption (Caputo et al., 2022; Macdiarmid, 2021).

Misunderstandings and insufficient awareness concerning plant-based diets and meat alternatives may impede consumer acceptance. Studies suggest that ignorance about plant-based diets and misconceptions concerning the health benefits of meat may contribute to individuals' hesitance to adopt plant-based meat alternatives (Cook, 2023). Individuals are deterred from utilising plant-based meats due to economic and logistical

challenges, including the perceived cost of meat alternatives and the labour-intensive nature of preparing plant-based dishes (Macdiarmid, 2021).

In the Malaysian context, the relative importance of these barriers may vary from global trends. Although taste resistance and knowledge deficiencies are commonly acknowledged obstacles, affordability appears to be the most critical barrier for Malaysian youth, considering the substantial price disparity between plant-based and conventional meat products as outlined in Table 2.1 (Lou et al., 2024). Cultural and religious barriers constitute significant obstacles in Malaysia, where Halal certification mandates, communal meat consumption practices, and entrenched culinary traditions engender structural resistance to dietary modification (Ho et al., 2023; Drewnowski et al., 2020). A comprehensive understanding of the most significant barriers affecting Malaysian youth is a crucial contribution of this study.

Comprehending and adeptly addressing these challenges are crucial for promoting the adoption and execution of plant-based diets. Implementing interventions that improve knowledge and awareness of meat alternatives, provide accurate information on plant-based nutrition, and address individual taste and texture preferences may effectively overcome these challenges (Bianchi et al., 2019). Moreover, efforts to augment understanding of the ecological and physiological benefits of plant-based diets, alongside improving the accessibility and affordability of plant-based alternatives, can facilitate the transition to more sustainable eating habits.

2.8 Theory of Planned Behaviour

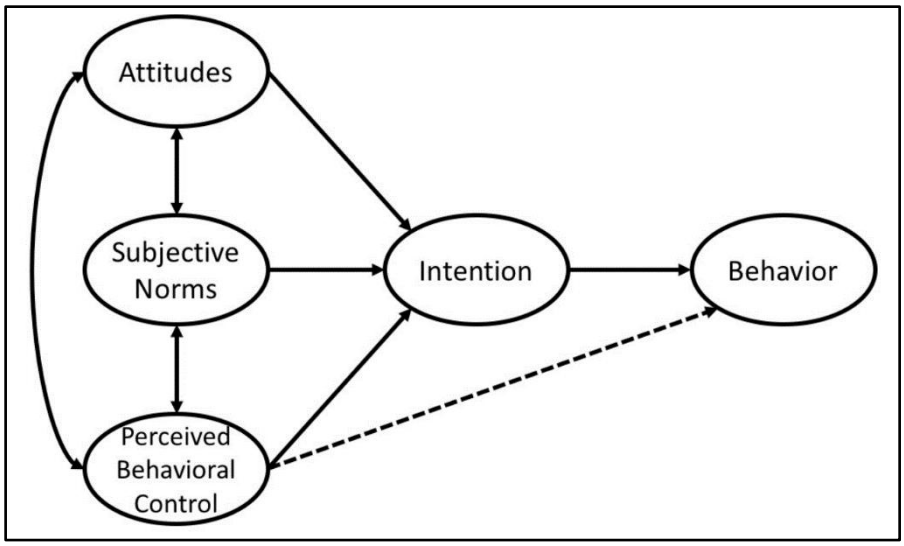

Figure 2.1 The Model of the Theory of Planned Behaviour
Source: Adapted from (Ajzen, 2005)

The TPB is a well-established psychological framework that elucidates human behaviour by examining the influences of attitudes, subjective norms, and perceived behavioural control (PBC) (Nardi et al., 2019). The TPB states that behavioural intentions are influenced by three fundamental components, which in turn affect actual behaviour (Xie et al., 2021). Attitudes denote an individual's favourable or unfavourable assessment of a behaviour, subjective norms encompass the perceived societal pressures to engage in a behaviour, and PBC pertains to the perceived ease or difficulty of executing a behaviour (Barbera et al., 2020).

The TPB has been extensively employed to comprehend and forecast consumer intentions and behaviours regarding food selections and dietary practices. Research indicates that the TPB is effective in elucidating the reasons behind individuals' food selections, including the consumption of organic food (Al-Swidi et al., 2014), consuming meat (Çoker et al., 2020), and adopting plant-based diets (Graça et al., 2015). TPB has been instrumental in examining the determinants that affect particular behaviours, including the propensity to try plant-based meat (Chen, 2023), the intentions to consume edible insects (Lucchese-Cheung et al., 2020), and the decrease in meat consumption (Krispenz et al., 2020).

In the examination of plant-based meat product consumption, attitudes, subjective norms, and PBC are pivotal in shaping individuals' intentions and

behaviours. Research indicates that individuals' attitudes toward plant-based meat, the social norms surrounding its consumption, and their perceived control over selecting plant-based alternatives significantly affect their willingness and intentions to embrace a more plant-based diet (Graça et al., 2015). Furthermore, the theory has been employed to elucidate the determinants affecting sustainable consumption behaviour, particularly regarding the consumption of plant-based alternatives (Matharu et al., 2020).

Empirical research employing the TPB to investigate plant-based meat consumption yielded significant insights into the factors influencing consumer behaviour. Research indicates that attitudes, subjective norms, and PBC affect individuals' intentions and behaviours regarding the consumption of plant-based meat (Graça et al., 2015). Researchers have employed these criteria to forecast and elucidate variations in consumer preferences and decisions regarding plant-based alternatives (Chen, 2023).

Although the TPB offers a comprehensive and extensively validated framework for comprehending food consumption behaviour, certain limitations merit recognition. The TPB was initially formulated and validated predominantly within Western cultural frameworks, and its direct relevance to collectivist societies like Malaysia, where family and community influences on dietary choices may differ from individualistic standards, has not been thoroughly examined in the context of plant-based meat (Bagozzi, 2007). The TPB predominantly emphasises rational cognitive processes in decision-making and may inadequately account for the emotional, habitual, and identity-related influences on meat consumption, including the profound cultural affinity for meat prevalent in numerous Malaysian dietary customs (Graça et al., 2019). The theory's focus on behavioural intention as a precursor to actual behaviour presupposes a direct intention-behaviour correlation, which may be undermined in practice by structural impediments such as restricted product availability and financial constraints encountered by Malaysian youth (Lou et al., 2024). The limitations do not undermine the significance of the TPB as a theoretical framework for this study, instead, they underscore the necessity of qualitative research in elucidating the intricate, culturally specific aspects of plant-based meat consumption behaviours that quantitative TPB models may neglect.

2.9 Research Framework

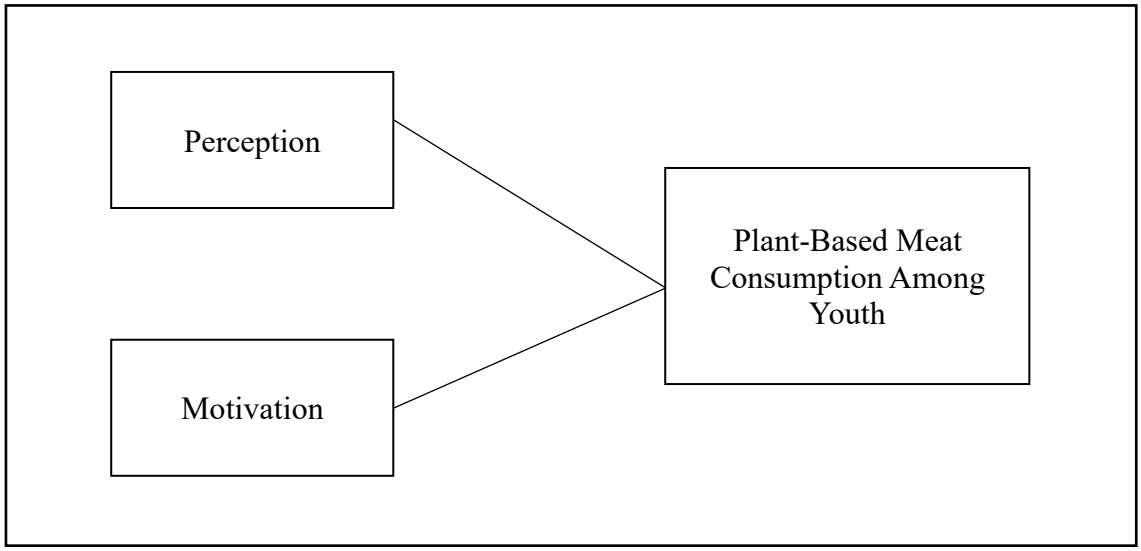

Figure 2.2 The Research Framework for this Study

Figure 2.2 illustrates the comprehensive research framework for this study, highlighting how perceptions and motivations play a crucial role in influencing the consumption of plant-based meat products among the youth in Malaysia.

This framework is based on the TPB, with each construct of the study aligned with the three fundamental components of the TPB. Perception, which includes sensory evaluations, health beliefs, nutritional assessments, and cultural attitudes towards plant-based meat products, aligns with the attitude construct of the TPB, illustrating how youth develop positive or negative evaluative beliefs regarding these products. Motivation encompasses health consciousness, environmental awareness, ethical considerations, social and peer influences, affordability concerns, and product accessibility. It is aligned with the subjective norms construct, which reflects social pressures and influences on consumption intentions, and the PBC construct, which addresses the practical facilitators and barriers affecting the ease or difficulty of consuming plant-based meat products. Consumption patterns, including the frequency, context, and nature of interaction with plant-based meat products, align with the behavioural intention and actual behaviour elements of the TPB, reflecting the observable results of the attitudinal and motivational processes analysed in this study.

This framework selection underscores the study's qualitative focus, instead of quantitatively assessing predictive relationships among TPB constructs, it employs TPB as a guiding framework for thematically examining youth perceptions, motivations, and

consumption patterns within a culturally specific Malaysian context. This methodology aligns with qualitative applications of the TPB in food behaviour research, prioritising comprehensive understanding rather than statistical forecasting (McInnes et al., 2023; Graça et al., 2015).

2.10 Summary

The chapter begins with an overview of plant-based meat products, highlighting their growing popularity and importance in the food industry. The chapter recognises that although plant-based meat products present significant health, environmental, and ethical advantages, debates surrounding their ultra-processed characteristics, nutritional sufficiency, and cultural acceptability necessitate thorough examination. This study explores the perceptions and motivations influencing the adoption of plant-based alternatives, offering insights into the factors that shape the dietary preferences of Malaysian youth. The chapter further explores the consumption patterns of plant-based meat products among the youth, emphasising the significance of comprehending changing food preferences and trends. It also examines barriers to the consumption of plant-based meat products, providing essential insights into the challenges that may impede the acceptance of plant-based alternatives among Malaysian youth. Additionally, the chapter introduces the TPB as a conceptual framework for comprehending consumer behaviour regarding the consumption of plant-based meat products. Although the TPB offers a robust theoretical framework, its shortcomings in addressing the cultural, emotional, and structural aspects of food behaviour within the Malaysian context have been recognised, thereby underscoring the significance of the qualitative methodology employed in this research. This chapter offers a comprehensive analysis of the existing literature, establishing the groundwork for the upcoming research on Malaysian youths' perceptions and motivations regarding the consumption of plant-based meat products. The next chapter presents the study's methodology.

CHAPTER 3
RESEARCH METHODOLOGY

3.1 Introduction

This chapter provides a detailed explanation and analysis of the research methods and procedures used to gather data on perception and motivation on plant-based meat product consumption among youth in Malaysia. It provides an overview of the study's methodology, sampling principles, and data collection and analysis procedures.

3.2 Qualitative Research Approach

This study employed a qualitative research methodology to examine the impact of perceptions and motivations on the consumption of plant-based meat products among Malaysian youth. It acknowledged the subjective nature of researchers and regarded it as a crucial component of the analytical process (Vandermause, 2024; Rosairo, 2023; Campbell et al., 2021). Researchers select qualitative approaches to encapsulate the complexity of human experiences and societal frameworks (Mohammed, 2024).

This study employed a qualitative descriptive methodology, which provided significant descriptive insights into the what, why, and how of informer’s experiences and perceptions, thereby rendering it especially appropriates for investigations into perceptions, motivations, and behavioural patterns (Villamin et al., 2025; Hall et al., 2024). In contrast to phenomenology, which emphasises the significance of lived experiences, grounded theory, which seeks to develop new theoretical frameworks from data, and ethnography, which necessitates prolonged cultural immersion, the qualitative descriptive approach prioritises delivering a comprehensive and clear portrayal of participants' experiences and viewpoints, rendering it the most suitable method for the current study (Villamin et al., 2025; Hall et al., 2024). Likewise, ethnography was deemed unsuitable due to its necessity for prolonged immersion in a cultural context, which exceeded the parameters of this study. The qualitative descriptive technique was

the most suitable methodology for examining how Malaysian youths perceive, are motivated by, and interact with plant-based meat products in their daily lives.

This research methodology facilitates an in-depth understanding of phenomena by thoroughly examining experiences from multiple viewpoints (Bailey-Rodriguez, 2021). Qualitative research is crucial for enhancing understanding and delivering valuable insights, particularly in fields such as health and nutrition (Moisey et al., 2022; Hearld et al., 2021; Bennett et al., 2020). Rationalising the choice of qualitative research methodologies, sampling techniques, and data analysis procedures is essential for bolstering credibility and assuring suitability (Fingerhut et al., 2023; Islam et al., 2021; Subedi, 2021)

This qualitative descriptive technique was conducted through face-to-face and online interviews, facilitating comprehensive and nuanced responses from informers. The data were subsequently examined through theme analysis utilising Atlas.ti software. This methodological integration for a thorough investigation of the perceptions, motivations, and consumption patterns of Malaysian youth regarding plant-based meat products.

This methodology directly tackles the deficiency highlighted in the literature review, specifically the inadequate qualitative insight into Malaysian youth's perceptions and interactions with plant-based meat products within their distinct cultural, religious, and socioeconomic frameworks. This study uses a qualitative descriptive approach to obtain nuanced, context-specific insights that quantitative methods cannot adequately capture (McInnes et al., 2023).

3.3 Sample and Population for Qualitative Research Approach

In Malaysia, the legal definition of youth has been revised through amendments to the Youth Societies and Youth Development Act. Under the 2007 Act (Act 668), youth were defined as individuals aged 15 to 40 years. However, with the enforcement of the Youth Societies and Youth Development (Amendment) Act 2019 (Act A1602) on January 1, 2026, the upper age limit will be reduced to 30 years (Awang, 2023). This adjustment brings Malaysia closer to international standards, such as those applied in Indonesia (16–30) and the Philippines (15–30) (Awang, 2023). Since this study was conducted in 2024, it followed the definition of youth as 15–40 years old, because the

amendment will only take effect on January 1, 2026. Nevertheless, the findings remain relevant even after the amendment, as all informers in the study were aged between 19 and 29 years, which falls within the revised category.

This study explored perceptions and motivations influencing the consumption patterns of plant-based meat products among Malaysian youth. The informers, aged 19 to 29, were identified as regular meat users, indicating that they incorporated conventional meat products into their diet regularly. This criterion was determined through an initial screening step in recruiting, where potential informers were queried about their regular meat consumption as part of their daily dietary practices. This criterion was implemented to guarantee that informers could offer significant comparative insights into their perceptions and motivations regarding plant-based meat alternatives. Moreover, informers were not mandated to have prior experience with plant-based meat products, since the study aimed to encompass a wide array of viewpoints, including both individuals who had sampled these items and those who had not, thus representing the varied attitudes of Malaysian youth. This age group coincides with the emphasis of national development initiatives, specifically individuals aged 18 to 25 18 to 25 (Faizah, 2007). Data were collected using face-to-face and online interviews using a qualitative methodology, which facilitated greater depth of responses, enhanced understanding, and a more personal interaction with the informers.

The sample was acquired by purposive sampling, a non-probability selection technique. Informers were selected based on certain characteristics and criteria relevant to the investigation. Purposive sampling is a technique wherein researchers deliberately select informers possessing particular traits pertinent to the research inquiry. This methodology guarantees that the sample corresponds effectively with the research aims, resulting in enhanced rigour in the study and higher reliability of the data and findings (Campbell et al., 2020).

Although the sample was intentionally chosen to align with the research objectives, it is recognised that confining recruitment to university and college students may restrict the applicability of findings to non-student youth populations, who may possess distinct socioeconomic conditions and dietary exposures. Moreover, although diversity among institutions, geographic regions, and ethnic origins was taken into account during recruitment, complete socioeconomic diversity cannot be assured due to the intrinsic characteristics of the tertiary student demographic. The sample comprised both male and female informers to guarantee equal representation of opinions.

The population for this study consisted of informers aged 19 to 29 years from selected universities and colleges in Malaysia, specifically from public and private higher learning institutions, including Universiti Teknologi MARA (UiTM) Shah Alam, Universiti Teknologi MARA (UiTM) Puncak Alam, UNITAR International University, Universiti Kebangsaan Malaysia (UKM), Sunway College, and Lincoln University College in Selangor; University of Malaya (UM) in Kuala Lumpur; Universiti Malaysia Pahang Al-Sultan Abdullah (UMPSA) and International Islamic University Malaysia (IIUM) in Pahang; Universiti Tun Hussein Onn Malaysia (UTHM) in Johor; Universiti Teknologi MARA (UiTM) in Pulau Pinang; University of Technology Sarawak (UTS) in Sarawak; and Universiti Malaysia Sabah (UMS) in Sabah. The study was conducted as a qualitative inquiry across multiple institutions spanning urban and semi-urban areas of Peninsular and East Malaysia. A total of nineteen (19) informers participated in the interviews for this study. In qualitative research, the optimal sample size is not predetermined but is determined by the principle of data saturation. Data collection continued until no new information or themes arose, ensuring a thorough investigation of the research issue (Subedi, 2021). This methodology enables researchers to comprehensively capture the richness and complexity of the data, resulting in a meticulous examination and interpretation of the findings.

This sample directly addresses the research gap identified in the literature review by concentrating specifically on Malaysian youths in tertiary institutions, a demographic that is under-represented in current qualitative studies on plant-based meat consumption, while capturing diverse perspectives across urban and semi-urban institutions throughout Peninsular and East Malaysia.

3.4 Research Instrument Design for Qualitative Research

A set of 18 semi-structured interview questions was created. The interview questions were designed based on a systematic examination of the literature regarding plant-based meat consumption, consumer perceptions, and motivational factors, so ensuring that the questions were grounded in the theoretical and empirical frameworks outlined in Chapter 2. The enquiries were categorised into four subject sections: demographic information, perception, motivation, and consumption patterns and

impact, to guarantee systematic and thorough covering of the research aims. This interview approach adhered to a preset series of semi-structured questions to ensure the consistency of the information gathered. The interview instrument was submitted to the Faculty Ethics Review Committee (FREC) at UiTM for approval.

Semi-structured interviews were selected above other forms for several reasons. In contrast to unstructured interviews, they offered a level of uniformity among informers while yet permitting flexibility for probing and follow-up enquiries. In contrast to focus groups, individual semi-structured interviews were considered more suitable for this study, as they enabled informers to express personal and perhaps sensitive opinions regarding dietary choices without social pressure or group impact. Semi-structured interviews were commonly employed in qualitative research for the creation of research instruments, since they provided flexibility and depth in data collection (Oerther, 2021; Busetto et al., 2020; Watkins et al., 2019). The interviews consisted a structured sequence of open-ended questions that guided the dialogue while permitting additional probing and follow-up enquiries to explore the responses more thoroughly (Lap et al., 2022; Muttuvelu et al., 2022; Anjum, 2021). This methodology offered a cohesive blend of structure and flexibility, enabling researchers to explore multifaceted problems while maintaining a degree of consistency in data collection (Lap et al., 2022; Anjum, 2021).

Their perceptions of plant-based meat products, motivations to consumption, and the impact of consuming such products were included. Furthermore, the demographic attributes of informers were incorporated. The interview questions were meticulously intended to elicit comprehensive responses, providing significant insights on the variables influencing the intake of plant-based and animal products among Malaysian youth. Semi-structured interviews are recognised to have inherent limitations, such as the possibility of interviewer bias in question formulation and the dependence on self-reported data, which may be influenced by social desirability bias. The constraints were mitigated by use neutral, open-ended question framing and ensuring informers of the confidentiality of their responses before each interview. The interviews were expected to last between 45 minutes and one hour. The complete semi-structured interview questions used in this study are presented in Appendices 1 to 4.

3.5 Pilot Study

A pilot study was conducted prior to the main data collection to assess the clarity, relevance, and overall suitability of the interview questions (Murali, 2024; Botezatu, 2021; Charlesworth et al., 2019). The purpose was to identify any ambiguous or leading questions, assess the appropriateness of question sequencing, and estimate the duration of the interview.

The pilot study informers consisted of three postgraduate students from UiTM Puncak Alam. Postgraduate students were specifically selected for the pilot study rather than other tertiary level students because of their familiarity with qualitative research processes and their capacity to provide informed and constructive methodological feedback on the interview instrument, which was the primary purpose of the pilot study.

Following to the pilot study, several alterations were implemented to the interview questions in accordance with the feedback obtained. A question regarding informers' perceptions and feelings towards the purchasing of plant-based meat products was incorporated into the motivation section to more effectively elucidate the affective aspects of consumer behaviour. A question regarding the advantages and disadvantages of consuming plant-based animal products was included in the perception section to obtain more balanced and full responses. These enhancements provided increased depth and clarity in articulating informers' perspectives and were incorporated into the finished interview protocol submitted for ethical approval.

3.6 Procedure of Data Collection for Qualitative Approach

Prior to conducting the interviews, the informers were approached to obtain their agreement and willingness to participate in the study. Informers were enlisted through institutional procedures with the appropriate approvals from the corresponding institutions. Informers received an initial telephone call detailing the research aims, the voluntary nature of their participation, and confidentiality of their responses. During this discussion, provisions were established for in-person and virtual interviews based upon the informer’s availability and location.

The interviews were arranged from January 10, 2025, to February 28, 2025. During each interview, the Informers were posed a set of semi-structured questions in a

uniform order to ensure uniformity. While a constant sequence was upheld, flexibility was retained through the employment of probing questions and follow-up prompts, enabling the researcher to investigate unexpected yet pertinent responses more thoroughly. Before each interview, a rapport was built by quickly explaining the purpose of the study and assuring informers that their participation was voluntary and would be kept private. This was followed by a short, casual conversation to make people feel comfortable enough to share freely and honestly.

The interviews were digitally recorded with the clear consent of the informers. Each interview generally lasted between 45 minutes and one hour. To maintain confidentiality, all recordings and transcripts were anonymised by substituting informers' names with participant codes, and all data were securely stored on a password-protected device accessible only to the researcher.

3.7 Procedure of Data Analysis for Qualitative Research

The data acquired from the interviews were processed using Atlas.ti software, an effective tool for qualitative data analysis. Atlas.ti enabled systematic data management, aiding with the identification of themes and patterns within the dataset, hence enhancing the rigour and efficiency of the thematic analysis process (Braun et al., 2020).

Thematic analysis was utilised for data analysis, adhering to the six-phase framework established by Braun and Clarke (2020), a widely recognised methodology for identifying, analysing, and reporting patterns or themes in qualitative data. The six phases were implemented as outlined below:

Table 3.1
Phases of Thematic Analysis Following Braun and Clarke

Phase	Name	Description
Phase1	Familiarisation	The researcher familiarised themselves with the data by reading and re-reading the interview transcripts and noting initial observations and impressions.
Phase 2	Coding	Initial codes were systematically generated across the entire dataset using Atlas.ti, capturing meaningful features of the data relevant to the research questions.
Phase 3	Theme Development	Related codes were grouped into potential themes, with Atlas.ti facilitating the organisation and visualisation of code clusters.

Phase 4	Theme Review	Themes were reviewed and refined against the coded data extracts and the full dataset to ensure they accurately represented the informers' responses.
Phase 5	Naming Themes	Each theme was clearly defined and named to reflect its essence in relation to the research objectives on perception, motivation, and consumption patterns.
Phase 6	Reporting	The final themes were incorporated into the written findings, with supporting data extracts used to illustrate and validate each theme.

The thematic analysis was performed inductively, allowing themes to arise naturally from the data instead of being dictated by a pre-established framework. Although the Theory of Planned Behaviour (TPB) provided the overarching conceptual framework for the study, the analytical method was data-driven to guarantee that the findings accurately represented the informers' viewpoints (Braun et al., 2020). This systematic approach to thematic analysis facilitated a comprehensive understanding of the factors and attitudes that shaped the consumption of plant-based meat products among Malaysian youth. To enhance the rigour of the analysis, peer debriefing was performed with academic peers proficient in qualitative methodologies, and an audit trail was preserved throughout the analytical process to record significant judgements made during coding and theme development.

3.8 Trustworthiness and Credibility

In qualitative research, trustworthiness is assessed based on four criteria defined by Lincoln and Guba (1985): credibility, transferability, dependability, and confirmability. These criteria functioned as the standards for guaranteeing the quality and rigour of the current investigation.

Credibility, denoting the trust in the reliability of the findings, was established through peer debriefing with academic peers knowledgeable in qualitative methodologies and the broader context of youth food behaviour in Malaysia. These peers reviewed emergent codes and themes, aiding in the reduction of interpretive bias and enhancing the credibility of findings concerning perception and motivation.

Transferability, relating to the applicability of findings to different contexts, was addressed by providing detailed descriptions of the study context, sample characteristics, and data collection procedures, allowing readers to evaluate the relevance of the findings to other settings or populations (Lincoln et al., 1985).

Dependability, defined as the consistency and stability of findings across time, was assured by maintaining a comprehensive audit trail that documented all methodological decisions, modifications, and analytical processes throughout the investigation.

Confirmability, pertaining to the extent to which findings represent the informers' viewpoints rather than researcher bias, was addressed through reflexive practice, wherein the researcher continuously recognised and examined their own assumptions and possible biases during the data collection and analysis phases.

Collectively, these measures enhanced the overall reliability and credibility of the study, guaranteeing that the data offer a reliable and genuine representation of Malaysian youth perspectives and motivations regarding plant-based meat product consumption.

3.9 Summary

This chapter outlines the study methodology, emphasising a qualitative descriptive approach to explore the factors affecting the consumption of plant-based meat products among Malaysian youth. This methodology was chosen as the most suitable for exploring perceptions, motivations, and consumption patterns, as it provides nuanced, contextually specific insights that quantitative methods cannot adequately capture. The text outlines the methodology for selecting samples and populations in qualitative research, highlighting the necessity of incorporating a broad spectrum of perspectives and experiences from the youth demographic through purposive sampling across various urban and semi-urban tertiary institutions throughout Peninsular and East Malaysia. The chapter provides a detailed description of the development of the research instruments, indicating that semi-structured interview questions were developed based on the literature review and subsequently modified through a pilot study to guarantee clarity, relevance, and depth. The document outlines the protocols for data collection and analysis, employing thematic analysis using Atlas.ti in accordance with Braun and Clarke's six-phase framework, while ensuring trustworthiness through strategies of credibility, transferability, dependability, and confirmability as per Lincoln and Guba's criteria. This chapter offers a detailed elucidation of the research methodology, establishing the groundwork for the qualitative

study on perceptions and motivations influencing plant-based meat eating among Malaysian youths. The next chapter presents and discusses the study's findings.

CHAPTER 4
FINDINGS AND ANALYSIS

4.1 Introduction

This chapter presents and discusses the findings of the study. The results are primarily based on qualitative data from interviews with the selected informers. The chapter begins by explaining the analytical approach used to interpret the data and describing the informers' profiles. The informers' perceptions of plant-based meat, their motivations for consuming it, their overall consumption patterns, and their views on its broader impact are further explored and discussed in this chapter.

4.2 Contemplation Concerning the Method of Analysis

Data were collected for analytical purposes through face-to-face and online interviews with meticulously chosen informers. Every interview was recorded verbatim to accurately document the informers' responses. Special emphasis was placed on maintaining the depth and richness of their ideas, views, and perspectives expressed during the discussions. This meticulous transcription method guaranteed that no essential content was omitted.

In the preparation of the transcripts, brief breaks in speech were denoted by commas or periods. Conversely, extended pauses were denoted by ellipses. These annotations facilitated the expression of the dialogue's inherent rhythm and provided insight into the informers' cognitive processes. The transcription focused on the essential information and well-expressed ideas, rather than highlighting hesitation signals, repetition, or filler words. Some qualitative researchers contend that pause indicators and repetitions convey meaning, indicating uncertainty or emphasis. This study prioritises the substantive content of informers' perceptions and motivations over the mechanics of spoken language, making this technique the best suitable for achieving analytical clarity. This guaranteed that the ensuing analysis would concentrate on substantive content, rather than the informal attributes of spoken language.

Subsequent to transcription, the data were processed by theme analysis (Braun et al., 2020). This strategy entailed the methodical identification, analysis, and interpretation of patterns or themes that arose throughout the interviews. It established a definitive framework for comprehending the informers' perceptions and motivations about the consumption of plant-based meat products. The thematic analysis was performed inductively, allowing themes to arise spontaneously from the data instead of being dictated by a pre-established framework. Although the Theory of Planned Behaviour (TPB) provided the overarching conceptual framework for the study, as outlined in Chapter 3, the analytical method was fundamentally data-driven to guarantee that the findings accurately represented the informers' viewpoints.

The analytical method began with initial coding, wherein notable passages from the data were emphasised and categorised. The Atlas.ti program was employed to systematically organise codes, enabling efficient grouping and display of developing patterns within the dataset. As a result, these codes were classified into broad categories that encapsulated recurring themes within the dataset. Key themes were derived from these categories to represent the principal elements affecting consumption behaviour, including health consciousness, environmental awareness, taste preferences, and social impact. The linkages among these themes were analysed to comprehend the factors influencing the consumption of plant-based meat products among youths in Malaysian tertiary institutions.

An audit trail was kept throughout the analytical process to verify its rigour and reliability, documenting critical decisions made during coding and theme development. The researcher participated in reflexive practice, continually analysing personal assumptions and potential biases to ensure that the developing themes accurately represented the informers' viewpoints rather than the researcher's preconceptions. These parameters enhanced the credibility and reliability of the findings, as elaborated in Chapter 3.

This study offers a distinct Malaysian viewpoint on the existing literature regarding plant-based meat eating among youth. This study examines the complex interplay of cultural, religious, and socioeconomic factors influencing plant-based meat perceptions and motivations among Malaysian youths in tertiary institutions, a demographic that is under-represented in existing research predominantly focused on Western or East Asian consumer populations.

4.3 Informer's Profile

This study included 19 informers from several tertiary institutions around Malaysia, encompassing a range of academic specialities, cultural backgrounds, and geographic areas. All informers are Malaysian youths enrolled in foundation, diploma, undergraduate, or postgraduate programs. Their demographic and educational diversity facilitates a comprehensive understanding of the elements influencing youth perceptions and motivations regarding the consumption of plant-based meat products. The subsequent profiles offer contextual insights into each informer's background, thereby potentially affecting their views, awareness, and behavioural patterns about plant-based meat products.

The demographic and educational information of the informers offers essential context for comprehending their backgrounds. The particulars encompass age, gender, ethnicity, religion, country of origin, academic discipline, and university affiliation. Furthermore, they provide an extensive perspective on the sample's diversity, encompassing academic levels from foundation to postgraduate education. The existence of diverse ethnic and religious identities enhances the analysis by introducing numerous views. This diversity enriches the data's depth and relevance, facilitating a more nuanced examination of experiences and perspectives pertinent to the research issue. An overview of the demographic and educational characteristics is provided in Table 4.1: Informers' Profile below.

Table 4.1
Informer's Profile

Informer	Age	Gender	Race	Religion	Origin	Field of study	University
Informer 1	25 years old	Female	Malay	Islam	Seri Manjung, Perak	Master of Science (Food Service Management)	Universiti Teknologi MARA (UiTM), Puncak Alam Branch
Informer 2	19 years old	Male	Malay	Islam	Kuantan, Pahang	Diploma in Mechanical Engineering	Universiti Malaysia Pahang Al-Sultan Abdullah (UMPSA)
Informer 3	23 years old	Male	Malay	Islam	Port Dickson, Negeri Sembilan	Bachelor of Science Physics (Honour)	International Islamic University Malaysia (IIUM)
Informer 4	25 years old	Male	Malay	Islam	Batu Pahat, Johor	Masters of Technical and Vocational Education	Universiti Tun Hussein Onn Malaysia (UTHM)
Informer 5	23 years old	Male	Malay	Islam	Ipoh, Perak	Bachelor of Mechanical Engineering	Universiti Teknologi MARA (UiTM), Pulau Pinang Branch
Informer 6	25 years old	Male	Malay	Islam	Seremban, Negeri Sembilan	Masters in Gastronomy	Universiti Teknologi MARA (UiTM), Puncak Alam Branch
Informer 7	23 years old	Male	Malay	Islam	Ipoh, Perak	Diploma in Accounting	UNITAR International University
Informer 8	19 years old	Female	Malay	Islam	Seri Manjung, Perak	Foundation in Arabic	International Islamic University Malaysia (IIUM)
Informer 9	22 years old	Female	Malay	Islam	Bangi, Selangor	TESL	Universiti Kebangsaan Malaysia (UKM)
Informer 10	27 years old	Female	Malay	Islam	Temerloh, Pahang	Bachelor's Degree in Special Education	Universiti Kebangsaan Malaysia (UKM)
Informer 11	23 years old	Female	Malay	Islam	Lumut, Perak	Bachelor's Degree in Doctor of Dentistry	Universiti Kebangsaan Malaysia (UKM)
Informer 12	29 years old	Female	Malay	Islam	Masjid Tanah, Melaka	Doctor of Philosophy in Mass Communication	Universiti Teknologi MARA (UiTM), Shah Alam Branch
Informer 13	24 years old	Female	Indian	Hindu	Tanjung Malim, Perak	Bachelor of Business Administration	UNITAR International University
Informer 14	21 years old	Male	Chinese	Buddhist	Subang Jaya, Selangor	Diploma in Mass Communication	Sunway College
Informer 15	22 years old	Male	Dayak	Christian	Sibu, Sarawak	Foundation in Arts	University of Technology Sarawak
Informer 16	25 years old	Female	Malay	Islam	Kepong, Selangor	Master of Science (Food Service Management)	Universiti Teknologi MARA (UiTM), Puncak Alam Branch
Informer 17	23 years old	Female	Malay	Islam	Klang, Selangor	Bachelor of International and Strategic Studies	University Malaya
Informer 18	21 years old	Female	Malay	Islam	Selangor	Bachelor's Degree in Doctor of Medicine	Universiti Malaysia Sabah (UMS)
Informer 19	23 years old	Female	Chindian	Christian	Sungai Petani, Kedah	Bachelor's Degree in Doctor of Medicine	Lincoln University College

Although the sample includes various academic fields, geographic regions, and ethnic backgrounds, it is noted that the predominant majority of informers, precisely 15 out of 19, are Malay Muslim. This aligns with the demographic composition of Malaysian public colleges, where Malay Muslim students represent the predominant portion of the student population. This characteristic enhances the study by providing profound and contextually rich insights into plant-based meat consumption among Halal-sensitive customers, a large and underexplored market sector in Malaysia. The viewpoints of informers from Chinese Buddhist, Indian Hindu, Dayak Christian, and mixed heritage backgrounds, however limited in quantity, provide complementary insights that enhance the overall research. The representation of several academic disciplines, including food science, medicine, engineering, business, and the arts, guarantees that the findings encompass a wide array of knowledge frameworks and individual perspectives on plant-based meat products. The diverse disciplinary backgrounds are anticipated to produce both diverse and complementary viewpoints in the findings, enhancing the overall comprehension of the research topic.

Informer 1 is a 24-year-old Malay Muslim female from Seri Manjung, Perak. She is pursuing a Master of Science in Food Service Management at UiTM, Puncak Alam Branch. Her academic engagement with food systems positions her within a professional context where nutrition, sustainability, and food innovation are emphasised, making her perspectives especially relevant to discussing alternative protein sources.

An 18-year-old Malay Muslim male from Kuantan, Pahang, informer two is enrolled in a Diploma in Mechanical Engineering at UMPSA. As a student in a technical field, his exposure to plant-based meat products is likely influenced more by digital and social media than by formal education, offering insight into how food trends are encountered outside of health-related disciplines.

From Port Dickson, Negeri Sembilan, a 22-year-old Malay Muslim male identified as Informer 3 is completing a Bachelor of Science in Physics with Honours at the IIUM. His scientific training leads him to view plant-based meat products analytically as a technological advancement rather than merely a dietary choice.

At 24, Informer 4 comes from Batu Pahat, Johor, and is enrolled in a Master of Technical and Vocational Education at UTHM. His expertise in teaching methods suggests how modern educational approaches can support introducing plant-based meat products in classrooms and workforce training.

A 22-year-old Malay Muslim male from Ipoh, Perak, who is Informer 5, is pursuing a Bachelor of Mechanical Engineering at UiTM Pulau Pinang Branch. He tends to form opinions about plant-based meat products through personal experience, peer influence, and media exposure rather than formal instruction.

Pursuing a Master's in Gastronomy at UiTM, Puncak Alam Branch, Informer 6 is a 24-year-old Malay Muslim male from Seremban, Negeri Sembilan, whose culinary lens focuses on sensory qualities such as taste, texture, and authenticity when evaluating plant-based meat.

Studying for a Diploma in Accounting at UNITAR International University, Informer 7 is a 22-year-old Malay Muslim male from Ipoh, Perak, who frames plant-based meat products primarily in terms of cost, market value, and commercial viability rather than ethical or nutritional concerns.

A 19-year-old Malay Muslim female from Seri Manjung, Perak, identified as Informer 8, is enrolled in a Foundation in Arabic at IIUM. She approaches plant-based meat products with cultural and spiritual considerations, particularly Islamic dietary principles.

Studying Teaching English as a Second Language at UKM, Informer 9 is a 22-year-old Malay Muslim female from Bangi, Selangor, exposed to global sustainability discourse that likely shapes her awareness of plant-based alternatives.

Holding a Bachelor’s Degree in Special Education from UKM, Informer 10 is a 27-year-old Malay Muslim female from Temerloh, Pahang, whose greater life experience makes personal health and well-being primary motivators in her views on plant-based meat.

Training for a Bachelor of Dentistry at UKM, Informer 11 is a 23-year-old Malay Muslim female from Lumut, Perak, who applies preventive health and nutrition knowledge to critically evaluate plant-based meat products from a wellness perspective critically.

Pursuing a Doctor of Philosophy in Mass Communication at UiTM Shah Alam, Informer 12 is a 29-year-old Malay Muslim female from Masjid Tanah, Melaka, who previously studied in Australia and whose advanced communication studies provide exposure to global sustainability narratives and consumer behaviour relevant to attitudes about plant-based innovations.

Completing a Bachelor of Business Administration at UNITAR International University, Informer 13 is a 24-year-old Indian Hindu female from Tanjung Malim,

Perak. Her cultural background and business training allow her to view plant-based meat products as a lifestyle choice and a market opportunity.

A 21-year-old Chinese Buddhist male from Subang Jaya, Selangor, known as Informer 14, studies Mass Communication at Sunway College. His urban, media-focused background increases exposure to global food trends and digital content about alternative proteins.

Hailing from Sibu, Sarawak, Informer 15 is a 22-year-old Dayak Christian male pursuing a Foundation in Arts at the UTS. His perspective reflects regional food culture differences and varying access to plant-based options in semi-urban East Malaysia.

At 25, Informer 16 is a Malay Muslim female from Kepong, Selangor, studying for a Master of Science in Food Service Management at UiTM Puncak Alam. Her food science and nutrition expertise positions her at the intersection of health, sustainability, and culinary innovation.

A 23-year-old Malay Muslim female from Klang, Selangor, identified as Informer 17, studies International and Strategic Studies at UM. She situates plant-based meat products within broader concerns such as climate change and food security.

Currently enrolled in a Doctor of Medicine program at UMS, Informer 18 is a 21-year-old Malay Muslim female from Selangor who uses medical training to evaluate plant-based diets' nutritional implications and potential health outcomes.

Finally, Informer 19 is a 23-year-old Chindian Christian female from Sungai Petani, Kedah, studying Medicine at Lincoln University College. Her mixed heritage and health-oriented studies blend traditional food values with modern dietary innovation.

The demographic and educational diversity of the informers enhances this study, facilitating a comprehensive investigation of the research issue. Incorporating informers from various age groups, genders, ethnicity, religions, geographical locations, and academic backgrounds offers a broad array of perspectives that represent the multi-ethnic and multi-disciplinary landscape of Malaysian youths in tertiary institutions. Although the sample is not designed for statistical representativeness, its qualitative nature, together with the multiplicity of informers, guarantees theoretical richness and facilitates the transferability of findings to analogous Malaysian youths in tertiary institutions environments. The primarily Malay Muslim composition of the sample facilitates a thorough examination of Halal-sensitive plant-based meat consumption, which is a notably important aspect of food selection among Malaysian youths.

4.4 Perceptions of Plant-Based Meat Products Among Youths in Tertiary Institutions in Malaysia

This section explores young consumers' perceptions of plant-based meat products, focusing on their understanding, attitudes, and influencing factors. It explores key areas such as the definition and perception of plant-based meat, its advantages and disadvantages, nutritional value, overall sensory experience, and the role of cultural or religious backgrounds. Additionally, it examines the factors that shape consumer views, providing insights into how these elements influence the acceptance and adoption of plant-based meat products in Malaysia. The findings highlight opportunities for stakeholders to address barriers and refine product offerings to align with consumer expectations.

4.4.1 Understanding of Plant-Based Meat

This subsection explores Question 1 of the perception part, as understanding how youth in Malaysian tertiary institutions perceive plant-based meat products is crucial for assessing their acceptance and potential market growth in Malaysia. To explore these perceptions, informers were asked: “What comes to your mind when you hear the term 'plant-based meat'? Could you explain your understanding of plant-based meat?” Their responses were analysed using inductive coding, identifying key themes that reflect their thoughts and attitudes toward plant-based meat products. The findings are as shown below:

a) <u>Emphasis on Taste and Texture Similarity</u>

Among Malaysian youths in tertiary institutions, the sensory appeal of plant-based meat plays a central role. Eleven informers (n=11) pointed out that these products are designed to mimic the taste, texture, and even the appearance of conventional meat, making them feel both familiar and innovative at the same time. Their views are reflected in the following statements:

"When I hear 'plant-based meat,' I think of food made to look and taste like meat, but it's it is made from plants. It's It is usually meant to be an alternative for people who don't do not eat animal products. It sounds like a good option for a more sustainable diet."

(Informer 1)

"I can think of plant-based meat, which is made from plants to imitate conventional meat. In my understanding, plant-based meat not only aims to replicate the taste but also the texture."

(Informer 4)

"I think of food that looks like meat but is made from plants. It is an option for people who do not eat meat or want to try something different."

(Informer 5)

"The meat produced from plant-based ingredients but designed to resemble the taste, texture, and appearance of conventional meat. An alternative to conventional meat made from ingredients such as soybeans, wheat, or peas."

(Informer 7)

"When I hear 'plant-based meat,' I think about food that looks and tastes like meat, but it is made from plants instead. I think plant-based meat are healthier and cruelty-free."

(Informer 8)

"I think is about food that replicates the experience and taste of eating conventional meat without using actual animal products and its alternatives to meat design to like vegetarian, vegan or anyone who is looking to reduce meat consumption. Even for like Muslim and we are abroad overseas it can be hard to find Halal meat so plant-based meat could be a good substitute or another alternative to eat when we cannot find any Halal meat."

(Informer 9)

"At first, when I heard about plant-based meat, I thought it was something like tempeh, but actually, it is not. Based on what I have heard and what you have explained, along with the information I found online, it is an innovative product designed to mimic conventional meat."

(Informer 10)

"When I hear 'plant-based meat', I think of products that taste like meat but are made from plants, like soy or pea protein. It is kind of like a veggie burger but designed to mimic real meat."

(Informer 11)

"The term 'plant-based meat' describes meat substitutes that mimic the flavour, texture, and appearance of typical meat using plant-derived substances such as soy, pea protein, or mushrooms."

(Informer 13)

"I think of food products made from plant ingredients that look and taste like meat. They are meant to provide an alternative for people who do not eat traditional meat but still want a similar experience."

(Informer 16)

"Plant-based meat is a meat alternative made from plants like soy, peas, or mushrooms, designed to taste and feel like real meat. Examples include IKEA's plant-based meatballs, this is a vegetarian alternative to their classic Swedish meatballs and made from pea protein, potatoes, apple, oats and onion."

(Informer 17)

These youth reflect how modern food innovation shapes eating habits, showing that replicating the familiar pleasures of meat can serve as a pathway to more ethical food choices. For Malaysian youth, plant-based meat products satisfy their cravings and align with their growing values around sustainability and personal well-being.

b) <u>Recognised as a Meat Alternative</u>

Building on their sensory expectations, Malaysian youth are beginning to see plant-based meat products as practical replacements for animal-based options. Ten informers (n=10) described these products as suitable substitutes that meet their dietary needs and preferences without significant compromises. The following responses illustrate this perspective:

"When I hear 'plant-based meat,' I think of food made to look and taste like meat, but it is made from plants. It is usually meant to be an alternative for people who do not eat animal products. It sounds like a good option for a more sustainable diet."

(Informer 1)

"I think plant-based meat is an alternative made from plants. It is suitable for vegetarians and vegans."

(Informer 3)

"I think of food that looks like meat but is made from plants. It is an option for people who do not eat meat or want to try something different."

(Informer 5)

"From my understanding, plant-based meat is made from plants that substitute meat products. They typically use ingredients like soy, wheat, peas, and proteins, and currently, jackfruit is also used."

(Informer 6)

"The meat produced from plant-based ingredients but designed to resemble the taste, texture, and appearance of conventional meat. An alternative to conventional meat made from ingredients such as soybeans, wheat, or peas."

(Informer 7)

"I think is about food that replicates the experience and taste of eating conventional meat without using actual animal products and its alternatives to meat design to like vegetarian, vegan or anyone who is looking to reduce meat consumption. Even for like Muslim and we are abroad overseas it can be hard to find Halal meat so plant-based meat could be a good substitute or another alternative to eat when we cannot find any Halal meat."

(Informer 9)

"The term 'plant-based meat' describes meat substitutes that mimic the flavour, texture, and appearance of typical meat using plant-derived substances such as soy, pea protein, or mushrooms."

(Informer 13)

"I think of food products made from plant ingredients that look and taste like meat. They are meant to provide an alternative for people who do not eat traditional meat but still want a similar experience."

(Informer 16)

"Plant-based meat is a meat alternative made from plants like soy, peas, or mushrooms, designed to taste and feel like real meat. Examples include IKEA's plant-based meatballs, this is a vegetarian alternative to their classic Swedish meatballs and made from pea protein, potatoes, apple, oats and onion."

(Informer 17)

"The first thing that comes to mind when hearing the term is plant-based food—an alternative to animal-based meat such as chicken, beef, or lamb. It is made from plants, such as mushrooms. I have seen plant-based meat on the internet, where the meat is made from mushrooms and soybeans."

(Informer 18)

These informers highlight an emerging shift in eating habits, where plant-based meat products are seen as a flexible and empowering option for Malaysian youth in campus settings. Such choices promote inclusivity in shared meals while

accommodating a range of motivations, from care for the environment to respect for cultural food practices.

c) <u>Awareness of Key Ingredients</u>

Alongside their recognition of plant-based alternatives, Malaysian youth also show greater awareness of what these products are made from. Eight informers (n=8) specifically mentioned ingredients such as soy and mushrooms, reflecting an informed curiosity about the composition of plant-based meat products. Their views are reflected in the following statements:

> *"From my understanding, plant-based meat is made from plants that substitute meat products. They typically use ingredients like soy, wheat, peas, and proteins, and currently, jackfruit is also used."*
>
> (Informer 6)

> *"The meat produced from plant-based ingredients but designed to resemble the taste, texture, and appearance of conventional meat. An alternative to conventional meat made from ingredients such as soybeans, wheat, or peas."*
>
> (Informer 7)

> *"When I hear 'plant-based meat', I think of products that taste like meat but are made from plants, like soy or pea protein. It is kind of like a veggie burger but designed to mimic real meat."*
>
> (Informer 11)

> *"Actually, I do have some vegan friends, and I was introduced to vegan meat back then. The first vegan meat I tasted or knew about was made from tofu and gluten extracted from flour."*
>
> (Informer 12)

> *"The term 'plant-based meat' describes meat substitutes that mimic the flavour, texture, and appearance of typical meat using plant-derived substances such as soy, pea protein, or mushrooms."*
>
> (Informer 13)

> *"Plant-based meat is a meat alternative made from plants like soy, peas, or mushrooms, designed to taste and feel like real meat. Examples include IKEA's plant-based meatballs, this is a vegetarian alternative to their classic Swedish meatballs and made from pea protein, potatoes, apple, oats and onion."*
>
> Informer 17)

"The first thing that comes to mind when hearing the term is plant-based food—an alternative to animal-based meat such as chicken, beef, or lamb. It is made from plants, such as mushrooms. I have seen plant-based meat on the internet, where the meat is made from mushrooms and soybeans."

(Informer 18)

"When I think about plant-based meat, it is meat made from plant sources and do not contain any form of meat. It may be made from soy or vegetable such as mushrooms and cabbage."

(Informer 19)

These informers, who demonstrated awareness of product ingredients, add practical insight to their perceptions by turning abstract ideas into everyday choices. Their knowledge empowers Malaysian tertiary youth to make more intentional decisions, where health awareness becomes part of daily eating habits that reflect personal growth and a sense of shared responsibility.

d) <u>Suitability for Vegetarians and Vegans</u>

Beyond awareness of ingredients, some youth link plant-based meat products to particular lifestyles. Four informers (n=4) highlighted how these products align with vegetarian or vegan preferences, emphasising their role in supporting ethical dietary choices. The following responses highlight this perspective:

"I think plant-based meat is an alternative made from plants. It is suitable for vegetarians and vegans."

(Informer 3)

"I think is about food that replicates the experience and taste of eating conventional meat without using actual animal products and its alternatives to meat design to like vegetarian, vegan or anyone who is looking to reduce meat consumption. Even for like Muslim and we are abroad overseas it can be hard to find Halal meat so plant-based meat could be a good substitute or another alternative to eat when we cannot find any Halal meat."

(Informer 9)

"Actually, I do have some vegan friends, and I was introduced to vegan meat back then. The first vegan meat I tasted or known about was made from tofu and gluten extracted from flour."

(Informer 12)

"Plant-based meat is a meat alternative made from plants like soy, peas, or mushrooms, designed to taste and feel like real meat. Examples include IKEA's plant-based meatballs, this is a vegetarian alternative to their classic Swedish meatballs and made from pea protein, potatoes, apple, oats and onion"

(Informer 17)

These informers highlight the compassionate dimension of food choices, where plant-based meat products act as a bridge for Malaysian youth in tertiary settings. They encourage inclusive eating practices that respect ethical convictions while fostering stronger social connections across diverse dietary preferences.

e) <u>Perceived Health and Sustainability Benefits</u>

Alongside lifestyle suitability, some youth also connected plant-based meat products to wider benefits, with three informers (n=3) highlighting their potential contributions to health, sustainability, and ethical living. These perspectives point to aspirational motivations that extend beyond immediate dietary choices. Their views are reflected in the following statements:

"When I hear 'plant-based meat,' I think of food made to look and taste like meat, but it's made from plants. It is usually meant to be an alternative for people who do not eat animal products. It sounds like a good option for a more sustainable diet."

(Informer 1)

"When I hear 'plant-based meat,' I think about food that looks and tastes like meat, but it is made from plants instead. I think plant-based meat are healthier and cruelty-free."

(Informer 8)

"Fake meat. Thru my understanding of the word plant-based meat, first thing that comes to mind is that it is for people who are trying to lose weight or cut down on protein because of illness."

(Informer 14)

These informers reflect a hopeful outlook for healthier futures, showing how plant-based meat products can encourage Malaysian university youth to adopt eating patterns that combine personal well-being with care for the planet, transforming everyday meals into mindful acts of responsibility and empowerment.

f) Familiarity with Specific Brands and Examples

Building on these benefits, real-world exposure also shaped how youth viewed plant-based meat, with three informers (n=3) mentioning specific brands like Beyond Meat or IKEA meals, showing that their knowledge often comes from direct experiences or media influence. The following responses illustrate this perspective:

> *"At first, when I heard about plant-based meat, I thought it was something like tempeh, but actually, it is not. Based on what I have heard and what you have explained, along with the information I found online, it is an innovative product designed to mimic conventional meat."*
>
> (Informer 10)

> *"Plant-based meat based on my understanding is sometimes like beyond meat & tempeh."*
>
> (Informer 15)

> *"Plant-based meat is a meat alternative made from plants like soy, peas, or mushrooms, designed to taste and feel like real meat. Examples include IKEA's plant-based meatballs, this is a vegetarian alternative to their classic Swedish meatballs and made from pea protein, potatoes, apple, oats and onion"*
>
> (Informer 17)

These brand-aware informers illustrate the excitement of discovery, as Malaysian youth in higher education encounter plant-based meat products through well-known global brands. Such experiences motivate them to include these products in their eating habits, creating a bridge between local food traditions, international trends, and emerging lifestyle innovations.

g) Misconceptions and Scepticism

However, not all perspectives were entirely positive. Two informers (n=2) expressed doubts or confusion, with some equating plant-based meat products to traditional foods like tempeh. In contrast, others dismissed them as less desirable. These views point to existing gaps in knowledge and understanding. Their views are reflected in the following statements:

> *"At first, when I heard about plant-based meat, I thought it was something like tempeh, but actually, it is not. Based on what I have heard and what you have explained, along with the information I found online, it is an innovative product designed to mimic conventional meat."*
>
> (Informer 10)

> *"Fake meat. Thru my understanding of the word plant-based meat, first thing that comes to mind is that it is for people who are trying to lose weight or cut down on protein because of illness."*
>
> (Informer 14)

These sceptical informers highlight the challenges often accompanying new ideas, showing how misconceptions among Malaysian tertiary youth may discourage motivation. At the same time, these doubts also open opportunities for education and awareness-building, which can help reshape perceptions and, over time, support more confident and enthusiastic choices around plant-based meat products.

h) <u>Consideration for Halal Consumers</u>

Finally, cultural relevance emerged as another important layer, with one informer (n=1) pointing out the potential of plant-based meat products as a Halal-friendly option abroad, offering practical solutions to food challenges in diverse settings. The following response highlights this perspective:

> *"I think is about food that replicates the experience and taste of eating conventional meat without using actual animal products and its alternatives to meat design to like vegetarian, vegan or anyone who is looking to reduce meat consumption. Even for like Muslim and we are abroad overseas it can be hard to find Halal meat so plant-based meat could be a good substitute or another alternative to eat when we cannot find any Halal meat."*
>
> (Informer 9)

This informer highlights how cultural values shape the food choices of Malaysian youth, showing that plant-based meat products can support adaptive consumption in university life. By blending religious considerations with the realities of global mobility, these products help foster eating patterns that affirm identity, resilience, and inclusivity in everyday dietary practices.

Overall, the analysis of informers' perspectives reveals that Malaysian youth hold diverse and layered understandings of plant-based meat products. Eleven informers (n=11) emphasised similarities in taste and texture, while ten informers (n=10) recognised them as viable substitutes for conventional meat. Eight informers (n=8) demonstrated awareness of key ingredients, and four informers (n=4) highlighted their suitability for vegetarian and vegan diets. In addition, three informers (n=3) linked these products to broader health and sustainability benefits, and another three informers (n=3) showed familiarity with specific brands and global examples. At the same time, two informers (n=2) expressed scepticism or held misconceptions, while one informer (n=1) raised the issue of Halal suitability. These findings illustrate how Malaysian youth navigate a wide range of perceptions and motivations, suggesting that targeted education and marketing strategies could strengthen acceptance and encourage more sustainable consumption patterns within tertiary institutions. The following subsection examines both the advantages and disadvantages of plant-based meat products.

4.4.2 Advantages and Disadvantages of Plant-Based Meat Products

This subsection explores Question 2 of the study, which examines consumer perceptions regarding the advantages and disadvantages of consuming plant-based meat products. To investigate these views, informers were asked: "What are your opinions on the advantages and disadvantages of consuming plant-based meat products?" Their responses were analysed using inductive coding, identifying key themes that reflect their thoughts and attitudes toward plant-based meat. The findings are organised into advantages and disadvantages, presented below in descending order by frequency (n).

Advantages

a) Health as a Driving Factor

When assessing plant-based meat products, Malaysian youths in tertiary institutions often point to health benefits as a key motivation, with six informers (n=6) highlighting reduced cholesterol, lower saturated fat, and overall dietary improvements that frame these products as healthier alternatives to conventional meat. Their views are reflected in the following statements:

"The advantage is that it can be healthier since it is plant-based."
(Informer 5)

"The advantage is that it can improve our health by reducing cholesterol and fat content in our diet."
(Informer 6)

"The advantage of consuming plant-based meat products is that it is lower in saturated fat compared to conventional meat."
(Informer 7)

"In terms of health, I think if we want to consume plant-based meat products, first and foremost, they should be healthier because they contain less fat. The advantage of plant-based meat products is that they are lower in fat and cholesterol."
(Informer 10)

"The advantages include being healthier, environmentally friendly, and cruelty-free."
(Informer 16)

"Plant-based meat products have benefits like being healthier (lower in fat and cholesterol), better for the environment (using less water and land), and ethical (no animal harm)."
(Informer 17)

These informers illustrate how health consciousness is becoming part of everyday food decisions, with plant-based meat products seen as a practical step toward better well-being without giving up the pleasure of familiar flavours. Their attention to reducing cholesterol and lower fat reflects how Malaysian youth increasingly link dietary choices to long-term health, turning eating habits into personal self-care that fits naturally within campus dining environments.

b) <u>Environmental Sustainability</u>

Caring for the planet stands out for environmentally conscious youth as a decisive advantage of plant-based meat products, with four informers (n=4) explaining how these alternatives help conserve resources and lower environmental impact. The following responses illustrate this theme:

"In my opinion, the advantage of consuming plant-based meat products is that it can certainly reduce the consumption of regular meat products, and it also helps in preserving our environment."
(Informer 2)

"One good thing about plant-based meat products is that it can be better for the environment because it doesn't require raising animals."

(Informer 8)

"Plant-based meat products reduce animal slaughter and are more environmentally friendly, requiring fewer resources and producing less pollution."

(Informer 14)

"Plant-based meat products have benefits like being healthier (lower in fat and cholesterol), better for the environment (using less water and land), and ethical (no animal harm)."

(Informer 17)

These informers reflect a strong sense of ecological responsibility, seeing plant-based meat products not only as a personal choice but also as a contribution to collective sustainability. Their focus on resource conservation shows how Malaysian youth connect global environmental issues with their food decisions, treating each meal as a small but meaningful act of caring for the planet.

c) <u>Ethical Considerations</u>

Alongside environmental concerns, moral values also play a central role, with four informers (n=4) perceiving plant-based meat products consumption as connected to animal welfare. For these youth, such products are seen as a pathway to compassionate living and cruelty-free food systems, reflecting how ethical perceptions influence their views on alternatives to conventional meat. Their views are reflected in the following statements:

"I think the advantage should be ethical consideration because plant-based meat products do not involve animal slaughter."

(Informer 3)

"The advantage of consuming plant-based meat products is supporting ethical food choices because you know how when we eat conventional meat, we would not have to slaughter an animal."

(Informer 9)

"Plant-based meat products reduce animal slaughter and are more environmentally friendly, requiring fewer resources and producing less pollution."

(Informer 14)

> *"Plant-based meat products have benefits like being healthier (lower in fat and cholesterol), better for the environment (using less water and land), and ethical (no animal harm)."*
>
> (Informer 17)

These informers frame dietary choices as ethical expressions, seeing plant-based meat products as a practical way to live out values of compassion and respect for animals. Their moral reasoning shows how Malaysian youth navigate food decisions with a sense of conscience, turning ordinary meals into daily affirmations of their commitment to a kinder world.

d) <u>Suitability for Dietary Restrictions</u>

Cultural and health considerations play an important role among Malaysian youth who manage diverse dietary needs. Two informers (n=2) pointed out how plant-based meat products can support individuals with religious restrictions, health conditions, or food allergies by providing alternatives that meet these requirements. The following responses highlight this perspective:

> *"In my opinion, the advantage of plant-based meat products is that it is suitable for those who cannot eat meat, possibly due to religious beliefs, health issues, and other reasons."*
>
> (Informer 18)

> *"Advantages are it can be consumed by people that are vegetarians or vegan or even people that are allergic to red meat."*
>
> (Informer 19)

These informers highlight a strong sense of cultural sensitivity and inclusivity, recognizing plant-based meat products as a way to bridge dietary differences within Malaysia's diverse population. Their perspectives suggest that these products do more than provide alternatives for individual needs. Instead, they create opportunities for shared meals across varied dietary preferences, turning food from a potential source of separation into a unifying element within campus communities.

e) <u>Convenience and Accessibility</u>

Within the fast-paced setting of tertiary institutions, practical needs often guide food choices. One informer (n=1) specifically emphasised that the accessibility and ease of preparing plant-based meat products make them suitable for students managing busy

schedules, highlighting convenience as a key factor supporting adoption. The following response illustrates this theme:

> *"Plant-based meat products are also convenient as they are widely available in stores and can be quickly prepared, making them a fast and easy alternative to traditional meat, which requires longer cooking times or preparation."*
>
> (Informer 15)

This informer highlights the practical realities of campus life, where limited time often influences food choices. Convenience turns plant-based meat products from merely an ethical option into a practical solution for students juggling academic responsibilities and nutritional needs, showing how accessibility can play a key role in encouraging adoption among time-pressed youth.

Disadvantages

f) Cost as a Barrier to Adoption

For Malaysian youth considering plant-based meat products, price frequently appears to be a significant barrier. Five informers (n=5) highlighted concerns over the higher cost compared to conventional meat, noting that this premium makes regular consumption difficult for students who are mindful of their budgets. Their views are reflected in the following statements:

> *"In my opinion, the advantage of consuming plant-based meat products is that it can certainly reduce the consumption of regular meat products, and it also helps in preserving our environment. In terms of drawbacks, I feel that plant-based meat products are quite expensive, based on what I know."*
>
> (Informer 2)

> *"The disadvantage is the cost because I noticed that food like plant-based meat products there usually more pricey or expensive compared to conventional food."*
>
> (Informer 9)

> *"On the other hand, a downside is the price; I think they are quite expensive compared to conventional meat because they are innovative products, so the cost of producing them is much higher."*
>
> (Informer 10)

"Plant-based meats can be more expensive and may contain allergens like soy or gluten."

(Informer 15)

"Additionally, the price might be higher compared to real meat."

(Informer 18)

These informers reflect the financial realities of student life, where limited budgets often guide food choices, even when ethical or health considerations are important. Their concerns about cost highlight the tension between wanting to adopt plant-based meat products and the practical limits of affordability, showing how price plays a key role in whether these products move from occasional trials to regular inclusion in students' diets.

g) <u>Challenges with Taste and Texture</u>

Sensory expectations present a notable challenge among students immersed in Malaysia's rich culinary traditions. Four informers (n=4) specifically pointed to issues with taste and texture as key barriers to broader acceptance of plant-based meat products. The responses below illustrate this theme:

"I think the disadvantage, in my opinion, is that we cannot taste the original meat, so the taste and texture may not be the same as the conventional one."

(Informer 3)

"But sometimes, the taste does not quite match real meat, and it can be more expensive. Also, some people might not like the taste if they are used to real meat."
(Informer 8)

"I think the main advantage is it is better for the environment and animals. But sometimes the taste can be a bit off compared to real meat."

(Informer 11)

"While it is improved, it still might not taste or feel exactly like real meat for some people."

(Informer 17)

These informers show how strongly sensory expectations influence food acceptance within Malaysia's rich culinary culture. Their focus on authentic taste and texture highlights that adopting plant-based meat products successfully requires more

than ethical alignment. It also depends on satisfying sensory experiences that respect traditional food practices, creating challenges and opportunities for product innovation.

h) Processing Concerns

Although Malaysian youth acknowledge the potential health benefits of plant-based meat, they also express concerns about how these products are made. Three informers (n=3) specifically highlighted worries over the level of processing and adding certain ingredients, suggesting that such factors could reduce the perceived healthiness and naturalness of these alternatives. Their responses include:

> *"However, it can be highly processed, with added ingredients like preservatives and salt."*
>
> (Informer 17)

> *"While, disadvantages are certain items have additives and are heavily processed."*
>
> (Informer 13)

> *"Plant-based meats can be more expensive and may contain allergens like soy or gluten."*
>
> (Informer 15)

These informers highlight a rising awareness of food processing among Malaysian youth, where additives can create a gap between health aspirations and the reality of the products. Their concerns point to a desire for transparency and simplicity in food choices, suggesting that cleaner formulations could enhance trust and encourage acceptance among health-conscious consumers.

i) Nutritional Adequacy Concerns

Among students attentive to their dietary intake, concerns about nutritional completeness stand out. Three informers (n=3) questioned whether plant-based meat products might lack essential nutrients such as protein, vitamin B12, and iron, typically abundant in conventional meat. The following responses reflect this view:

> *"The disadvantage of consuming plant-based meat products is that you may lose some essential nutrients needed by your body."*
>
> (Informer 12)

"It may also lack important nutrients like vitamin B12 and iron."
(Informer 17)

"Disadvantages are that they will not have enough protein intake as much as real red meat."
(Informer 19)

These informers show a deeper nutrition awareness, moving beyond surface-level health claims to consider long-term dietary balance. Their concerns about nutrient adequacy underscore the importance of clear communication regarding the nutritional content of plant-based alternatives and the potential for fortification strategies to address gaps and ensure balanced diets.

j) Environmental Impact Concerns

Challenging the common belief that plant-based meat products are automatically eco-friendly, one informer (n=1) raised a critical perspective on their environmental impact. They noted that large-scale production, including resource-intensive cultivation of ingredients like soy, could have unintended ecological consequences, potentially undermining sustainability claims. The following response highlights this consideration:

"A disadvantage is that plant-based meat products can harm the ecosystem. Producing a single patty of plant-based meat products requires a large number of plants, such as soy. To grow these plants, we need to dedicate land and time, which consumes resources and contributes to environmental strain."
(Informer 4)

This informer questions simplified claims about sustainability, highlighting a more nuanced understanding of the trade-offs involved in food production. Their perspective emphasises the importance of transparent communication regarding plant-based meat's full environmental impact, recognising its benefits and potential drawbacks in efforts to promote more sustainable food systems.

k) Limited Impact on Consumption Patterns

Despite increasing interest in plant-based alternatives, some informers note that these products have not yet caused substantial reductions in global meat consumption. One informer (n=1) observed that adoption remains limited within broader dietary

patterns, highlighting the gap between consumer awareness and actual behaviour change. The following response illustrates this theme:

> *"As a result, the impact on global meat consumption remains limited."*
>
> (Informer 14)

This observation highlights the gap between consumer interest and actual behaviour, showing how meat-eating habits remain strong even among environmentally conscious youth. The informer's realistic perspective underscores the need for multifaceted strategies that go beyond product development to address cultural norms and established consumption habits to achieve meaningful changes in dietary patterns.

Overall, the analysis of informers' perspectives presents a balanced view of plant-based meat products. Six informers (n=6) highlighted health benefits as a key advantage, while another five (n=5) highlighted cost as a significant barrier. Four informers each emphasised environmental sustainability (n=4), ethical considerations (n=4), and taste or texture challenges (n=4). In comparison, three informers noted concerns about processing (n=3) and nutritional adequacy (n=3). Two informers (n=2) recognised suitability for dietary restrictions, and one informer each mentioned convenience (n=1), environmental trade-offs (n=1), and limited market impact (n=1). Together, these findings reveal how Malaysian youth weigh multiple, sometimes competing considerations when evaluating plant-based meat, suggesting that successful adoption depends on meeting sensory expectations, improving affordability, and fostering trust through transparent communication about benefits and limitations. The following subsection focuses on the nutritional value of plant-based meat products.

4.4.3 Nutritional Value of Plant-Based Meat Products

This subsection explores Question 3 of the perception part, which examines whether informers believe plant-based meat products are nutritious or healthier than conventional meat. To investigate these views, informers were asked: "Do you believe plant-based meat products are nutritious or healthier than conventional meat? Why?" Their responses were analysed using inductive coding, identifying key themes that

reflect their thoughts and attitudes toward the nutritional value of plant-based meat. The findings are presented below in descending order by frequency (n).

a) Processing Concerns

When evaluating plant-based meat products, Malaysian youth express concerns about how these products are made. Six informers (n=6) specifically highlighted worries about the degree of processing and the inclusion of added ingredients, suggesting that such factors could undermine the perceived healthiness and naturalness of these alternatives. Their views are reflected in the following statements:

> *"I believe plant-based meat products can be healthier since it is lower in cholesterol and fat, but it depends on the product. Some are packed with preservatives and sodium, which are not as healthy. It really varies by brand and ingredients."*
>
> (Informer 1)

> *"No, plant-based meat products are not nutritious or healthier than conventional meat because overly processed plant-based meat products may contain unhealthy fats. The nutritional content may vary between brands, and some may lack the nutrients that are naturally found in meat."*
>
> (Informer 7)

> *"I think plant-based meat products could be healthier, especially since it usually has less fat and fewer chemicals. However, some options can still be highly processed, so it is not always the best choice."*
>
> (Informer 8)

> *"Yes and no. Plant-based meat products can be healthier because they often contain less saturated fat and no cholesterol, which may reduce the risk of heart disease. They are also usually higher in fibre compared to conventional meat. However, some products are heavily processed and may contain additives, high sodium levels, and refined ingredients, which can offset these health benefits. The nutritional value largely depends on the brand and formulation."*
>
> (Informer 14)

"I think plant-based meat products can be good generally for all of us and sometimes healthier than regular meat. It often has more vitamins and less unhealthy fat. It also does not have the antibiotics or hormones that can be in animal meat. However, to mimic the taste of real meat, many plant-based meats add preservatives, salt, and other ingredients, which may not always be the healthiest. So, while plant-based meat products can be a good choice, it is important to check the label to make sure it is a healthy option."

(Informer 17)

"I believe that plant-based meat products can be a healthier option as they are free from injections or chemicals. However, the ingredients used during processing also play a role. If they contain many additives, they might become less healthy."

(Informer 18)

These informers highlight a growing awareness of food processing among Malaysian youth, where additives can create a gap between health goals and the reality of the products. Their concerns point to a desire for transparency and simplicity in food choices, suggesting that cleaner formulations could build greater trust and encourage acceptance among health-conscious consumers.

b) <u>Nutritional Content</u>

Considering their dietary priorities, Malaysian youth recognise specific nutritional benefits that make plant-based meat products appealing. Five informers (n=5) emphasised reduced cholesterol, lower saturated fat, and higher fibre content as key reasons these products may be considered healthier alternatives to conventional meat. The following responses illustrate this theme:

"I believe plant-based meat products can be healthier since it is lower in cholesterol and fat, but it depends on the product. Some are packed with preservatives and sodium, which are not as healthy. It really varies by brand and ingredients."

(Informer 1)

"Yes, because I think plant-based meat products can be healthy since it is made from plants and have more fibre. However, I prefer conventional meat because it is more natural."

(Informer 5)

"Plant-based meat products are more nutritious than conventional meat. I believe that plant-based meat products are quite nutritious because its ingredients come from various types of plants, providing different kinds of nutrients like zinc, iron, protein, and more."

(Informer 6)

"To me, it is healthier because it is plant-based, so the fat content is likely lower, and it also contains more nutrients."

(Informer 10)

"Yes, I believe plant-based meat products can be healthier than conventional meat in some ways, but it really depends on the type of products. It is because many types of plant-based meats are lower in saturated fat and contain no cholesterol, which can be beneficial for heart health. However, some plant-based meats can be highly processed and may contain additives, sodium, or unhealthy oils that reduce their overall nutritional value."

(Informer 15)

These informers demonstrate nutritional awareness beyond general health claims, showing how Malaysian youth link plant-based meat products to meaningful dietary improvements. Their attention to specific nutrients reflects a sophisticated understanding of food composition, suggesting that providing clear and transparent nutritional information could enhance the appeal of these products among health-conscious youth.

c) Brand Variability

While acknowledging the potential health benefits of plant-based meat, Malaysian youth demonstrate nuanced thinking about differences between products. Five informers (n=5) specifically noted that nutritional value can vary significantly by brand, shaping their perceptions of these alternatives' overall healthiness. Their views are reflected in the following statements:

"I believe plant-based meat products can be healthier since it is lower in cholesterol and fat, but it depends on the product. Some are packed with preservatives and sodium, which are not as healthy. It really varies by brand and ingredients."

(Informer 1)

> *"I think they can be healthier, especially if they have fewer fats, but it really depends on the brand. Some can still be processed a lot, which is not great."*
>
> (Informer 11)

> *"It varies. While some plant-based meat product substitutes are healthier because they include less saturated fat and cholesterol, others are heavily processed and contain preservatives and sodium. In general, a plant-based, whole-food diet is healthier than either choice."*
>
> (Informer 13)

> *"Yes and no. Plant-based meat products can be healthier because they often contain less saturated fat and no cholesterol, which may reduce the risk of heart disease. They are also usually higher in fibre compared to conventional meat. However, some products are heavily processed and may contain additives, high sodium levels, and refined ingredients, which can offset these health benefits. The nutritional value largely depends on the brand and formulation."*
>
> (Informer 14)

> *"Yes, I believe they are healthier because they usually contain less saturated fat and cholesterol. However, it depends on how they are processed and the specific ingredients used."*
>
> (Informer 16)

These informers show an emerging consumer literacy, recognising that not all plant-based meat products are nutritionally equivalent. Their awareness of brand differences reflects a sophisticated understanding of food choices, indicating that clear labelling and standardised health claims could help Malaysian youth make informed decisions in a market where product quality varies.

d) <u>Health Benefits</u>

Focusing on preventive health, Malaysian youth identify particular benefits of plant-based meat products that support their wellness goals. Four informers (n=4) highlighted advantages such as a reduced risk of heart disease, absence of antibiotics, and lower cholesterol, viewing these factors as key motivators for choosing these alternatives. The following responses capture this perspective:

"Yes, plant-based meat products are nutritious or healthier than conventional meat because plant-based meat products can be nutritious especially for people aiming to lower their cholesterol or manage their weight but it depends because some products can have like a high level of process so it would be considering high processed food but it will be healthier than conventional meat."

(Informer 9)

"Yes, I believe plant-based meat products can be healthier than conventional meat in some ways, but it really depends on the type of products. It because many types of plant-based meats are lower in saturated fat and contain no cholesterol, which can be beneficial for heart health. However, some plant-based meats can be highly processed and may contain additives, sodium, or unhealthy oils that reduce their overall nutritional value."

(Informer 15)

"I think plant-based meat products can be good generally for all of us and sometimes healthier than regular meat. It often has more vitamins and less unhealthy fat. It also does not have the antibiotics or hormones that can be in animal meat. However, to mimic the taste of real meat, many plant-based meats add preservatives, salt, and other ingredients, which may not always be the healthiest. So, while plant-based meat products can be a good choice, it is important to check the label to make sure it is a healthy option."

(Informer 17)

"Yes, plant-based meat products are nutritious or healthier than conventional meat because in a way as they have more fibre and nutrition, and they are free from chemicals such as injection in animals."

(Informer 19)

These informers reflect a health-conscious mindset, viewing plant-based meat products as a deliberate choice to support overall wellness. By focusing on specific health outcomes, Malaysian youth demonstrate how food decisions are connected to long-term vitality, transforming everyday dietary habits into self-care that balances immediate enjoyment with future health benefits.

e) <u>Preference for Natural</u>

Some Malaysian youth who assessed dietary options clearly preferred whole foods. Three informers (n=3) noted conventional meat's naturalness and nutrient completeness, suggesting that they perceive plant-based alternatives as less beneficial for overall health. The following responses illustrate this perspective:

> *"In my opinion, no, because regular meat products already contain all the nutrients required for humans, while plant-based meat products undergo several processes that may involve the use of chemicals in their production."*
>
> (Informer 2)

> *"I do not believe that plant-based meat products are more nutritious or healthier than conventional meat. While plant-based meat products provide protein, they may not be as fulfilling or as healthy as conventional meat. As humans, we need proper sources of nutrition, which are more effectively provided by conventional meat."*
>
> (Informer 4)

> *"I do not really think plant-based meat products is more nutritious than red meat or chicken because I believe the body needs a complete and complex range of nutrients. Consuming only plant-based foods is not enough. I used to follow a plant-based diet when I was younger, between the ages of 21 and 23. During that time, I realised that my body tended to get tired more easily compared to when I had a balanced diet that included meat and other essential nutrients. That is why, based on my personal experience, I feel that consuming plant-based meat products or following a plant-based diet is not necessarily beneficial for the body."*
>
> (Informer 12)

These informers prefer minimally processed, whole foods that align with traditional dietary practices. Their scepticism, often based on personal experience, highlights a segment of youth who value food in its most natural form, suggesting that plant-based meat products must address perceptions of artificiality to gain wider acceptance within Malaysia's diverse food culture.

Overall, the analysis of informers' perspectives reveals a nuanced understanding of the nutritional profile of plant-based meat. Six informers (n=6) highlighted concerns about processing as an important consideration, while five informers each emphasised nutritional content (n=5) and brand differences (n=5). Four informers (n=4) identified specific health benefits, and three (n=3) preferred the naturalness of conventional meat. Together, these findings show how Malaysian youth navigate complex nutritional factors when evaluating plant-based meat, suggesting that successful market adoption requires addressing processing transparency, enhancing nutritional quality, and building trust through clear communication of benefits and limitations. The following subsection focuses on overall perception and flavour.

4.4.4 Overall Perception and Flavour

This subsection explores Question 4 of the perception part, which examines informers' overall perceptions of plant-based meat products, including their opinions on flavour and texture. To investigate these views, informers were asked: “How would you describe your overall perception of plant-based meat products, including their flavour?” Their responses were analysed using inductive coding, identifying key themes that reflect their thoughts and attitudes toward plant-based meat. The findings are presented below in descending order by frequency (n).

a) <u>Taste and Texture Limitations</u>

When describing their experiences with plant-based meat products, Malaysian youths in tertiary institutions often raise concerns about sensory authenticity. Seven informers (n=7) noted that these alternatives do not fully replicate conventional meat's texture and authentic flavour, which shapes their culinary expectations. Their views are reflected in the following statements:

> *“While plant-based meat products may imitate the taste of real meat, they cannot replicate the texture and overall taste of actual meat, and they are also quite expensive.”*
>
> (Informer 2)

> *“Plant-based meat products are okay, but I prefer the taste and texture of conventional meat. I might try it sometimes, but it does not replace conventional meat for me.”*
>
> (Informer 5)

> *“My perspective especially when it comes to taste, I think that the taste will never be exactly the same as conventional meat. It can be a bit pricey if he buys plant-based meat, so price is a bit factor and for the texture it also critical because some people they have a hard time like consuming things that have different texture and stuff, so I think because it's not conventional meat, the texture would be very different than the conventional meat.”*
>
> (Informer 9)

> *“I think, in terms of taste, the flavour might be quite different from conventional meat. I also feel that the texture might be different from conventional meat.”*
>
> (Informer 10)

"My overall perception is that it is interesting but not always as tasty as the real thing. Some are good, but some still need work, especially with texture."

(Informer 11)

"Plant-based meat products generally lack strong flavour compared to conventional meat. While some brands try to mimic the taste of meat, the results often fall short."

(Informer 14)

"I think plant-based meats have improved a lot in flavour and texture. Some taste almost like real meat, especially burgers and sausages, but some can still taste a bit artificial or dry."

(Informer 19)

These informers highlight the sensory realities of Malaysian food culture, where authentic taste and texture are essential for satisfaction. Their feedback indicates that, despite ongoing improvements, plant-based meat products must continue enhancing their sensory qualities to appeal to habitual meat consumers within Malaysia's diverse culinary landscape.

b) <u>Positive Innovation</u>

In Malaysia's evolving food landscape, youth increasingly see plant-based meat products as a promising innovation. Five informers (n=5) highlighted its potential as an alternative to conventional meat while recognising that further taste and texture improvements are needed. The following responses illustrate this theme:

"My perception is generally positive; I think plant-based meats are a good innovation. The taste can be close to real meat, but the texture is sometimes a bit different. Overall, it is a decent alternative."

(Informer 1)

"I like plant-based meats, but I still think they could improve in taste and texture. Some brands get really close to the real thing, while others do not taste as great. But overall, I appreciate the effort to make something that helps people reduce their meat intake."

(Informer 8)

> *"Overall, I view plant-based meat products as a strong alternative to traditional meat. When it comes to flavour, they've significantly improved in recent years, with many products now closely mimicking the taste and texture of actual meat."*
>
> (Informer 15)

> *"I think plant-based meat products are a good choice for people who want to eat less meat. The flavour has gotten better, and many taste quite like real meat, especially in things like burgers. The texture can be a little different, but they do a good job of feeling like meat. Some brands might taste better than others, but overall, I see them as a tasty and eco-friendly option for people trying different diets."*
>
> (Informer 17)

> *"For me, the innovation of this product is great and interesting, especially for vegetarians. However, in terms of taste, it may not be quite the same as real meat."*
>
> (Informer 18)

These informers view plant-based meat products as a meaningful innovation that aligns with their evolving values around sustainability and ethical consumption. Their positive perspective indicates a growing acceptance of these products as viable alternatives within Malaysia's changing food landscape.

c) <u>Brand Variability</u>

Malaysian youth notice considerable differences across the plant-based meat products market, recognising that quality can vary widely between products. Four informers (n=4) highlighted that brand choice is key in shaping their overall perception of these alternatives. Their views are reflected in the following statements:

> *"I would describe plant-based meat products as offering a satisfactory alternative to conventional meat in terms of flavour and texture. However, in my opinion, the flavour often varies by brand. Since there are multiple brands in the market, the flavour is not the same across different brands."*
>
> (Informer 3)

> *"The tofu-based meat I tasted before had a flavour similar to chicken, but the texture felt a bit unusual. The taste was good, but you need to use the right herbs and condiments; otherwise, it won't taste like real meat. I think it tastes good, but it might not be the best choice for daily consumption."*
>
> (Informer 12)

"The flavour and texture of meat can be accurately replicated by some brands, but not by others. Though they are becoming better, not all plant-based meats have the same taste or level of enjoyment."

(Informer 13)

"My perception is generally positive. Some brands do a great job replicating the flavour, but others fall short. It is a mix of excitement and cautious optimism for me."

(Informer 16)

These informers show a sophisticated level of consumer awareness, understanding that the quality of plant-based meat products varies across brands. Their insights indicate that maintaining consistent product quality and clear brand differentiation is crucial for building trust and promoting regular consumption among Malaysian youth.

d) <u>Cost Concerns</u>

Considering their financial realities, Malaysian students often see price as a significant barrier. Four informers (n=4) noted that the high cost of plant-based meat products limits accessibility and prevents them from becoming a regular part of their diets. The responses below illustrate this theme:

"While plant-based meat products may imitate the taste of real meat, they cannot replicate the texture and overall taste of actual meat, and they are also quite expensive."

(Informer 2)

"In terms of flavour, I think they have done a very good job of imitating conventional meat, around 80%-90%. However, plant-based meat products are expensive, difficult to find, and not all supermarkets sell them."

(Informer 4)

"For me, the texture is almost similar to conventional meat products, and the taste is a little bit different. However, the people who make the product try to replicate the taste and flavour as closely as possible. The price is quite expensive because it is made from plant-based ingredients, but I think they could sell it at a lower, more affordable price."

(Informer 6)

"I am open to trying it, but I think it needs to be better in terms of taste and price to attract the public's attention."

(Informer 7)

These informers highlight students' economic constraints, where limited budgets shape food choices regardless of environmental or ethical motivations. Their concerns about cost underscore how affordability is a key factor in determining whether plant-based meat products move from occasional curiosity to a regular part of youth diets.

e) <u>Potential for Improvement</u>

Looking toward the future, some Malaysian youth express cautious optimism about the development of plant-based meat. Three informers (n=3) highlighted ongoing improvements, suggesting that further refinements could enhance consumer acceptance. The following quotes highlight this perspective:

"My overall perception is that it is interesting but not always as tasty as the real thing. Some are good, but some still need work, especially with texture."

(Informer 11)

"Plant-based meat products generally lack strong flavour compared to conventional meat. While some brands try to mimic the taste of meat, the results often fall short."

(Informer 14)

"I think plant-based meats have improved a lot in flavour and texture. Some taste almost like real meat, especially burgers and sausages, but some can still taste a bit artificial or dry."

(Informer 19)

These informers reflect a forward-looking perspective, seeing current limitations as temporary challenges rather than fixed barriers. Their constructive feedback indicates a willingness to embrace plant-based meat products as product quality improves. This suggests that ongoing innovation could substantially boost adoption among Malaysian youth.

The analysis of informers' perspectives reveals a multifaceted understanding of plant-based meat products. Seven informers (n=7) highlighted taste and texture limitations as a key consideration, while five informers (n=5) viewed these products as positive innovations. Four informers each noted brand variability (n=4) and cost

concerns (n=4), and three informers (n=3) expressed optimism about future improvements. Together, these findings show how Malaysian youth balance sensory expectations with practical considerations when evaluating plant-based meat, suggesting that successful market adoption requires enhancing texture authenticity, improving affordability, and ensuring consistent quality across brands to build trust and encourage regular consumption. The following subsection focuses on factors influencing perception.

4.4.5 Factors Influencing Perception

This subsection explores Question 5, which examines the factors influencing informers' perceptions of plant-based meat products, such as taste, texture, price, and other considerations. To investigate these views, informers were asked: “What factors influence your perception of plant-based meat products (e.g., taste, texture, price)?” Their responses were analysed using inductive coding, identifying key themes that reflect their thoughts and attitudes toward plant-based meat. The findings are presented below in descending order by frequency (n).

a) <u>Taste and Texture</u>

When navigating the complex landscape of food choices, Malaysian youths in tertiary institutions consistently prioritise sensory experience. Seven informers (n=7) emphasised that taste and texture are the primary factors determining whether plant-based meat product alternatives are accepted and incorporated into their regular diets. Their views are reflected in the following statements:

> *“I think taste and texture are the most important factors. Price also plays a big role for me because some plant-based meat products are expensive. The availability of good quality options is also a factor.”*
>
> (Informer 1)

> *“The taste and texture mimic conventional meat, but they are not 100% the same. In my opinion, the price could be higher than conventional meat, possibly due to the lower demand.”*
>
> (Informer 3)

"Taste and texture are the most important factors. If it does not taste good or feels strange, I am not willing to pay for it, especially since the price might be higher than conventional meat. Before this, I went to a fast-food restaurant where I was able to compare the price between plant-based meat products and conventional meat."

(Informer 5)

"For me, it is mostly the price and also the taste. As I mentioned, it is pretty expensive, and the taste I do not think it will be very similar to conventional meat."

(Informer 9)

"Taste and texture definitely matter to me. I also think the price is a big factor. If it is too expensive, I will probably go for regular meat."

(Informer 11)

"The most important factors are taste and texture, and cost is a factor; it is frequently more costly."

(Informer 13)

"For me, the main factors are taste and texture. Price is also an important factor, especially if it is more expensive than real meat. For students, price might be an issue since we do not have a steady income."

(Informer 18)

These informers highlight how sensory expectations influence food acceptance within Malaysia's rich culinary culture. Their focus on authentic taste and texture shows that successful adoption of plant-based meat products requires alignment with ethical values and sensory satisfaction that respects traditional food experiences, presenting both challenges and opportunities for product innovation.

b) <u>Price Sensitivity</u>

Considering their financial realities as students, Malaysian youth express significant concerns about affordability. Six informers (n=6) identified price as a decisive factor that often takes precedence over other considerations when deciding whether to try or regularly consume plant-based meat products. The responses below illustrate this theme:

"The biggest factor is definitely the internet, because I often see plant-based meat products on the internet and in the media promoting them. The intention is good, and I support it, but my current lifestyle makes it difficult for me to accept and buy these products. In my opinion, taste, texture, and price do not influence me because I have never tried plant-based meat products, but they are more expensive, and I would rather buy regular meat products."

(Informer 2)

"First of all, in terms of taste, I don't really have any issues because they properly imitate conventional meat. The texture is also good. However, when it comes to price, I have a problem. I went to the supermarket before and compared regular chicken nuggets with plant-based ones. The plant-based meat products were much more expensive—about three times the price of conventional meat nuggets."

(Informer 4)

"To be honest, I look at the price first since plant-based meat products can be quite expensive. If it is affordable and tastes good, I am more likely to buy it. Other than that, I also look at how close it comes to the flavour and feel of real meat."

(Informer 8)

"The first issue is, of course, the price, as plant-based meat products is quite expensive compared to conventional meat. For example, 400 grams of tofu-based meat can cost nearly double the price of regular meat. Another factor is the texture; I do not really like the texture or the taste. If someone has been vegan for a long time, it might not affect their taste buds as much. However, for someone who has been consuming meat for a long time, the difference in taste and texture can be quite noticeable."

(Informer 12)

"The most important factors are taste and texture, and cost is a factor; it is frequently more costly."

(Informer 13)

"For me, the main factors are taste and texture. Price is also an important factor, especially if it is more expensive than real meat. For students, price might be an issue since we do not have a steady income."

(Informer 18)

These informers highlight the financial realities of student life, where limited budgets shape food choices regardless of ethical or health motivations. Their concerns about cost reveal the tension between aspirational consumption and economic constraints, showing that affordability is a key factor in determining whether plant-

based meat products move from occasional curiosity to regular inclusion in students' diets.

c) <u>Health and Nutritional Value</u>

Balancing dietary aspirations with practical considerations, Malaysian youth demonstrate nutritional awareness beyond surface-level health claims. Four informers (n=4) linked plant-based meat products to potential health benefits while expressing concerns about processing and ingredient quality. Their views are reflected in the following statements:

> *"The nutritional value is important because, in Malaysia, people usually do not eat a lot of vegetables and fruits. Therefore, plant-based options serve as an alternative to help maintain a healthy diet."*
>
> (Informer 6)

> *"Price and health. The high price prevents frequent purchases compared to conventional meat. Positive marketing about health benefits can improve public perception."*
>
> (Informer 7)

> *"My perception of plant-based meat products is influenced by several factors. First, taste and texture are crucial, as I want the product to closely resemble real meat in both flavour and mouthfeel. Nutritional content also plays a role; I look for products that offer health benefits, like being low in saturated fat and free from excessive additives. Price is another important factor, as plant-based meats can sometimes be more expensive, which could limit accessibility."*
>
> (Informer 15)

> *"I base my opinion of plant-based meat production a few things. First, taste is key—if it tastes good and similar to real meat, I like it more. Texture also matters; it should feel right when I bite into it. The price is another factor; if it's too expensive, I might not choose it often. Lastly, I consider how healthy it is and if it has a lot of added ingredients like preservatives or salt."*
>
> (Informer 17)

These informers demonstrate a sophisticated level of nutritional literacy, weighing health benefits against concerns about processing. Their nuanced perspective shows that perceived healthiness depends on ingredient transparency and product

formulation, suggesting that clear labelling could build greater trust among health-conscious consumers.

d) Availability and Accessibility

Malaysian youth notice market gaps and recognise how physical access influences their food choices. Three informers (n=3) stated that limited availability in stores and restaurants is a significant barrier to trying and regularly consuming plant-based meat product alternatives. The following responses highlight this perspective:

> *"I think taste and texture are the most important factors. Price also plays a big role for me because some plant-based meat products are expensive. The availability of good quality options is also a factor."*
>
> (Informer 1)

> *"First of all, in terms of taste, I do not really have any issues because they properly imitate conventional meat. The texture is also good. However, when it comes to price, I have a problem. I went to the supermarket before and compared regular chicken nuggets with plant-based ones. The plant-based meat products were much more expensive—about three times the price of conventional meat nuggets."*
>
> (Informer 4)

> *"Taste, texture, price, and availability. If it does not taste good or is too expensive, I am less likely to buy it."*
>
> (Informer 16)

These informers highlight how limited distribution constrains opportunities to engage with plant-based meat products. Their observations suggest that expanding retail presence in urban centres and around universities could significantly increase trial and adoption among Malaysian youth who might otherwise be interested but lack access.

e) Marketing and Awareness

Malaysian youth are exposed to plant-based meat products through digital channels and social networks in multiple contexts. Two informers (n=2) noted that media coverage and promotional campaigns influence their awareness and initial perceptions of these alternatives. The following responses illustrate this theme:

> *"The biggest factor is definitely the internet, because I often see plant-based meat products on the internet and in the media promoting them. The intention is good, and I support it, but my current lifestyle makes it difficult for me to accept and buy these products. In my opinion, taste, texture, and price do not influence me because I have never tried plant-based meat products, but they are more expensive, and I would rather buy regular meat products."*
>
> (Informer 2)

> *"Price and health. The high price prevents frequent purchases compared to conventional meat. Positive marketing about health benefits can improve public perception."*
>
> (Informer 7)

These informers show that digital platforms are key touchpoints for discovering plant-based meat product options. Their insights indicate that while marketing helps raise awareness, turning that interest into regular consumption depends on addressing practical factors such as price and sensory quality, ultimately driving purchasing decisions.

The analysis of informers' perspectives reveals a complex interplay of factors shaping perceptions of plant-based meat. Seven informers (n=7) identified taste and texture as the most critical considerations, while six informers (n=6) highlighted price as a significant barrier. Four informers (n=4) emphasised health and nutritional value, three informers (n=3) noted concerns about availability, and two informers (n=2) discussed the influence of marketing. These findings illustrate how Malaysian youth balance multiple considerations when evaluating plant-based meat, suggesting that successful market integration requires enhancing sensory appeal, improving affordability, expanding distribution, and fostering trust through transparent communication about product quality and benefits. The following subsection examines the role of cultural and religious influences.

4.4.6 Cultural and Religious Influences

This subsection explores Question 6, which examines how informers cultural or religious backgrounds influence their views on plant-based meat products. To investigate these views, informers were asked: "How does your cultural or religious

background influence your views on plant-based meat products?" Their responses were analysed using inductive coding, identifying key themes that reflect their thoughts and attitudes toward plant-based meat. The findings are presented below.

a) Alignment with Halal Requirements

When navigating the intersection of faith and food choices, Malaysian Muslim youth consistently prioritise Halal certification. Seven informers (n=7) highlighted that adherence to Islamic dietary guidelines strongly shapes their acceptance of plant-based meat products as a viable alternative when properly certified. Their views are reflected in the following statements:

> *"First of all, I am a Muslim, and in Islam, we do consume conventional meat. However, I do not believe there are any restrictions when it comes to plant-based meat products. From what I have read and understand, I believe that Buddhists and some other religious groups are prohibited from eating conventional meat. In this case, plant-based meat products could be very useful and fulfilling for them."*
>
> (Informer 4)

> *"As a Muslim, I believe eating meat is part of our food culture. I prefer Halal meat, but I am open to plant-based options as long as they are Halal. However, I see plant-based meat products as an extra option, not a replacement for conventional meat."*
>
> (Informer 5)

> *"Normally, plant-based food is Halal because it is made from plants, and there is no need to slaughter animals according to Sharia law or Islamic law. So, for me, the majority of plant-based foods are Halal. Islam is open to any type of food that benefits the body, as long as it follows Islamic law. Therefore, I believe plant-based meat products can provide benefits to the body in terms of religious purposes."*
>
> (Informer 6)

> *"As a Muslim, plant-based meat products align with Halal requirements making a good alternative when it need, for example, when we cannot find a Halal meat or something but as a Malaysian, I feel like we Malaysian are meat lovers. so, when it comes to choosing between conventional meat and plant-based meat, I think conventional meat will be the winner, people have easier access to it rather than plant-based meat."*
>
> (Informer 9)

> *"As Muslims, I think we might prefer conventional meat and also look for sources that are guaranteed in terms of how the meat is slaughtered. So, choosing plant-based meat products might actually be better because we would not have doubts about the ingredients used. As for culture, we tend to prefer conventional meat over plant-based meat. Culturally, acceptance might be a bit more challenging, and it may take time to adapt."*
>
> (Informer 10)

> *"As a Muslim, I have grown up with certain dietary practices, like eating Halal meat, so it is important for me to make sure that plant-based meat products align with those guidelines. It is a bit of a challenge to adjust, but if the plant-based options are certified Halal and good for the environment and animals, I would be more open to trying them. I would just want to ensure they meet my religious standards. Culturally, I am used to eating meat, so it is a bit hard to change. But I am open to it if it is better for the planet and animals."*
>
> (Informer 11)

> *"In Islam, the dietary guidelines focus on Halal food, which must meet specific standards. Plant based meat products are often Halal because they do not involve animal slaughter. This makes them a good option for Muslims who want to avoid haram (forbidden) foods. However, I would still need to check if the plant-based meat products are processed with non-Halal ingredients (like alcohol or non-Halal flavourings). If the product meets Halal standards, I would feel comfortable choosing it as an alternative to traditional meat."*
>
> (Informer 17)

These informers show how religious requirements guide food choices. Halal certification turns plant-based meat products from a dietary curiosity into a faith-compliant option. Their insights reveal that trust in Halal verification systems is crucial for fostering acceptance among Malaysia's Muslim-majority youth.

b) <u>Cultural Preference for Conventional Meat</u>

Traditional meat consumption is a deeply ingrained cultural practice within Malaysia's rich culinary heritage. Six informers (n=6) highlighted how their ethnic backgrounds and family traditions create strong attachments to conventional meat, shaping their openness to plant-based alternatives. The following responses illustrate this theme:

"From a religious perspective, I am Muslim, and Islam does not forbid me from consuming meat, so I feel there is no need or necessity to buy and use plant-based meat products. From a cultural perspective, my family is not aware of these products, and I also find it very difficult to practice buying them."

(Informer 2)

"As a Muslim, plant-based meat products align with Halal requirements making a good alternative when it need, for example, when we cannot find a Halal meat or something but as a Malaysian, I feel like we Malaysian are meat lovers. so, when it comes to choosing between conventional meat and plant-based meat, I think conventional meat will be the winner, people have easier access to it rather than plant-based meat."

(Informer 9)

"As Muslims, I think we might prefer conventional meat and also look for sources that are guaranteed in terms of how the meat is slaughtered. So, choosing plant-based meat products might actually be better because we would not have doubts about the ingredients used. As for culture, we tend to prefer conventional meat over plant-based meat. Culturally, acceptance might be a bit more challenging, and it may take time to adapt."

(Informer 10)

"As a Muslim, I have grown up with certain dietary practices, like eating Halal meat, so it is important for me to make sure that plant-based meat products align with those guidelines. It is a bit of a challenge to adjust, but if the plant-based options are certified Halal and good for the environment and animals, I would be more open to trying them. I would just want to ensure they meet my religious standards. Culturally, I am used to eating meat, so it is a bit hard to change. But I am open to it if it is better for the planet and animals."

(Informer 11)

"As someone who is Chinese, my cultural background may emphasise the importance of authentic Flavors and textures in dishes, which could influence how plant-based meat products is perceived. Traditional Chinese cuisine often features a variety of meat-based dishes, so plant-based alternatives might be viewed sceptically unless they closely mimic the taste and texture of real meat."

(Informer 14)

> *"As someone from a Dayak background in Sarawak, my views on plant-based meat products are influenced by traditional dietary practices and cultural values. In Dayak culture, meat, particularly from local sources like fish and poultry, plays a significant role in meals and celebrations. While plant-based meats offer an interesting alternative, the shift towards them might take some adjustment in terms of flavour and texture, as traditional foods are often heavily reliant on animal-based proteins."*
>
> (Informer 15)

These informers highlight how cultural identity is closely tied to food traditions, where meat consumption symbolises nutrition, heritage, celebration, and community. Their insights suggest that successfully introducing plant-based alternatives requires respecting these cultural contexts while providing products that honour familiar sensory experiences.

c) <u>Limited Exposure and Awareness</u>

Malaysian youth notice gaps in their everyday environments and recognise how familiarity influences food choices. Four informers (n=4) highlighted that limited exposure to plant-based meat products within their families and communities is a significant barrier to understanding and adoption. Their views are reflected in the following statements:

> *"From a religious perspective, I am Muslim, and Islam does not forbid me from consuming meat, so I feel there is no need or necessity to buy and use plant-based meat products. From a cultural perspective, my family is not aware of these products, and I also find it very difficult to practice buying them."*
>
> (Informer 2)

> *"In my opinion, some cultures or religions may prefer plant-based meat products due to dietary restrictions. In my culture and religion, we are less exposed to this kind of product, so regarding its status in terms of Halal, health, or ethics, I personally do not have much of an opinion about it, because, as ordinary citizens, we are not very exposed to it."*
>
> (Informer 3)

"As Muslims, I think we might prefer conventional meat and also look for sources that are guaranteed in terms of how the meat is slaughtered. So, choosing plant-based meat products might actually be better because we would not have doubts about the ingredients used. As for culture, we tend to prefer conventional meat over plant-based meat. Culturally, acceptance might be a bit more challenging, and it may take time to adapt."

(Informer 10)

"I guess for Muslims, this is not really an issue. However, for Indians who practice veganism or follow a vegetarian or plant-based diet, this might have a bigger influence on them. For me, as a Muslim, it does not really matter because it is a choice, not a necessity. It does not significantly influence or affect my daily life."

(Informer 12)

These informers emphasise how visibility influences perception, with unfamiliarity in daily life limiting engagement and trial of plant-based meat. Their insights suggest that expanding market presence and implementing educational initiatives could help bridge awareness gaps, especially in communities where these products remain niche or difficult to access.

d) <u>Flexibility and Openness</u>

Balancing tradition with changing food landscapes, some Malaysian youth show practical adaptability. Three informers (n=3) expressed conditional openness to plant-based meat, viewing it as a practical alternative that complements rather than replaces conventional meat within their cultural and religious contexts. The following responses highlight this perspective:

"First of all, I am a Muslim, and in Islam, we do consume conventional meat. However, I do not believe there are any restrictions when it comes to plant-based meat products. From what I have read and understand, I believe that Buddhists and some other religious groups are prohibited from eating conventional meat. In this case, plant-based meat products could be very useful and fulfilling for them."

(Informer 4)

"As a Muslim, I believe eating meat is part of our food culture. I prefer Halal meat, but I am open to plant-based options as long as they are Halal. However, I see plant-based meat products as an extra option, not a replacement for conventional meat."

(Informer 5)

"As a Muslim, I have grown up with certain dietary practices, like eating Halal meat, so it is important for me to make sure that plant-based meat products align with those guidelines. It is a bit of a challenge to adjust, but if the plant-based options are certified Halal and good for the environment and animals, I would be more open to trying them. I would just want to ensure they meet my religious standards. Culturally, I am used to eating meat, so it is a bit hard to change. But I am open to it if it is better for the planet and animals."

(Informer 11)

These informers illustrate a balanced approach to food choices, where cultural traditions coexist with practical considerations. Their conditional acceptance suggests that successfully adopting plant-based meat products requires products that respect religious requirements while providing satisfying sensory experiences, positioning these alternatives as a complement rather than a replacement for conventional meat.

e) <u>Ethical and Environmental Alignment</u>

Connecting their values to food choices, Malaysian youth recognise a strong alignment between plant-based eating and ethical principles. Three informers (n=3) noted that cultural or religious values emphasising compassion and environmental stewardship resonate with the benefits of alternatives to plant-based meat products. The following responses illustrate this theme:

"My culture and religion influence me a bit because I tend to be cautious about food sources. I appreciate plant-based options because they align more with ethical and environmental values. However, I still prefer meat in some traditional dishes."

(Informer 1)

"Normally, plant-based food is Halal because it is made from plants, and there is no need to slaughter animals according to Sharia law or Islamic law. So, for me, the majority of plant-based foods are Halal. Islam is open to any type of food that benefits the body, as long as it follows Islamic law. Therefore, I believe plant-based meat products can provide benefits to the body in terms of religious purposes."

(Informer 6)

"My religious background encourages ethical eating and reducing harm to animals, so plant-based meat products align with those values."

(Informer 16)

These informers highlight how moral frameworks influence dietary choices, with plant-based meat products serving as a tangible way to express values of compassion and sustainability. Their insights suggest that promoting ethical alignment could resonate strongly with youth who want their food choices to reflect their evolving identities and social or environmental concerns.

The overall analysis of informers' perspectives reveals a nuanced understanding of cultural and religious influences on perceptions of plant-based meat products. Seven informers (n=7) highlighted Halal certification as a key consideration, while six informers (n=6) emphasised cultural preferences for conventional meat. Four informers (n=4) noted limited exposure and awareness, and three informers (n=3) each expressed conditional openness and ethical or environmental alignment. These findings illustrate how Malaysian youth navigate complex cultural and religious factors when evaluating plant-based meat, suggesting that successful market integration requires addressing Halal certification, enhancing visibility, respecting cultural traditions, and emphasising ethical alignment to build trust and acceptance across diverse consumer segments. The following subsection presents a summary of perceptions of plant-based meat products.

4.4.7 Summary on Perceptions of Plant-Based Meat Products

This summary combines insights from Questions 1 to 6, which examine how Malaysian youth view different aspects of plant-based meat products. These aspects include their understanding of the products, the advantage and disadvantage they see, ideas about nutrition, taste, and texture, what influences their choices, and how culture and religion play a role. The findings are based on in-depth responses from youths in tertiary institutions, offering a clear and detailed picture of how this group thinks about plant-based meat products. For many, these products are not just part of a food trend, but are connected to broader issues such as health, personal beliefs, affordability, and sense of identity. Note that each summary is based on the actual words and experiences shared by the youth, so their voices remain central to the discussion. Organised by theme, this section highlights how plant-based meat products are understood and experienced within the real-life contexts of Malaysian youth, shaped by their personal values, family and peer influences, and cultural backgrounds. Summary of data

interpretation on perceptions of plant-based meat products is presented in Table 4.2 below:

Table 4.2
Summary of Data Interpretation on Perceptions of Plant-based Meat Products

Question	Summary
Question 1 Understanding of Plant-based Meat Products	Malaysian youths in tertiary institutions clearly and thoughtfully understand plant-based meat products. Eleven informers (n=11) stressed the importance of taste, texture, and appearance, explaining that these products aim to copy conventional meat. Ten informers (n=10) see them as practical meat alternatives. At the same time, eight (n=8) know key ingredients such as soy, peas, and mushrooms. Four informers (n=4) recognise that plant-based meat products suit vegetarians and vegans. At the same time, three (n=3) mentioned health benefits and familiarity with brands. Two informers (n=2) remain doubtful, calling them "fake meat" or comparing them to traditional foods like tempeh. One informer (n=1) pointed out that these products could be helpful as Halal options when traveling. This shows that youth are becoming more aware of plant-based meat products, recognising what they offer and where they fall short.
Question 2 Advantages and Disadvantages of Plant-based Meat Products	The analysis demonstrates that Malaysian youth hold balanced views on the pros and cons of plant-based meat products. Six informers (n=6) see health benefits, while six (n=5) identify high cost as a significant concern. Four informers (n=4) each mentioned environmental benefits, ethical reasons, and challenges with taste and texture. Three informers (n=3) express worries about processing and nutrition, while two (n=2) note that these products can help those with dietary needs. One informer mentions concerns about environmental impact (n=1), one points to limited market reach (n=1), and another highlights convenience (n=1). Overall, youth appreciate plant-based meat products' health and ethical advantages but remain cautious due to price, taste, and how processed they are. Some informers show careful thinking, seeing

	the benefits while recognising the drawbacks. This suggests that while awareness grows, barriers like cost and sensory quality still limit wider use among different youth groups.
Question 3 Nutritional Value of Plant-based Meat Products	Malaysian youth show a thoughtful understanding of the nutrition in plant-based meat products, weighing both pros and cons. Six informers (n=6) are concerned about processing and added ingredients, noting that health benefits might be reduced by high sodium or preservatives. Five informers (n=5) mention knowledge of nutritional content and differences between brands, showing they pay attention to quality and variation. Four (n=4) point to health advantages such as lower cholesterol and no antibiotics, while three (n=3) prefer conventional meat for being more natural and nutritionally complete. The findings show that youth consider potential health gains alongside concerns about processing. Choosing a brand plays an important role in how they judge these products. This balanced view suggests that clear labelling about ingredients and how products are made could help ease concerns and increase acceptance, especially among health-conscious youth who are carefully evaluating their options.
Question 4 Overall Perception and Flavour	Sensory experience is the most important factor for Malaysian youth when judging plant-based meat products. Seven informers (n=7) stated taste and texture are key barriers, explaining that many products do not fully match the experience of eating real meat. Five (n=5) view them as promising new options, while four each note differences between brands (n=4) and cost concerns (n=4). Three (n=3) believe improvements will come in the future. The data shows that while youth see potential, how the product tastes and feels remains the main factor in whether they accept it. Their awareness of brand differences shows growing consumer awareness, and cost remains challenging for students. Overall, youth are interested but cautious, with matching the texture of real meat seen as a major challenge that needs better product design to overcome.

Question 5 Factors Influencing Perception	For Malaysian youths in tertiary institutions, taste and texture (n=7) and price (n=6) are the most important factors shaping their views on plant-based meat products. Seven informers (n=7) said that how closely the product resembles real meat is the main factor in deciding whether to try or continue using it. Six (n=6) pointed to high cost as a significant barrier, especially for those on tight student budgets. Four (n=4) consider health and nutrition, three (n=3) mention limited availability, and two (n=2) say marketing plays a role. The findings show that even if youth care about the environment or animal welfare, taste and price ultimately shape their decisions. Cost is significant, with several informers saying they would choose regular meat if plant-based options are too expensive. This suggests that for these products to succeed, they must taste good and be priced competitively, with better availability as a key supporting factor.
Question 6 Cultural and Religious Influences	Cultural and religious beliefs strongly influence how Malaysian youth view plant-based meat products. Seven informers (n=7) said Halal certification is essential for Muslim youth, making it a must-have for acceptance. Six (n=6) expressed strong ties to traditional meat-based dishes, showing that cultural food habits can make switching hard. Four (n=4) stated they rarely see or hear about plant-based meat products in their communities. Meanwhile, three (n=3) each expressed openness to trying them and alignment with ethical values. The findings show that Halal status is non-negotiable for Muslim informers. At the same time, cultural traditions across ethnic groups create strong preferences for conventional meat. Nonetheless, some youth show practical openness—especially when Halal certification is clear or when Halal meat is hard to find while traveling. This suggests that positioning plant-based meat products as Halal-approved, developing them with cultural respect, and increasing awareness could help build greater acceptance among Malaysia's diverse youth population.

The next section presents the motivations for consuming plant-based meat products among youths in tertiary institutions in Malaysia.

4.5 Motivations of Plant-Based Meat Products Among Youths in Tertiary Institutions in Malaysia

This section explores consumer motivations regarding plant-based meat products, drawing on responses to six key questions, from question 7 to question 12. The analysis delves into opinions about purchasing plant-based meat products, the importance of environmental concerns, perceived benefits, personal motivations, ethical considerations, and the influence of social circles. Together, these insights provide a comprehensive understanding of the factors shaping consumer attitudes toward plant-based meat product alternatives. The findings highlight diverse perspectives and priorities influencing decision-making in this evolving market.

4.5.1 Motivation to Purchase Plant-Based Meat Products

This subsection explores Question 7, which examines informers' opinions and feelings about purchasing plant-based meat products. Understanding these motivations is essential for assessing the factors that influence consumer attitudes toward plant-based alternatives. To explore these views, informers were asked: “What are your opinions or feelings about purchasing plant-based meat products?” Their responses were analysed using inductive coding, identifying key themes that reflect their thoughts and attitudes toward plant-based meat. The findings are presented below, ordered from highest to lowest frequency:

a) <u>Price Sensitivity</u>

Economic concerns consistently emerged among Malaysian youth when considering plant-based meat products, with cost being the main barrier to regular use. Seven informers (n=7) specifically questioned whether these alternatives are worth the price, especially when compared to conventional meat options they have long relied on. The following responses illustrate this perspective, showing how cost concerns consistently cut across different demographic segments:

"In my opinion, buying plant-based meat products certainly has good intentions, but I believe that within these good intentions, there are also questions regarding the companies producing these products because of their relatively high price."

(Informer 2)

"I have a positive feeling because we can try another version of meat. However, the cost or availability on the market could be one of the problems that prevent me from choosing it."

(Informer 3)

"I'm not sure if this product is worth buying because it is expensive and the taste may be less satisfying."

(Informer 7)

"When I think about buying plant-based meat, I feel kind of interested, but I wonder if it is worth the price. It is something I would try if it is available, but I am not always sure about spending more money for it. I think I would buy it more if I was convinced it tasted just like meat."

(Informer 8)

"Personally, I am very neutral because I have nothing against conventional meat, I have nothing against plant-based meat products also but I am very open to trying plant-based meat products if it is affordable and if it's known to be tasty. if it accessible, If I can get it like in grocery store near me, I think there would be another factor that would contribute to me consuming plant-based meat products."

(Informer 9)

"As I mentioned before, if it were a choice, I would not buy plant-based meat. But if I were forced to, then yes, I would choose it. However, I do not think I would purchase plant-based meat products willingly, considering the price and texture—these are the two main factors that influence my purchasing decision."

(Informer 12)

"I do not mind trying it out if it tastes good, nutritious and budget friendly."

(Informer 19)

The voices of these youth reflect the everyday experience of Malaysian youth trying to balance ethical choices with limited budgets. Their concerns show how financial constraints influence decisions about sustainable eating, revealing that even strong intentions can be limited by real economic challenges in a context where every ringgit matters.

b) Environmental Concerns

Moreover, environmental sustainability became an important factor for Malaysian youth when evaluating plant-based meat products, with growing awareness of ecological issues shaping their food choices. Five informers (n=5) clearly linked their interest in these products to a desire to reduce their environmental impact and support the planet's well-being. Their views are reflected in the following statements, which reveal a genuine desire to align personal choices with environmental well-being:

> *"I feel curious about trying plant-based meat. It is a good option to explore, especially for the environment. But I would not fully switch unless it becomes a staple in my diet."*
>
> (Informer 1)

> *"For me, we can help save the environment while also maintaining a healthier lifestyle and diet."*
>
> (Informer 6)

> *"The environmental benefits, such as a lower carbon footprint, are important to me, and I appreciate that these products can provide a healthier alternative to traditional meat in terms of lower saturated fat and no cholesterol."*
>
> (Informer 15)

> *"I think it is a good option for people who want to reduce their environmental footprint or eat healthier."*
>
> (Informer 16)

> *"People's opinions on plant-based meat products vary widely. Some view them as an exciting alternative to traditional meat, seeing them as healthier options with fewer calories, fats, and cholesterol. Others may feel sceptical, concerned about the taste or texture compared to real meat. There are also individuals who are interested in plant-based meats due to their sustainability and environmental benefits, but they may still prefer traditional meat because of habit or cultural preferences. Ultimately, purchasing these products depends on personal values, dietary needs, and openness to trying new things."*
>
> (Informer 17)

Malaysian youth are not just thinking about their next meal, but are connecting their food choices to the planet's health. Their words reflect a generation that sees what they eat as a form of action, where each choice supports the kind of future they want for themselves and the world. This mindset is especially present during their time in tertiary institutions, as they move toward more sustainable and environmentally aware lives.

c) Health Considerations

Additionally, health concerns emerged as a key factor shaping how Malaysian youth view plant-based meat products, with nutritional benefits playing a meaningful role in their decisions. Five informers (n=5) connected their interest in these alternatives to personal health goals and dietary improvements. The responses below illustrate this perspective, showing how health concerns blend with environmental awareness and economic considerations:

> *"For me, we can help save the environment while also maintaining a healthier lifestyle and diet."*
>
> (Informer 6)

> *"I think it is okay to buy plant-based meat products because if we want to adopt a healthy lifestyle, it is better for us to consume plant-based meat products as it is higher in nutrients."*
>
> (Informer 10)

> *"The environmental benefits, such as a lower carbon footprint, are important to me, and I appreciate that these products can provide a healthier alternative to traditional meat in terms of lower saturated fat and no cholesterol."*
>
> (Informer 15)

> *"I think buying plant-based meat products is a good thing, especially if it supports a healthy lifestyle."*
>
> (Informer 18)

> *"I do not mind trying it out if it tastes good, nutritious and budget friendly."*
>
> (Informer 19)

Health is not an abstract idea for these Malaysian youth. It is a daily practice tied to their identity. Their comments show how well-being has become part of self-care, with food choices reflecting personal values and hopes for the future during their university years, when they are learning to navigate adulthood.

d) Taste and Texture Concerns

Furthermore, the sensory experience of eating remained crucial to Malaysian youth when considering plant-based meat products, with the taste and texture needing to feel real to be accepted. Five informers (n=5) shared concerns about how well these alternatives could match the familiar experience they associate with traditional meat.

Examples of their responses include these candid reflections on the sensory gap between expectation and reality:

> *"As consumers, I do not think we have any major issues with plant-based meat products. Sometimes they are okay, but they are not as fulfilling as conventional meat. In the future, I would be interested in seeing how the technology advances and how they imitate the mouthfeel or sensation of meat with current innovations."*
>
> (Informer 4)

> *"I am not sure if this product is worth buying because it is expensive and the taste may be less satisfying."*
>
> (Informer 7)

> *"When I think about buying plant-based meat, I feel kind of interested, but I wonder if it is worth the price. It is something I would try if it is available, but I am not always sure about spending more money for it. I think I would buy it more if I was convinced it tasted just like meat."*
>
> (Informer 8)

> *"As I mentioned before, if it were a choice, I would not buy plant-based meat. But if I were forced to, then yes, I would choose it. However, I do not think I would purchase plant-based meat products willingly, considering the price and texture—these are the two main factors that influence my purchasing decision."*
>
> (Informer 12)

> *"People's opinions on plant-based meat products vary widely. Some view them as an exciting alternative to traditional meat, seeing them as healthier options with fewer calories, fats, and cholesterol. Others may feel sceptical, concerned about the taste or texture compared to real meat. There are also individuals who are interested in plant-based meats due to their sustainability and environmental benefits, but they may still prefer traditional meat because of habit or cultural preferences. Ultimately, purchasing these products depends on personal values, dietary needs, and openness to trying new things."*
>
> (Informer 17)

The emotional connection to familiar Flavors runs deep for Malaysian youth, showing how food memories influence their openness to new choices. For these youth, taste is not just about sensation. It is linked to comfort, tradition, and what makes a meal feel like home. This is especially meaningful in campus dining settings, where food helps them stay connected to their roots and cultural identity.

e) <u>Openness to Trying New Things</u>

In contrast, curiosity about plant-based meat products showed that Malaysian youth are open to trying new food options, even as they hold realistic expectations. Four informers (n=4) expressed genuine interest in these products, seeing them as part of their changing relationship with food. Their responses highlight how traditional eating habits can exist alongside a willingness to embrace new ideas. Their responses include these thoughtful expressions of measured interest in culinary exploration:

> *"I feel curious about trying plant-based meat. It is a good option to explore, especially for the environment. But I would not fully switch unless it becomes a staple in my diet."*
>
> (Informer 1)

> *"Personally, I am very neutral because I have nothing against conventional meat, I have nothing against plant-based meat products also but I am very open to trying plant-based meat products if it is affordable and if it is known to be tasty. if it accessible, If I can get it like in grocery store near me, I think there would be another factor that would contribute to me consuming plant-based meat products."*
>
> (Informer 9)

> *"I would consider buying it, especially if I want to try something new. It is not something I buy every week, though."*
>
> (Informer 11)

> *"People's opinions on plant-based meat products vary widely. Some view them as an exciting alternative to traditional meat, seeing them as healthier options with fewer calories, fats, and cholesterol. Others may feel sceptical, concerned about the taste or texture compared to real meat. There are also individuals who are interested in plant-based meats due to their sustainability and environmental benefits, but they may still prefer traditional meat because of habit or cultural preferences. Ultimately, purchasing these products depends on personal values, dietary needs, and openness to trying new things."*
>
> (Informer 17)

Curiosity comes through clearly in these responses, gentle but steady. These Malaysian youth represent a mindset of exploration, ready to try something new while still being careful. They are open to stepping outside their comfort zones. However, they remain cautious, having seen food trends come and go without lasting value. This balance is evident in their campus dining experiences, where they continue looking for honest and meaningful meals.

f) Cultural and Habitual Preferences

Finally, food traditions and habitual patterns played a key role in how Malaysian youth relate to meat consumption, with cultural identity affecting how open they are to plant-based meat products. Three informers (n=3) clearly linked their hesitation to adopt these alternatives to strong preferences formed through family meals and shared social experiences. The following quotes highlight this perspective, showing how cultural context influences receptiveness to dietary innovation:

> *"I do not feel strongly about buying plant-based meat. If I see it and feel curious, I might try it, but I mainly stick to conventional meat."*
>
> (Informer 5)

> *"I personally would not go for it since I am more of a traditional meat consumer but I would not stop people who are eager to try it, personal preference it is not for me."*
>
> (Informer 14)

> *"People's opinions on plant-based meat products vary widely. Some view them as an exciting alternative to traditional meat, seeing them as healthier options with fewer calories, fats, and cholesterol. Others may feel sceptical, concerned about the taste or texture compared to real meat. There are also individuals who are interested in plant-based meats due to their sustainability and environmental benefits, but they may still prefer traditional meat because of habit or cultural preferences. Ultimately, purchasing these products depends on personal values, dietary needs, and openness to trying new things."*
>
> (Informer 17)

Food traditions are not just daily habits but meaningful connections that link Malaysian youth to their family, community, and cultural identity. Their hesitation is not about resisting change, but reflects how deeply food is tied to who they are and where they come from. This is especially clear as they navigate modern life while holding on to cultural values through shared meals.

The overall analysis of informers' opinions and feelings about buying plant-based meat products shows a mix of motivations and challenges. Seven informers (n=7) pointed to price as the main barrier. Five informers (n=5) each mentioned environmental concerns and health benefits as key reasons for considering these products. Another five informers (n=5) stressed the importance of taste and texture, saying these must match

what they expect from real meat. Four informers (n=4) showed careful interest. They were open to trying but not entirely convinced. Three informers (n=3) said cultural traditions strongly shape food choices. These insights show how Malaysian youth balance modern values like sustainability with deep-rooted cultural practices. Moving forward, wider acceptance will depend on making plant-based meat products more affordable while respecting the cultural meanings and sensory experiences that connect youth to their heritage. Considering environmental concerns, the following subsection highlights the motivation to purchase plant-based meat products.

4.5.2 Motivation to Purchase Plant-Based Meat Products Considering Environmental Concerns

This subsection explores Question 8, which examines informers' views on the importance of purchasing plant-based meat products in the context of environmental concerns. Hence, understanding these perspectives is crucial for assessing how environmental factors influence consumer attitudes toward plant-based alternatives. To explore these views, informers were asked: "How important is purchasing plant-based meat products, particularly considering environmental concerns?" Their responses were analysed using inductive coding, identifying key themes that reflect their thoughts and attitudes toward the environmental importance of plant-based meat. The findings are presented below, ordered from highest to lowest frequency.

a) <u>Environmental Benefits as a Priority</u>

When Malaysian youth consider plant-based meat products from an environmental perspective, their views show an evident appreciation of the ecological benefits as a reason to try them. Nine informers (n=9) clearly explained how these products could help reduce environmental harm and save natural resources, seeing them as contributing to a healthier planet. The following responses illustrate this perspective, demonstrating how environmental consciousness shapes purchasing considerations:

> *"It is important to me, especially for environmental reasons. Reducing meat consumption could help with sustainability and reduce animal farming. I believe it is worth considering."*
>
> (Informer 1)

"In my opinion, it is important because plant-based meat products production may use fewer natural resources, as it does not require resources from animals. This is better for the environment."

(Informer 3)

"To promote a healthier environment, I think it is important to create a balance between plant-based and meat consumption. For example, in one day, we can balance our diet by consuming a little bit of plant-based food and a small amount of conventional meat products."

(Informer 6)

"I think buying plant-based meat products is important because it helps the planet. By reducing the need for animal farming, it could lower pollution and save natural resources. It is something I would consider more seriously for environmental reasons."

(Informer 8)

"It is quite important because I have read somewhere before that eating plant-based meat products can help reduce carbon emission and conserve our water which is very important for the environment because as we know, we are going through like the global warming right now, so doing everything we can to help save the planet would be for the best I think."

(Informer 9)

"It is really important because, in comparison to traditional beef, it uses less water, land, and greenhouse gas emissions."

(Informer 13)

"The importance of purchasing plant-based meat products is growing, particularly because of environmental concerns. Many people see it as a crucial way to reduce the environmental impact of the meat industry, which is a significant contributor to greenhouse gas emissions, deforestation, and water use. Plant-based meats typically have a much lower environmental footprint, making them an appealing choice for environmentally conscious consumers. Reducing reliance on animal farming can help mitigate climate change, preserve natural habitats, and use resources more efficiently."

(Informer 17)

"The advantage is that it is more environmentally friendly and better suited for individuals who want to reduce their consumption of animal meat, whether due to beliefs, health reasons, or others. However, the downside might be the taste and texture, which may not be the same as real meat."

(Informer 18)

"Considering plant-based meat products is more eco-friendly, and it does not harm any animals, I would love to help."

(Informer 19)

These youth strongly believe in the importance of protecting the environment by choosing plant-based alternatives. Their words show a generation that sees their food choices as meaningful actions in addressing climate change, where each meal is a way to support the planet's health, even as meat remains an important part of cultural life in Malaysian society.

b) <u>Personal Values and Environmental Awareness</u>

Moreover, for Malaysian youth considering plant-based meat products, care for the environment has become closely linked to who they are and the values they live by. Six informers (n=6) clearly connected their food choices to their commitment to protecting the planet and living more sustainably, showing how these decisions reflect their growing sense of identity. Their views are reflected in the following statements, which demonstrate how environmental concerns merge with personal ethics:

"It is quite important because I have read somewhere before that eating plant-based meat products can help reduce carbon emissions and conserve our water, which is very important for the environment because, as we know, we are going through like the global warming right now, so doing everything we can to help save the planet would be for the best, I think."

(Informer 9)

"It is definitely important, especially with climate change. Reducing meat consumption could help with a lot of environmental problems."

(Informer 11)

"Purchasing plant-based meat products is quite important to me, especially when considering environmental concerns. The production of plant-based meats generally has a much lower environmental impact compared to traditional meat, requiring fewer resources like water and land, and producing less greenhouse gas emissions."

(Informer 15)

"It is very important to me because reducing meat consumption can significantly lower greenhouse gas emissions and resource use."

(Informer 16)

> *"The importance of purchasing plant-based meat products is growing, particularly because of environmental concerns. Many people see it as a crucial way to reduce the environmental impact of the meat industry, which is a significant contributor to greenhouse gas emissions, deforestation, and water use. Plant-based meats typically have a much lower environmental footprint, making them an appealing choice for environmentally conscious consumers. Reducing reliance on animal farming can help mitigate climate change, preserve natural habitats, and use resources more efficiently."*
>
> (Informer 17)

> *"Considering plant-based meat products is more eco-friendly, and it does not harm any animals, I would love to help."*
>
> (Informer 19)

These informers do not just know about environmental issues in theory. They feel them personally. Their commitment shows how sustainability has become part of their sense of right and wrong during their university years, a time of personal growth. For them, food choices are more than habit. They reflect what they believe in and their desire to care for the planet they will live on for the rest of their lives.

c) <u>Balancing Environmental and Practical Concerns</u>

Additionally, Malaysian youth show thoughtful consideration when assessing plant-based meat products, recognising the environmental benefits and considering practical factors influencing whether they would actually buy them. Five informers (n=5) acknowledged the positive impact on the environment. However, they stressed that cost, taste, and access must also be considered when making food choices in everyday life. The responses below illustrate this perspective, showing how environmental consciousness intersects with everyday realities:

> *"To promote a healthier environment, I think it is important to create a balance between plant-based and meat consumption. For example, in one day, we can balance our diet by consuming a little bit of plant-based food and a small amount of conventional meat products."*
>
> (Informer 6)

> *"It is important because it can reduce livestock farming, thus fewer animals are slaughtered. While I support efforts to protect the environment, there are other cheaper and more effective options I can choose rather than buying plant-based meat."*
>
> (Informer 7)

> *"If we have more plant-based meat products, I think by choosing these products, we could reduce water usage. This is because when we buy conventional meat, the slaughtering process requires a lot of water, so plant-based meat products could help conserve water."*
>
> (Informer 10)

> *"Purchasing plant-based meat products is somewhat important for environmental concerns. They typically require fewer resources like water and land and produce fewer greenhouse gas emissions than traditional meat. However, their overall impact may feel limited unless adopted on a larger scale."*
>
> (Informer 14)

> *"The advantage is that it is more environmentally friendly and better suited for individuals who want to reduce their consumption of animal meat, whether due to beliefs, health reasons, or others. However, the downside might be the taste and texture, which may not be the same as real meat."*
>
> (Informer 18)

These youth navigate the complex reality of university life, where environmental ideals come up against tight budgets and expectations about taste and texture. Their careful decision-making shows how the desire to live sustainably often competes with immediate, practical needs. This highlights the gap between understanding what is better for the environment and being able to follow through, especially within the financial limits they face every day.

d) <u>Scepticism About Environmental Impact</u>

Furthermore, some Malaysian youth doubt whether plant-based meat products truly help the environment, wondering if these alternatives make a real difference or are just a short-lived trend. Four informers (n=4) specifically questioned whether these products bring meaningful environmental benefits, suggesting scepticism about their impact on ecological issues. Examples of their responses include these thoughtful challenges to conventional environmental narratives:

> *"In my opinion, this meat product does not have a significant impact on the environment, so its purchase is not widely practiced in Malaysia. However, in terms of its importance, it is not very crucial, and there are other things that are more important."*
>
> (Informer 2)

> *"I do not think they are that important because the ecosystem has been functioning with a balance between eating meat and plants. If you tilt the balance too far towards plants or vegetables, I think it could disrupt that harmony. It would not be beneficial for us or the environment."*
>
> (Informer 4)

> *"It is important because I understand the environmental benefits, but it is not something that influences my decisions. I eat regular meat because I believe it is part of life."*
>
> (Informer 5)

> *"To be honest, I do not really think there is a correlation between eating plant-based food and being concerned about the environment. The ecosystem has evolved the way it has for a reason. However, some people might believe that eating plant-based meat products or following a plant-based diet helps the environment. In my opinion, that is not necessarily true—but that is just my personal perspective."*
>
> (Informer 12)

This scepticism does not come from a lack of environmental care, but from careful thinking about addressing complex ecological challenges. These informers question simple answers and call for approaches supported by evidence, reflecting their desire for solutions that truly make a difference. Their views show a need for environmental efforts to align with ecological understanding and the cultural meaning in their lives.

e) <u>Neutral or Mixed Perspectives</u>

Finally, some Malaysian youth take a cautious approach to plant-based meat products, not fully embracing or rejecting them, but recognising the environmental benefits while continuing their usual eating habits. Three informers (n=3) shared balanced views, saying they appreciate these products' positive impact on the environment. However, this awareness has not led to significant changes in consumption patterns. The following quotes highlight this perspective, showing how environmental awareness coexists with dietary inertia:

> *"It is important because I understand the environmental benefits, but it is not something that influences my decisions. I eat regular meat because I believe it is part of life."*
>
> (Informer 5)

> *"To promote a healthier environment, I think it is important to create a balance between plant-based and meat consumption. For example, in one day, we can balance our diet by consuming a little bit of plant-based food and a small amount of conventional meat products."*
>
> (Informer 6)

> *"It is quite important because I have read somewhere before that eating plant-based meat products can help reduce carbon emission and conserve our water which is very important for the environment because as we know, we are going through like the global warming right now, so doing everything we can to help save the planet would be for the best I think."*
>
> (Informer 9)

These informers represent a thoughtful middle ground, neither fully convinced by environmental arguments nor entirely dismissive. Their balanced views reflect how difficult it is to change long-standing eating habits, especially when cultural traditions and personal tastes meet environmental concerns in ways that cannot be easily resolved. Their stance shows that shifting food choices involves more than just knowing what is better for the planet. It also depends on what feels familiar, affordable, and meaningful in everyday life.

The overall analysis of informers' views on the importance of buying plant-based meat products for environmental reasons shows a range of perspectives. Nine informers (n=9) saw environmental benefits as a strong reason to consider these products. In comparison, six informers (n=6) connected their choices to personal values and a sense of responsibility toward the planet. Five informers (n=5) acknowledged the environmental advantages. However, they emphasised that these must be balanced with everyday concerns such as cost, taste, and availability. Four informers (n=4) doubted whether the environmental claims are genuine or lasting, questioning the actual impact of these products. Three informers (n=3) held neutral or mixed views, showing neither strong support nor outright rejection. Together, these insights show how Malaysian youth try to balance care for the environment with the realities of daily life. They suggest that for plant-based meat products to gain wider acceptance, messaging must speak to both environmental values and the practical needs that shape youth food decisions. The following subsection highlights the perceived benefits of purchasing plant-based meat products.

4.5.3 Perceived Benefits of Purchasing Plant-Based Meat Products

This section explores Question 9, which examines informers' perceptions of the benefits of purchasing plant-based meat products. Understanding these perceived benefits is crucial for assessing how consumers view the advantages of plant-based alternatives. To explore these views, informers were asked: “What benefits do you perceive from purchasing plant-based meat products?” Their responses were analysed using inductive coding, identifying key themes that reflect their thoughts and attitudes toward the benefits of plant-based meat. The findings are presented below, ordered from highest to lowest frequency.

a) <u>Environmental Sustainability</u>

When Malaysian youth think about the benefits of plant-based meat products, protecting the environment is an important advantage that connects with their concerns for the planet’s well-being. Ten informers (n=10) clearly explained how these alternatives can help preserve natural resources and reduce environmental harm by utilising less water, energy, and land than conventional meat. The following responses illustrate this perspective, showing how environmental consciousness shapes perceptions of the benefits of plant-based meat products:

> *“I think plant-based meat products is a step toward a healthier planet and healthier diets. It is also good for people who want to reduce their animal consumption. It could be more affordable and widespread with time.”*
>
> (Informer 1)

> *“The benefits I see are that it can help preserve the environment and prevent the production of unethical and excessive meat products. The benefits are good, but the quantity is too small compared to regular meat.”*
>
> (Informer 2)

> *“I think it can contribute to environmental sustainability because we do not kill animals for meat, which helps the environment. If we purchase plant-based meat, it contributes to environmental sustainability. For example, in rural areas, if people want meat, they need to go into the forest and hunt animals. However, with plant-based meat, environmental sustainability can be achieved by not killing animals.”*
>
> (Informer 3)

"The main benefit of plant-based meat products is that they are better for the environment, and it could be healthier for me. It is also a good way to avoid animal cruelty. If more people bought it, it could make a big difference in both health and the environment."

(Informer 8)

"I think buying plant-based meat products would be good for the environment and animals, it feels like a small change that can make a difference."

(Informer 11)

"Depending on the components, it can be a healthier choice with less of an impact on the environment."

(Informer 13)

"The benefits of purchasing plant-based meat products include reducing environmental impact, supporting animal welfare, offering potential health benefits, and providing options for diverse diets."

(Informer 14)

"Several benefits from purchasing plant-based meat products are environmental sustainability is a major factor, as they generally have a lower carbon footprint, use fewer resources, and produce less pollution compared to traditional meat production. Secondly, there are health benefits, such as lower levels of saturated fat and no cholesterol, which can contribute to better heart health. Plant-based meats offer a more ethical alternative, reducing the need for animal farming and helping with animal welfare concerns."

(Informer 15)

"Benefits include better health, ethical consumption, and contributing to environmental sustainability."

(Informer 16)

"There are several perceived benefits. From a health perspective, plant-based meats often contain fewer unhealthy fats and cholesterol than traditional meats, making them a good option for those looking to improve heart health or manage their weight. From an environmental standpoint, they have a smaller carbon footprint and contribute less to water and land usage. Ethical considerations, such as reducing animal suffering, are another significant benefit for many people. Lastly, plant-based meats can offer more sustainable food sources in the long term, especially as the world's population continues to grow."

(Informer 17)

These youth see plant-based meat products as a practical way to care for the environment, where daily food choices become meaningful actions that support the

planet's health. Their words show a generation that links what they eat to broader ecological responsibilities, viewing these alternatives as realistic steps toward living sustainably within their Malaysian context.

b) <u>Health Benefits</u>

Moreover, Malaysian youth recognize important health benefits linked to plant-based meat products. Nine informers (n=9) pointed out better nutrition and potential health advantages, such as lower saturated fat and cholesterol levels, which they see as key differences compared to regular meat. Their views are reflected in the following statements, which demonstrate how health considerations shape perceptions of the benefits of plant-based meat products:

> *"I think plant-based meat products is a step toward a healthier planet and healthier diets. It is also good for people who want to reduce their animal consumption. It could be more affordable and widespread with time."*
>
> (Informer 1)

> *"I think plant-based meat products are good for people who are on a diet or are mindful of their health, as they allow you to control protein intake and other nutritional factors, unlike conventional meat."*
>
> (Informer 4)

> *"I think, overall, it is about the potential health benefits that can help maintain a healthier diet, not only for individuals but also for the community as a whole."*
>
> (Informer 6)

> *"The main benefit of plant-based meat products is that they are better for the environment, and it could be healthier for me. It is also a good way to avoid animal cruelty. If more people bought it, it could make a big difference in both health and the environment."*
>
> (Informer 8)

> *"It is healthier option for people because it helps people with heart diseases and high cholesterol."*
>
> (Informer 9)

> *"I think, in terms of health, it is beneficial because it is high in fibre, vitamins, and other nutrients since it is plant-based."*
>
> (Informer 10)

> *"Depending on the components, it can be a healthier choice with less of an impact on the environment."*
>
> (Informer 13)

> *"Several benefits from purchasing plant-based meat products are environmental sustainability is a major factor, as they generally have a lower carbon footprint, use fewer resources, and produce less pollution compared to traditional meat production. Secondly, there are health benefits, such as lower levels of saturated fat and no cholesterol, which can contribute to better heart health. Plant-based meats offer a more ethical alternative, reducing the need for animal farming and helping with animal welfare concerns."*
>
> (Informer 15)

> *"It contains less saturated fat and is healthier. However, in terms of nutrient content, it may not be sufficient compared to regular meat, such as protein, vitamin B12, iron, and so on."*
>
> (Informer 18)

Health is not an abstract idea for these youths; it is a part of everyday life, deeply connected to their identity. Their comments show how taking care of their well-being has become a key part of looking after themselves, with food choices reflecting their values and hopes for the future. This is especially clear during their university years, when they learn to live independently and shape their own habits.

c) <u>Ethical Considerations</u>

Additionally, ethical values play an important role in how Malaysian youth view the benefits of plant-based meat products. Six informers (n=6) highlighted concern for animal welfare and moral beliefs as strong reasons for considering these alternatives, seeing them as a way to align their eating habits with their sense of right and wrong. The responses below illustrate this perspective, showing how ethical consciousness intersects with food choices:

> *"The benefits I see are that it can help preserve the environment and prevent the production of unethical and excessive meat products. The benefits are good, but the quantity is too small compared to regular meat."*
>
> (Informer 2)

> *"The main benefit of plant-based meat products is that they are better for the environment, and it could be healthier for me. It is also a good way to avoid animal cruelty. If more people bought it, it could make a big difference in both health and the environment."*
>
> (Informer 8)

> *"I think buying plant-based meat products would be good for the environment and animals, it feels like a small change that can make a difference."*
>
> (Informer 11)

> *"The benefits of purchasing plant-based meat products include reducing environmental impact, supporting animal welfare, offering potential health benefits, and providing options for diverse diets."*
>
> (Informer 14)

> *"Several benefits from purchasing plant-based meat products are environmental sustainability is a major factor, as they generally have a lower carbon footprint, use fewer resources, and produce less pollution compared to traditional meat production. Secondly, there are health benefits, such as lower levels of saturated fat and no cholesterol, which can contribute to better heart health. Plant-based meats offer a more ethical alternative, reducing the need for animal farming and helping with animal welfare concerns."*
>
> (Informer 15)

> *"There are several perceived benefits. From a health perspective, plant-based meats often contain fewer unhealthy fats and cholesterol than traditional meats, making them a good option for those looking to improve heart health or manage their weight. From an environmental standpoint, they have a smaller carbon footprint and contribute less to water and land usage. Ethical considerations, such as reducing animal suffering, are another significant benefit for many people. Lastly, plant-based meats can offer more sustainable food sources in the long term, especially as the world's population continues to grow."*
>
> (Informer 17)

These informers see their food choices as more than just personal preference; they reflect their values, such as kindness and responsibility toward animals. For them, each decision about what to eat is a way to live in line with what they believe is right. Their views show how Malaysian youth are reshaping what it means to eat with care, especially as awareness about animal welfare grows in today's world.

d) Dietary Variety and Flexibility

Furthermore, Malaysian youth appreciate the variety that plant-based meat products add to their meals, with four informers (n=4) noting how these alternatives suit different eating habits and help create shared food experiences in diverse social settings. They see them as a way to include everyone, whether someone eats meat or not, especially during gatherings with friends or family who may have different dietary choices. Examples of their responses include these reflections on dietary expansion:

> *"It can offer variety and might be interesting to try occasionally. It also provides an option for guests who do not conventional eat meat like vegetarian."*
>
> (Informer 5)

> *"Providing an additional option in the daily diet, especially for those who follow a vegetarian or vegan lifestyle."*
>
> (Informer 7)

> *"The benefits of purchasing plant-based meat products include reducing environmental impact, supporting animal welfare, offering potential health benefits, and providing options for diverse diets."*
>
> (Informer 14)

> *"Benefits include better health, ethical consumption, and contributing to environmental sustainability."*
>
> (Informer 16)

These youth see plant-based meat products not as a substitute, but as a valuable addition to the foods they enjoy. Their appreciation for flexibility in eating shows how Malaysian youth are open to new food options while still keeping their cultural food traditions. This balance allows them to include different preferences in shared meals, making it easier to eat together in diverse social circles where everyone's choices are respected.

e) Scepticism or Neutral Perspectives

Finally, some Malaysian youth approach plant-based meat products cautiously or rationally, with three informers (n=3) expressing doubts about how suitable these alternatives are for their own lives. They pointed to perceived limitations in taste, value, or practicality compared to conventional meat, suggesting that while they are aware of the options, these products have not yet become a meaningful part of their regular eating

habits. The following quotes highlight this perspective, showing how practical considerations shape benefit perceptions:

> *"I am not the target audience or market for plant-based meat, so I would not benefit from purchasing it. However, if purchasing a particular plant-based meat products would somehow benefit my community, then it might interest me. Otherwise, it does not really concern me."*
>
> (Informer 12)

> *"It contains less saturated fat and is healthier. However, in terms of nutrient content, it may not be sufficient compared to regular meat, such as protein, vitamin B12, iron, and so on."*
>
> (Informer 18)

> *"I think, in terms of health, it is beneficial because it is high in fibre, vitamins, and other nutrients since it is plant-based."*
>
> (Informer 10)

These informers represent a practical middle ground, recognising possible benefits of plant-based meat products while keeping realistic views about how well they fit into their daily lives. Their balanced outlook reflects the complex nature of food choices, where good intentions meet real-world constraints like taste preferences, cost, and convenience, especially for Malaysian youth navigating everyday meals in their university years.

The overall analysis of this subsection on informers' views about the benefits of buying plant-based meat products shows a well-rounded understanding of the advantages. Ten informers (n=10) pointed to environmental sustainability as an important benefit. In comparison, nine informers (n=9) identified health improvements as a key reason to consider these products. Six informers (n=6) stressed ethical values, particularly concern for animal welfare, as meaningful motivators. Four informers (n=4) appreciated the added variety and flexibility in meals, seeing these products as a way to include different eating preferences. At the same time, three informers (n=3) remained cautious or neutral, showing that not all youth consider these alternatives personally relevant. Together, these findings show how Malaysian youth weigh environmental, health, and ethical factors in their food choices while staying grounded in the practical realities of cost, taste, and cultural eating habits. The following subsection explores what motivates youth to try or consume plant-based meat products.

4.5.4 Motivation to Try or Consume Plant-Based Meat Products

This subsection explores Question 10, which examines the factors that motivate informers to try or consume plant-based meat products. Understanding these motivations is crucial for assessing how consumers perceive the value of plant-based alternatives and what drives their interest. To explore these views, informers were asked: "What motivates you to try or consume plant-based meat products?" Their responses were analysed using inductive coding, identifying key themes that reflect their thoughts and attitudes toward plant-based meat. The findings are presented below, ordered from highest to lowest frequency.

a) <u>Curiosity and Interest in New Food Trends</u>

Curiosity is the most potent motivator for Malaysian youth to try plant-based meat products. Ten informers (n=10) shared a genuine interest in new food ideas, the technology behind these products, and the experience of trying something different and modern within the evolving Malaysian food scene. The following responses illustrate this perspective, showing how curiosity shapes initial engagement with plant-based meat:

> *"The main motivation is the environmental impact and curiosity about new food trends. It is interesting to see if the flavour can really match meat. I am also open to healthier alternatives."*
>
> (Informer 1)

> *"My main motivation is definitely the internet, because the videos I have seen about this product have shown me its benefits, and I am curious to know the taste of this product."*
>
> (Informer 2)

> *"I think the main reason is my curiosity about trying new food innovations."*
>
> (Informer 3)

> *"I would like to learn more about the technological advancements in producing plant-based meat products. Specifically, how they are able to imitate meat, including its mouthfeel and taste."*
>
> (Informer 4)

> *"Curiosity is the main reason. If I hear good things about it or if a friend recommends it, I might try it."*
>
> (Informer 5)

"Something would motivate me is that I am a very curious person, so I think I would be very curious to how similar it tastes to conventional meat."

(Informer 9)

"I feel curious about the new innovative products in terms of texture, taste, and all of that."

(Informer 10)

"I'm curious to try it because it sounds like a healthier option and I want to see if it tastes good enough to replace meat in my diet."

(Informer 11)

"Curiosity about new food options and the desire to make more sustainable choices."

(Informer 16)

"I like to try new things and curious on how it tastes like. Also, I can contribute to helping the environment, so I can contribute to my health and also the environment."

(Informer 19)

These youth reflect a spirit of culinary exploration, where trying something new is not just about flavour, but also about personal discovery and connecting with others. Their curiosity shows a desire to be part of a global shift in food, allowing them to engage in meaningful conversations with peers locally and around the world.

b) <u>Health and Nutritional Benefits</u>

Moreover, health is key in shaping Malaysian youth's decision to try plant-based meat products. Eight informers (n=8) explained that the potential for better nutrition and supporting their overall wellbeing motivates them to consider these alternatives, seeing them as a way to make healthier food choices without completely changing their eating habits. Their views are reflected in the following statements, which demonstrate how health consciousness shapes motivation:

"The main motivation is the environmental impact and curiosity about new food trends. It is interesting to see if the flavour can really match meat. I am also open to healthier alternatives."

(Informer 1)

"I think I would try plant-based meat products just to see if it is a healthier option or tastes better than I expect. I also think it might be a good alternative for people trying to cut down on conventional meat. If it is good for the environment and health, that motivates me to try it."

(Informer 8)

"I am curious to try it because it sounds like a healthier option, and I want to see if it tastes good enough to replace meat in my diet."

(Informer 11)

"What motivates me to try or consume plant-based meat products is the combination of health benefits and environmental impact. I am interested in reducing my consumption of saturated fats and cholesterol, which are often present in animal-based meats, while still enjoying familiar flavours and textures."

(Informer 15)

"I am motivated to try this product because I want to live a healthier life. Although real meat may taste better, its saturated fat or cholesterol content could affect my health."

(Informer 18)

"Health benefits, ethical considerations, and curiosity."

(Informer 13)

"Motivation to try plant-based meat products can stem from a variety of factors. For some, health concerns such as reducing cholesterol, managing weight, or improving overall nutrition may be the driving force. Others are motivated by ethical reasons, wanting to avoid contributing to the exploitation of animals. Environmental concerns, like reducing the ecological footprint of meat production, also push many to try plant-based options. Additionally, curiosity, social trends, or the desire to simply explore new tastes and culinary options can be motivating factors as well."

(Informer 17)

"I like to try new things and curious on how it tastes like. Also, I can contribute to helping the environment, so I can contribute to my health and also the environment."

(Informer 19)

For these youth, health is not an abstract idea but a part of their everyday lives and sense of self. Their comments show that caring for their well-being has become a key part of looking after themselves, with food choices reflecting their values and long-term goals. This is especially clear during their university years, when they form habits and learn to make independent decisions about their lives.

c) Environmental Concerns

Additionally, environmental concern is an important motivator for Malaysian youth who are considering plant-based meat products. Six informers (n=6) clearly linked their interest in these alternatives to a desire to reduce their impact on nature and make a practical contribution to the planet's health. For them, choosing such products is one way to act on their values and support a more sustainable future. The responses below illustrate this perspective, showing how environmental values translate into food choices:

> *"The main motivation is the environmental impact and curiosity about new food trends. It is interesting to see if the flavour can really match meat. I am also open to healthier alternatives."*
>
> (Informer 1)

> *"I wanted to try a new product, which is why I decided to try plant-based food. I have had plant-based food before, and it tasted quite delicious."*
>
> (Informer 6)

> *"I think I would try plant-based meat products just to see if it is a healthier option or tastes better than I expect. I also think it might be a good alternative for people trying to cut down on conventional meat. If it is good for the environment and health, that motivates me to try it."*
>
> (Informer 8)

> *"I am motivated to try plant-based meat products for their potential environmental benefits, animal welfare considerations, and the curiosity to explore healthier alternatives."*
>
> (Informer 14)

> *"Motivation to try plant-based meat products can stem from a variety of factors. For some, health concerns such as reducing cholesterol, managing weight, or improving overall nutrition may be the driving force. Others are motivated by ethical reasons, wanting to avoid contributing to the exploitation of animals. Environmental concerns, like reducing the ecological footprint of meat production, also push many to try plant-based options. Additionally, curiosity, social trends, or the desire to simply explore new tastes and culinary options can be motivating factors as well."*
>
> (Informer 17)

> *"I like to try new things and curious on how it tastes like. Also, I can contribute to helping the environment, so I can contribute to my health and also the environment."*
>
> (Informer 19)

These informers do not just recognise environmental issues in theory. They feel them personally. Their commitment shows how sustainability has become part of their sense of right and wrong during their university years, a time of personal growth. For them, food choices are more than habits. They reflect what they stand for and their responsibility to care for the planet they will continue to live in.

d) Ethical Considerations

Furthermore, ethical values are important in how Malaysian youth view plant-based meat products. Four informers (n=4) highlighted concern for animal welfare and moral beliefs as strong motivators, seeing these alternatives as a way to align their eating habits with their personal values and sense of responsibility toward living beings. Examples of their responses include these reflections on the moral dimensions of food choices:

> *"I am motivated to try plant-based meat products for their potential environmental benefits, animal welfare considerations, and the curiosity to explore healthier alternatives."*
>
> (Informer 14)

> *"Motivation to try plant-based meat products can stem from a variety of factors. For some, health concerns such as reducing cholesterol, managing weight, or improving overall nutrition may be the driving force. Others are motivated by ethical reasons, wanting to avoid contributing to the exploitation of animals. Environmental concerns, like reducing the ecological footprint of meat production, also push many to try plant-based options. Additionally, curiosity, social trends, or the desire to simply explore new tastes and culinary options can be motivating factors as well."*
>
> (Informer 17)

> *"What motivates me to try or consume plant-based meat products is the combination of health benefits and environmental impact. I am interested in reducing my consumption of saturated fats and cholesterol, which are often present in animal-based meats, while still enjoying familiar flavours and textures."*
>
> (Informer 15)

> *"I am motivated to try this product because I want to live a healthier life. Although real meat may taste better, its saturated fat or cholesterol content could affect my health."*
>
> (Informer 18)

These informers see their food choices as more than personal preference; they reflect their values, such as kindness and responsibility toward animals. For them, each decision about what to eat is a way to live in line with what they believe is right. Their views show how Malaysian youth are reshaping what it means to eat with care, especially as awareness about animal welfare grows in today's world.

e) <u>Personal Health Goals and Lifestyle Changes</u>

Finally, some Malaysian youths are motivated to consider plant-based meat products due to personal health situations or changes in their lifestyle. Three informers (n=3) linked their interest to their own wellness goals, medical advice, or deliberate choices to improve their diet. For them, trying these products is part of a broader shift in how they relate to food. It reflects growing health awareness and a desire to make choices that support their well-being. The following quotes highlight this perspective, showing how individual circumstances shape motivation:

> *"I wanted to try a new product, which is why I decided to try plant-based food. I have had plant-based food before, and it tasted quite delicious"*
>
> (Informer 6)

> *"The main driving factors for me to try plant-based meat products again in the future would probably be if I want to lose weight. Another reason might be if I am diagnosed with a health issue that prevents me from eating conventional meat, then I would consider this alternative."*
>
> (Informer 12)

> *"I am motivated to try this product because I want to live a healthier life. Although real meat may taste better, its saturated fat or cholesterol content could affect my health."*
>
> (Informer 18)

These informers reflect the real-life reasons behind dietary change, where decisions about food are shaped by personal health experiences rather than general ideas. Their stories show how plant-based meat products can become part of a larger effort to improve well-being, influenced by family health history, individual medical concerns, and a commitment to developing healthier, long-term eating habits.

The overall analysis of this subsection on informers' motivations to try or consume plant-based meat products reveals a range of key drivers. Ten informers (n=10) identified curiosity as the main reason, seeing these products as something new and interesting to explore. Eight informers (n=8) pointed to health benefits as an important factor. In comparison, six informers (n=6) said environmental concern influenced their interest. Four informers (n=4) were motivated by ethical values, particularly care for animal welfare, and three informers (n=3) linked their choices to personal health needs or lifestyle changes. Together, these findings show that Malaysian youth are influenced by a mix of personal, social, and moral factors when considering plant-based meat products. Their decisions are not based on a single reason, but on how curiosity, health, environmental care, and ethics come together in everyday life. The following subsection explores ethical and animal welfare concerns regarding choosing plant-based meat products.

4.5.5 Ethical and Animal Welfare Concerns When Choosing Plant-Based Meat Products

This subsection explores Question 11, which examines whether informers consider ethical or animal welfare concerns when choosing plant-based meat products. Hence, understanding these perspectives is crucial for assessing how ethical considerations influence consumer attitudes toward plant-based alternatives. To explore these views, informers were asked: "Do you consider ethical or animal welfare concerns when choosing plant-based meat? Or any other concerns? Why?" Their responses were analysed using inductive coding, identifying key themes reflecting their thoughts and attitudes toward ethical and other concerns about plant-based meat. The findings are presented below, ordered from highest to lowest frequency.

a) <u>Ethical and Animal Welfare Concerns as a Priority</u>

When Malaysian youth consider plant-based meat products, ethical concerns often play a strong role in their decisions. Ten informers (n=10) clearly linked their interest in these products to care for animal welfare and the moral impact of what they eat, seeing their food choices as a way to align with values such as kindness and

responsibility within their cultural and personal beliefs. The following responses illustrate this perspective, showing how ethical consciousness shapes food decisions:

> *"Yes, I consider animal welfare when choosing plant-based meat products. I feel better knowing that no animals were harmed. Ethical concerns like reducing factory farming are important for me."*
>
> (Informer 1)

> *"When purchasing food like plant-based meat, I do consider the ethical issues and animal welfare, as one of the main reasons for the creation of plant-based meat products is to address these issues. Plant-based meat products is an innovation for society to reduce the consumption of real meat and also highlights that there are companies that have exploited our society, which has been accustomed to consuming regular meat and meat products."*
>
> (Informer 2)

> *"I think yes, because ethical concerns are significant for many plant-based meats, as they avoid animal cruelty and promote more humanity in food production."*
>
> (Informer 3)

> *"Yes, ethical reasons definitely play a role for me. As an animal lover, I think about how animals are treated and how the environment is affected by animal farming. Plant-based meat products feel like a better choice in that sense, and it makes me feel like I am doing something positive."*
>
> (Informer 8)

> *"As humans, we have human rights, and animals also have their own animal rights. Perhaps we could help increase the animal population. I consider animal welfare, and in terms of farming, maybe we no longer need to clear large areas of land. This is because farming requires high costs and vast areas of land."*
>
> (Informer 10)

> *"Yes, I definitely think about animal welfare, so plant-based meat product seems like a good choice for that. I am not sure about the other concerns though."*
>
> (Informer 11)

> *"Yes, I do consider ethical and animal welfare concerns when choosing plant-based meat. The reduction in animal farming and the ethical treatment of animals is an important factor for me. I believe supporting plant-based alternatives helps lessen the demand for factory farming and the associated cruelty to animals."*
>
> (Informer 15)

"Yes, ethical and animal welfare issues play a big role in my decision to choose plant-based over traditional meat."

(Informer 16)

"Ethical considerations are a significant motivator for many when choosing plant-based meat, as they want to avoid contributing to animal cruelty and factory farming practices. The idea of reducing animal suffering and promoting better treatment of animals often drives the decision for plant-based alternatives. Beyond animal welfare, environmental concerns such as reducing deforestation and minimising the carbon footprint of food choices are also important for some people. Health benefits, like lower risk of diseases associated with high meat consumption, can also be a factor."

(Informer 17)

"Yes, animal welfare is a big reason. If I can get something that tastes like meat but doesn't harm animals, it feels like a good choice. I also care about the environment, so sustainability matters to me."

(Informer 19)

These informers view their food choices as more than just about taste or convenience; they are tied to deeper values like kindness and responsibility. Their views show how Malaysian youth integrate ethical thinking into their sense of self, where what they eat becomes a quiet but meaningful way of expressing the kind of world they hope to live in and support through their daily actions.

b) <u>Neutral or Sceptical Perspectives on Ethical Concerns</u>

Moreover, some Malaysian youth remain neutral or sceptical about ethical concerns when considering plant-based meat products. Five informers (n=5) shared that animal welfare is not a priority for them, either because it does not fit with their personal beliefs or because other factors, like cost, taste, and convenience, matter more when deciding what to eat. For these youth, practical needs tend to outweigh moral considerations in their everyday food choices. Their views are reflected in the following statements, which demonstrate how ethical concerns may not drive purchasing decisions:

> *"No, I do not consider ethical or animal welfare concerns when choosing plant-based meat products because I believe in the natural food chain. Eating meat is part of life, and I do not see plant-based meat products as necessary for ethical reasons."*
>
> (Informer 5)

> *"No, I do not consider ethical or animal welfare concerns when choosing plant-based meat products because as Muslims, we know that following Islamic law when slaughtering means we do not harm or hurt the animal."*
>
> (Informer 6)

> *"No, I do not consider ethical or animal welfare concerns when choosing plant-based meat products because I focus more on factors such as taste, price, and health benefits rather than animal welfare issues."*
>
> (Informer 7)

> *"My main concern will be ethical concerns but convenience outweighs them because, like I mentioned, plant-based meat products is not really easily accessible, so it is more convenient for me to buy conventional meat."*
>
> (Informer 9)

> *"As I mentioned previously, I do not really see the correlation between plant-based meat products and animal welfare, because animal consumption will always have its own allocation for the meat served. My concern is more about how plant-based meat products actually contributes to the environment. I haven't seen any significant, tangible evidence or real impact from consuming plant-based meat. That is where my concern lies."*
>
> (Informer 12)

These informers reflect a practical way of making food choices, where ethical concerns either clash with cultural norms or take second place to more immediate issues like affordability, taste, and ease of access. Their views show that for many Malaysian youth, moral messages about food must go hand in hand with real-life benefits and everyday realities to make sense and impact.

c) <u>Environmental and Health Considerations</u>

Additionally, Malaysian youth often place greater importance on environmental and health factors than on ethical concerns when considering plant-based meat products. Four informers (n=4) explained that while animal welfare is acknowledged, it tends to be less influential compared to the benefits of protecting the environment and improving personal health, which play a stronger role in shaping their food choices. The responses

below illustrate this perspective, showing how ethical concerns intersect with other priorities:

> *"I do consider ethical and animal welfare concerns when choosing plant-based meat. While in Malaysia, we do not face this issue as much, from the perspective of other nations, I think it is an important issue to address. In some countries, they lack the capability to produce conventional meat, so they turn to plants as a replacement. I believe they could benefit from this."*
>
> (Informer 4)

> *"Indeed, in addition to environmental and health considerations, animal welfare is a key factor in the decision to eat plant-based meats."*
>
> (Informer 13)

> *"I do not actively consider ethical or animal welfare concerns when choosing plant-based meat, but other factors like health or environmental impact may play a role."*
>
> (Informer 14)

> *"I also consider ethical issues and animal welfare, but I am more concerned about how this product is processed, its nutritional content, and the benefits of the product."*
>
> (Informer 18)

For these youth, ethical considerations are just one part of a broader set of factors that shape their food choices. Their views show how Malaysian youth balance moral values with concerns about health and the environment, often giving more weight to issues directly connected to their everyday experiences and cultural practices. This balance reflects a thoughtful approach to decision-making, where personal and practical priorities help guide what they eat.

The overall analysis of this subsection on informers' views about ethical and animal welfare concerns reveals a range of perspectives shaping food decisions. Ten informers (n=10) identified animal welfare as an important factor, seeing plant-based meat products as a way to eat in line with their moral values. Five informers (n=5) held neutral or sceptical views, expressing that animal welfare does not strongly influence their choices due to personal indifference or competing priorities. Four informers (n=4) acknowledged ethical concerns but placed greater importance on environmental sustainability and personal health when deciding what to eat. These findings show that Malaysian youth engage with ethical issues in different ways, some deeply, others

selectively, and some not at all. This suggests that messaging around plant-based meat products should not assume universal concern for animal welfare, but instead should connect ethical aspects to real-life priorities like health, cost, and cultural eating habits. The following subsection highlights the influence of social circles on willingness to consume plant-based meat products.

4.5.6 Influence of Social Circle on Willingness to Consume Plant-Based Meat Products

This subsection explores Question 12, which examines how informers' social circles—friends, family, and peers—influence their willingness to consume plant-based meat products. Therefore, understanding these dynamics is crucial for assessing how interpersonal relationships shape consumer attitudes toward plant-based alternatives. To explore these views, informers were asked: "Does your social circle (friends, family, peers) influence your willingness to consume plant-based meat products? How?" Their responses were analysed using inductive coding, identifying key themes that reflect their thoughts and attitudes toward the influence of their social circle. The findings are presented below, ordered from highest to lowest frequency.

a) <u>Positive Influence from Social Circles</u>

When Malaysian youth think about plant-based meat products, the influence of their social circles often plays a key role in encouraging them to try these options. Ten informers (n=10) shared that their friends, family, and peers directly impact their openness to these products, primarily through shared meals, personal suggestions, and positive experiences they hear about from people they trust. The following responses illustrate this perspective, showing how social connections shape food decisions:

> *"Yes, my friends and family definitely influence me. If they are open to trying plant-based meats, I might be more likely to try them too. It is a group thing sometimes, especially if there is a good example."*
>
> (Informer 1)

"I have friends who do not consume conventional meat because they are vegan, and they cannot eat it for ethical reasons. To be respectful, I also choose to consume the same foods as them and their family. I think this has influenced my perception of plant-based meat products. I am willing to eat plant-based options at their gatherings, as I would not want to eat conventional meat in front of them."

(Informer 4)

"Yes, because my family is concerned about my health, and I am also concerned about my own health. I think people should try to incorporate plant-based meat products into their diet. They are aware of these products and have influenced me to consume plant-based meat, as they believe it is a healthier alternative to conventional meat. My friend also consumes plant-based meat, but not daily—maybe two or three times a week. They have also influenced my willingness to try plant-based meat products."

(Informer 6)

"Yes, my friends and family influence me. If they like it and tell me it is good, I am more likely to give it a go. It is easier to try new things when people close to you are into it too."

(Informer 8)

"Yes, I have a sister, sometimes she does not eat conventional meat, so she does not eat conventional, she prefers to eat plant-based meat products food because for her she is concern about the ethical, part of eating meat, I think she is meat influence, I know a bit about plant-based meat products because of her. For my friend, I do not really think I know any friend of mine who consume plant-based meat."

(Informer 9)

"In my opinion, that is true, because when we gather or meet with friends or family, if they come across or consume a new product, they will definitely talk about it. From there, even if we do not know, we will learn about the product and will become interested in finding out what they are trying with it."

(Informer 10)

"Yes, if friends or family are supportive or suggest trying it, I am more open to experimenting with these products."

(Informer 16)

"Yes, social circles can have a significant influence on one's willingness to try or adopt plant-based meat products. If friends, family, or peers are already incorporating plant-based options into their diets, they may encourage others to give it a try. Social influence plays a major role in shaping dietary choices, and many people find it easier to embrace a new trend when it is already common in their social circles. Positive experiences shared by others or collective decision-making (such as group dinners with plant-based options) can also influence one's willingness to try these products."

(Informer 17)

"If my family or those around me support or recommend this product for a healthier lifestyle and diet, I would be more likely to give it a try."

(Informer 18)

"Yes, if they were eating plant-based meals, I would have the curiosity to try them as well."

(Informer 19)

These youth show that food choices are not made in isolation, but are shaped by relationships and social interactions. Their stories revealed that for Malaysian youth, trying plant-based meat products often starts with someone they trust, a friend, family member, or peer, suggesting or sharing the experience. Acceptance grows through connection, mutual respect, and the shared act of eating together, highlighting how food decisions are deeply tied to belonging and community life.

b) <u>Neutral or Minimal Influence from Social Circles</u>

Moreover, some Malaysian youth experience limited social media influence on consuming plant-based meat products. Five informers (n=5) described making independent decisions or noted that the people around them lack awareness about these products in the Malaysian context. Their views are reflected in the following statements, which demonstrate how social circles may not drive food choices:

"No, because my friends and family are unaware of these products."

(Informer 3)

"Not really. If someone offers it or recommends it, I might try it, but my friends and family mainly eat conventional meat like I do. Because of the price, and we are unaware of the products."

(Informer 5)

> *"No, because I prefer to make decisions based on my own experience, not just by hearing from others whether the food is good or not. For me, they do not know about the existence of this product, because if they did, they would have suggested that I try it at home or in a restaurant."*
>
> (Informer 7)

> *"My social circle does not strongly influence my willingness to consume plant-based meat products, but if others in my circle were interested or tried them, it might spark some curiosity to try them myself."*
>
> (Informer 14)

> *"No, my social circle does not significantly influence my willingness to consume plant-based meat products. While I respect the choices of my friends, family, and peers, my decision is primarily based on my personal values, such as health, sustainability, and ethical concerns. I make choices that align with what feels right for me, rather than being influenced by others' opinions. However, I do recognise that some plant-based meat products may not be Halal, especially due to processing methods or ingredients. I take this into consideration and ensure that I choose products that are Halal-certified when sharing with or considering my Muslim friends' dietary needs."*
>
> (Informer 15)

These informers reflect a self-directed approach to food choices, where personal values and practical factors matter more than social influence. Their views show how Malaysian youth make thoughtful, independent decisions about eating, often relying on their own research rather than group opinions, especially within the context of their tertiary education.

c) <u>Negative or Indirect Influence from Social Circles</u>

Additionally, some Malaysian youth face indirect barriers to adopting plant-based meat products through their social circles. Four informers (n=4) explained that limited exposure or differing food preferences among family and friends reduce opportunities to try these alternatives, making them less likely to develop interest or feel encouraged to explore them. The responses below illustrate this perspective, showing how social dynamics can create obstacles to trying plant-based options:

> *"My friends or family do not influence my willingness to consume plant-based meat products. I think the main reason is that they are unaware of this product and lack awareness about the issues related to it."*
>
> (Informer 2)

> *"If my friends and family do not talk about trying plant-based stuff, I probably would not think about it much myself. It is not something that comes up in our usual conversations, so I might not be as motivated to try it unless I hear more about it from other sources or see it being promoted more widely."*
>
> (Informer 11)

> *"As I mentioned before, back in my early 20s, my circle of friends practiced veganism, so I was somewhat influenced by them for about a year and a half. However, as I mentioned earlier, when I followed a plant-based diet, my body became easily fatigued. I guess peer influence can be quite strong, especially if you are someone who seeks attention from those around you. They can influence you are eating habits and lifestyle. As for now, I do not think my family actively consumes plant-based meat products or anything related to veganism."*
>
> (Informer 12)

> *"No, because my friends and family are unaware of these products."*
>
> (Informer 3)

These informers demonstrate how the lack of discussion about plant-based meat products can quietly shape food choices. Their experiences reveal that for Malaysian youth, what is not talked about in social circles can be just as influential as what is discussed, creating a silence that reinforces traditional eating habits even when personal curiosity exists.

d) <u>Social Norms and Group Dynamics</u>

Finally, Malaysian youth recognize that group behaviours and social norms affect their openness to trying plant-based meat. Three informers (n=3) noted that shared meals, everyday eating habits, and seeing others use these products influence their willingness to try them, showing that acceptance often depends on how normal and visible they become within their everyday social settings. Examples of their responses include these reflections on social dynamics:

> *"In my opinion, that is true, because when we gather or meet with friends or family, if they come across or consume a new product, they will definitely talk about it. From there, even if we do not know, we will learn about the product and will become interested in finding out what they are trying with it."*
>
> (Informer 10)

> *"Family and friends can make a difference. People may be more inclined to try plant-based diet if it is popular in their social circle."*
>
> (Informer 13)

> *"Yes, social circles can have a significant influence on one's willingness to try or adopt plant-based meat products. If friends, family, or peers are already incorporating plant-based options into their diets, they may encourage others to give it a try. Social influence plays a major role in shaping dietary choices, and many people find it easier to embrace a new trend when it is already common in their social circles. Positive experiences shared by others or collective decision-making (such as group dinners with plant-based options) can also influence one's willingness to try these products."*
>
> (Informer 17)

These informers highlight the quiet influence of social norms on food decisions, where acceptance often depends on seeing plant-based meat products used and accepted within their community. Their insights show that for Malaysian youth, changing what they eat is not just a personal choice but a shared process, requiring changes in group habits and social practices, not just individual will.

The overall analysis of this subsection on informers' views about social circle influence reveals a range of interpersonal experiences. Ten informers (n=10) described positive support from friends or family, with shared meals and personal encouragement helping to spark interest. Note that five informers (n=5) reported little or neutral influence, making decisions independently due to limited discussion around them. Four informers (n=4) faced indirect barriers, where a lack of awareness or different eating habits in their circles reduced their motivation to try plant-based meat. Meanwhile, three informers (n=3) emphasised the role of social norms and group settings, noting that acceptance grows when these products become visible and common in shared meals. These findings show that Malaysian youth make food choices within a web of social relationships. Adopting plant-based meat products is not just about personal preference.

It is about how accepted and normalised they are in everyday social life. The following subsection provides a summary of motivations for plant-based meat products.

4.5.7 Summary of Motivations for Plant-Based Meat Products

This summary combines findings from Questions 7 to 12, exploring what motivates Malaysian youth to consider plant-based meat products. It covers six key areas: environmental concerns, health, ethics, curiosity, sensory experience, and social influence. Based on responses from youths in tertiary institutions, it shows how they balance personal values like health and care for the environment with practical factors such as cost, taste, and social norms when deciding whether to try or continue using these products. Their choices reflect a mix of individual beliefs and the cultural, economic, and social contexts of their daily lives. Moreover, each summary captures key insights from the data, staying close to the actual words and experiences shared by the youth. Below is the detailed interpretation of youth perspectives, systematically organised to illuminate how Malaysian youth perceive the motivational landscape of plant-based meat products within their sociocultural reality. Summary of data interpretation on the motivations for plant-based meat products is presented in Table 4.3 below:

Table 4.3
Summary of Data Interpretation on the Motivations for Plant-based Meat Products

Question	Summary
Question 7 Motivation to Purchase Plant-based Meat Products	Malaysian youth share different views about plant-based meat products, with cost being the most significant barrier (n=7). Many stress that these products are too expensive, showing how limited budgets shape what they can eat, especially in the university setting. At the same time, concern for the environment (n=5) and personal health (n=5) are strong reasons for considering these products, as youth link them to protecting the planet and improving wellbeing. Taste and texture matter too (n=5), reflecting how important sensory experience is in Malaysian food culture. Some youths are open to trying new things (n=4), showing cautious interest as they explore new ways of eating. Together, these perspectives show how youth

	balance hopeful ideas about sustainability with everyday realities, where cultural food habits and financial limits shape what is possible.
Question 8 Motivation to Purchase Plant-based Meat Products Considering Environmental Concerns	Malaysian youth clearly and thoughtfully understand how plant-based meat products affect the environment, with environmental benefits being the most common reason for support (n=9). They shared about saving resources, lowering carbon emissions, and protecting nature, showing that care for the environment has become part of how they see responsible eating. For some (n=6), these concerns are tied to who they are becoming, as food choices reflect their values during university life. However, many also recognise the challenge of balancing ideals with reality (n=5), where environmental goals must compete with cost and taste. A few youths (n=4) question whether these products truly help the environment, showing they do not accept claims at face value. These views show that Malaysian youth think carefully about sustainability, combining hope for change with realistic thinking about what works in daily life.
Question 9 Perceived Benefits of Purchasing Plant-based Meat Products	Malaysian youth see environmental sustainability as the main benefit of plant-based meat products (n=10), showing a strong awareness of how food choices affect the planet. Health benefits (n=9) are almost equally important, with youth noting advantages like lower saturated fat and reduced cholesterol, and recognising that nutritional quality may vary. Ethical concerns (n=6) matter to those who care about animal welfare and want their food to reflect moral values. Some youth appreciate the new options these products bring to meals (n=4), seeing them as a way to enjoy more variety without leaving behind cultural tastes. A small group remains unsure (n=3), not rejecting the idea but wanting more clarity on value and relevance. Overall, youth consider many factors when deciding about plant-based meat products, going beyond taste to include care for the environment, health, and ethics in everyday food decisions.
Question 10	Curiosity about new food trends is the strongest reason Malaysian youth try plant-based meat products (n=10), showing that interest in

Motivation to Try or Consume Plant-based Meat Products	innovation opens the door to new eating habits. Health benefits (n=8) come second, with youth connecting these products to personal wellness, better eating patterns, and long-term health in their cultural context. Environmental care (n=6) also motivates some, who see using plant-based meat products as a practical way to help protect the planet. Ethical reasons (n=4) matter to those concerned about animal treatment, while personal health goals (n=3), such as managing medical conditions or changing lifestyle habits, also lead youth to try them. These findings show that youth are drawn in by novelty, but stay engaged when they see tangible benefits for their health, the environment, and their values, reflecting a growing and thoughtful relationship with food.
Question 11 Ethical and Animal Welfare Concerns When Choosing Plant-Based Meat	For many Malaysian youths, concern for animal welfare is the main reason they consider plant-based meat products (n=10), representing how kindness toward animals has become part of their food values. They shared about factory farming, animal rights, and moral responsibility, framing their choices as part of a broader ethical stance shaped by personal and cultural beliefs. However, some youth remain neutral or unsure (n=5) because animal welfare is not a priority or because they question its relevance within Islamic dietary practices and local food norms. Others place more importance on health and environmental benefits (n=4), seeing these as more immediate or practical concerns. These views show that youth do not follow a single path when thinking about ethics. Instead, they weigh moral ideas against cultural traditions and personal beliefs, forming diverse understandings of eating ethically in today's Malaysia.
Question 12 Influence of Social Circle on Willingness to Consume	Support from family and friends significantly influences whether Malaysian youth are willing to try plant-based meat products (n=10). Many say they first learn about or feel comfortable trying these options because someone close to them—like a friend or family member—introduces them, talks about them, or shares a meal that includes the product. Others make decisions independently (n=5), relying on personal research rather than social

Plant-based Meat Products	pressure, showing independence in forming food habits. Some face indirect barriers (n=4), where a lack of discussion or different eating patterns in their circle makes it harder to access or feel encouraged to try plant-based meat. A few note that group habits and visibility matter (n=3), as people are more likely to accept something new when it becomes common in shared meals. These insights show that adopting plant-based meat products is not just a personal choice, but is shaped by relationships, social settings, and how normal these foods feel in everyday life.

The next section presents the consumption patterns of plant-based meat products among youths in tertiary institutions in Malaysia.

4.6 Consumption Patterns of Plant-Based Meat Products Among Youths in Tertiary Institutions in Malaysia

This section explores the consumption patterns of plant-based meat products among Malaysian youths, focusing on their experiences, barriers, and willingness to adopt these alternatives. The analysis delves into three key areas: past consumption behaviours and reasons for non-consumption, the challenges that hinder frequent consumption, and the potential for increased adoption under improved conditions. By examining these aspects, the section provides insights into the factors influencing consumer attitudes and decisions regarding plant-based meat. The findings are organised into distinct subtopics, each addressing a specific dimension of consumption patterns.

4.6.1 Consumption Experience and Context

This subsection explores Question 13, which examines informers' consumption patterns toward plant-based meat products. Understanding these patterns is crucial for identifying the factors influencing consumer behaviour regarding plant-based alternatives. To explore these views, informers were asked: “Have you ever consumed plant-based meat products? If yes, how frequent and in what context? If not, what are

the reasons behind it? Additionally, would you consider consuming plant-based meat products in the future?" Their responses were analysed using inductive coding, identifying key themes that reflect their thoughts and attitudes toward plant-based meat. The findings are presented below, ordered from highest to lowest frequency.

a) Price Sensitivity as a Primary Consumption Barrier

Price became a key factor affecting plant-based meat products consumption among Malaysian youth, with seven informers (n=7) clearly stating that cost is the main barrier to using these products regularly. This financial concern plays a central role in their food choices, highlighting the youth's economic challenges in a developing economy where budgets are often tight and everyday expenses must be carefully managed. The following responses illustrate this perspective:

> *"I have tried plant-based meat products a few times. I usually have them when I am eating out or trying something new at home. If I have not tried them more often, it is usually because they are pricey or not easily available."*
>
> (Informer 1)

> *"I have never consumed plant-based meat products. One of the main reasons is accessibility, because wherever I go, I have never come across these products. Additionally, based on what I have seen on the internet, their price is also quite high, which makes me feel that purchasing them is difficult. If I find them in a store, I think I would try them because I am curious, and I also believe that the purpose behind their creation is good."*
>
> (Informer 2)

> *"I have tried plant-based meat products in patties a few times, but not often because the taste does not quite resemble conventional meat, and the price is slightly higher."*
>
> (Informer 5)

> *"No, I have not tried it because, in terms of price, most of the processes involved in making plant-based meat products require high costs to replicate the taste of real meat. As a result, this product is sold at a very high price. Additionally, it is hard for me to find this product because I live in a rural area, and most of these products are only available in luxury malls and large supermarkets. It is quite difficult to find them in smaller shops like convenience stores."*
>
> (Informer 7)

> *"Yes, I had plant-based meat products before, maybe once or twice my whole life. I tried the plant-based nugget, honestly the taste is not really as good if I am being honest and not to mention the price is very expensive compared to regular nuggets. I think 2 times more expensive, at least."*
>
> (Informer 9)

> *"No, I have not consumed plant-based meat products. The main reasons are a lack of awareness and accessibility. I have not seen many options available where I live, and I'm not very familiar with them. The price can also be higher than regular meat, which makes me hesitant to try them. I might consider consuming plant-based meat products in the future if they become more widely available and affordable."*
>
> (Informer 17)

> *"I have consumed plant-based meat products before but very seldomly, maybe less than 10 times in my life. I would not consider consuming it in the future as in the current state of economy I could not afford it and the taste has yet to want me to seek for it."*
>
> (Informer 19)

These Malaysian youth navigate brutal financial realities, where the higher price of plant-based meat products makes them hard to afford. Their concerns show the challenge of balancing care for the environment with the need to manage limited budgets, revealing how economic limits directly affect decisions about sustainable eating among university students in Malaysia's developing economy.

b) <u>Curiosity and Future Consumption Intentions</u>

Building on the economic concerns previously discussed, a clear pattern of conditional interest appeared among the informers, with seven informers (n=7) expressing genuine curiosity about plant-based meat products despite current obstacles. This forward-looking attitude shows that while cost and other barriers limit use today, many youths remain open to trying these products in the future. Their responses suggest that as plant-based meat products become more affordable and widely available, there is strong potential for greater acceptance and market growth among Malaysian youth. The following responses demonstrate this perspective:

"I have never consumed plant-based meat products. One of the main reasons is accessibility, because wherever I go, I have never come across these products. Additionally, based on what I have seen on the internet, their price is also quite high, which makes me feel that purchasing them is difficult. If I find them in a store, I think I would try them because I am curious, and I also believe that the purpose behind their creation is good."

(Informer 2)

"No, I have not consumed plant-based meat products before because of limited availability or accessibility, as it is high in cost and has a lack of demand, which results in limited availability. Yes, I would consider trying plant-based meat products because I want to differentiate the taste and texture from conventional meat."

(Informer 3)

"Yes, I have tried plant-based meat products couple of times, mostly in things like burgers, for example, I have tried burger patties that is made of button mushroom before. I do not consume plant-based meat products all the time, but I will try it again if I find a good one. It is not something I eat every week, but I would like to have it more often if I liked it."

(Informer 8)

"I have never consumed plant-based meat products. I feel there is a lack of awareness, and I did not know about the existence of plant-based meat. I think it would be difficult to find these products in rural areas. I would consider trying plant-based meat products in the future because they can help reduce meat consumption. Meat contains saturated fat and can contribute to chronic diseases like high blood pressure and gout."

(Informer 10)

"I have not consumed plant-based meat products yet. The reasons could be a lack of awareness, accessibility, price, or other factors. I might consider trying them in the future, depending on my interest or circumstances."

(Informer 14)

"Yes, I have consumed plant-based meat products before in various form, including sausages, chicken nuggets, bacon, chicken cutlets, meatballs, patties, pepperoni and many mores. I try them occasionally, mainly when I am looking for a healthier or more sustainable option. I have enjoyed some products for their taste and texture, and I would definitely consider consuming them more frequently in the future, especially as they continue to improve and become more accessible."

(Informer 15)

> *"No, I have not consumed plant-based meat products. The main reasons are a lack of awareness and accessibility. I have not seen many options available where I live, and I am not very familiar with them. The price can also be higher than regular meat, which makes me hesitant to try them. I might consider consuming plant-based meat products in the future if they become more widely available and affordable."*
>
> (Informer 17)

Malaysian youth express genuine interest in plant-based alternatives despite existing challenges, showing a balance between everyday limitations and hopes for the future. Their willingness to try these products, on the condition that they become more affordable and accessible, suggests that improvements in price and availability could turn current curiosity into regular use. This shift may play a meaningful role in shaping eating habits within Malaysia's changing food environment.

c) <u>Accessibility as a Barrier to Consumption</u>

Alongside economic concerns, physical access to plant-based meat products presents another key challenge for Malaysian youth, with six informers (n=6) identifying limited availability in stores and uneven geographic distribution as the main barriers. This gap in access highlights differences between urban and rural areas, directly affecting who can easily obtain these products. The following responses illustrate this perspective:

> *"I have never consumed plant-based meat products. One of the main reasons is accessibility, because wherever I go, I have never come across these products. Additionally, based on what I have seen on the internet, their price is also quite high, which makes me feel that purchasing them is difficult. If I find them in a store, I think I would try them because I am curious, and I also believe that the purpose behind their creation is good."*
>
> (Informer 2)

> *"No, I have not consumed plant-based meat products before because of limited availability or accessibility, as it is high in cost and has a lack of demand, which results in limited availability. Yes, I would consider trying plant-based meat products because I want to differentiate the taste and texture from conventional meat."*
>
> (Informer 3)

"No, I have not tried it because, in terms of price, most of the processes involved in making plant-based meat products require high costs to replicate the taste of real meat. As a result, this product is sold at a very high price. Additionally, it is hard for me to find this product because I live in a rural area, and most of these products are only available in luxury malls and large supermarkets. It is quite difficult to find them in smaller shops like convenience stores."

(Informer 7)

"I have never consumed plant-based meat products. I feel there is a lack of awareness, and I did not know about the existence of plant-based meat. I think it would be difficult to find these products in rural areas. I would consider trying plant-based meat products in the future because they can help reduce meat consumption. Meat contains saturated fat and can contribute to chronic diseases like high blood pressure and gout."

(Informer 10)

"I have not consumed plant-based meat products yet. The reasons could be a lack of awareness, accessibility, price, or other factors. I might consider trying them in the future, depending on my interest or circumstances."

(Informer 14)

"No, I have not consumed plant-based meat products. The main reasons are a lack of awareness and accessibility. I have not seen many options available where I live, and I am not very familiar with them. The price can also be higher than regular meat, which makes me hesitant to try them. I might consider consuming plant-based meat products in the future if they become more widely available and affordable."

(Informer 17)

These accounts show Malaysia's uneven food landscape, where differences between urban and rural areas lead to unequal access to plant-based meat products. Their availability in high-end stores rather than familiar shopping places creates geographic and economic barriers, making it difficult for many Malaysian youths to include these options in their everyday meals.

d) <u>Taste and Texture Comparisons with Conventional Meat</u>

Furthermore, sensory experience became a key factor in how Malaysian youth accept plant-based meat products, with six informers (n=6) clearly stating that taste and texture compared to real meat shape their willingness to try or continue using them. This shows how deeply rooted food preferences and cultural expectations about eating

influence the appeal of meat alternatives in Malaysia's diverse food culture. The following responses illustrate this sensory dimension:

> *"Yes, I have tried plant-based meat products in patties a few times, but not often because the taste does not quite resemble conventional meat, and the price is slightly higher."*
>
> (Informer 5)

> *"Yes, I have tried plant-based meat products couple of times, mostly in things like burgers, for example, I have tried burger patties that is made of button mushroom before. I do not consume plant-based meat products all the time, but I will try it again if I find a good one. It is not something I eat every week, but I would like to have it more often if I liked it."*
>
> (Informer 8)

> *"Yes, I had plant-based meat products before, maybe once or twice my whole life. I tried the plant-based nugget, honestly the taste is not really as good if I am being honest and not to mention the price is very expensive compared to regular nuggets. I think 2 times more expensive, at least."*
>
> (Informer 9)

> *"Yes, I tried it once before during an event. It was curry with plant-based meat products that was served at a hotel buffet. I can clearly remember that it had a similar taste and texture to traditional meat. To be honest, I do not consume plant-based meat products often."*
>
> (Informer 11)

> *"I have tried it a few times in various forms, including burgers, sausages, and nuggets. Although I do not eat it much, I am willing to try it."*
>
> (Informer 13)

> *"I have consumed plant-based meat products before but very seldomly, maybe less than 10 times in my life. I would not consider consuming it in the future as in the current state of economy I could not afford it, and the taste has yet to want me to seek for it."*
>
> (Informer 19)

Malaysian youth's food choices are strongly influenced by taste and shaped by their rich culinary traditions. Their feedback demonstrates that for plant-based meat products to succeed, they must match local flavour preferences and offer fair value. When taste falls short, high prices become even harder to justify, making it difficult for these products to compete in Malaysia's everyday food market

e) Health Considerations Influencing Consumption Decisions

Finally, health perceptions became another factor shaping how Malaysian youth view plant-based meat products, with three informers (n=3) clearly linking their attitudes to nutritional concerns. This shows that while health matters, it is often weighed alongside cost, taste, and access. In this group, health was important but played a minor role compared to economic and availability issues in influencing actual consumption decisions. The following responses illustrate this perspective:

> *"I have never consumed plant-based meat products. I feel there is a lack of awareness, and I did not know about the existence of plant-based meat. I think it would be difficult to find these products in rural areas. I would consider trying plant-based meat products in the future because they can help reduce meat consumption. Meat contains saturated fat and can contribute to chronic diseases like high blood pressure and gout."*
>
> (Informer 10)

> *"Yes, I have consumed plant-based meat products before in various form, including sausages, chicken nuggets, bacon, chicken cutlets, meatballs, patties, pepperoni and many mores. I try them occasionally, mainly when I am looking for a healthier or more sustainable option. I have enjoyed some products for their taste and texture, and I would definitely consider consuming them more frequently in the future, especially as they continue to improve and become more accessible."*
>
> (Informer 15)

> *"I have never tried plant-based meat products because I am already accustomed to using or eating real meat, and the protein content in plant-based meat products may not be sufficient compared to real meat."*
>
> (Informer 18)

Health considerations show two views; some youth see plant-based meat products as helpful for lowering the risk of chronic diseases, while others are unsure whether they are truly nutritious. This difference in opinion shows the need for clear, accurate information about nutrition that speaks to the health concerns and priorities of Malaysian youths in tertiary institutions nationwide.

The overall analysis of this subsection reveals a complex picture of how Malaysian youth engage with plant-based meat products. Seven informers (n=7) identified high cost as a significant barrier. In contrast, another seven (n=7) showed

interest in trying them in the future, showing a mix of caution and openness. Six informers (n=6) pointed to limited availability, especially in certain areas, and another six (n=6) stressed that taste and texture must match real meat for acceptance. Three informers (n=3) mentioned health as a factor, either as a benefit or a concern. Together, these findings show that youth make food choices based on a balance of price, access, sensory experience, and personal values. Improving affordability, expanding availability, enhancing taste, and providing clear health information could help increase acceptance among this group. The following subsection highlights barriers to consuming plant-based meat products.

4.6.2 Barriers to Consuming Plant-Based Meat Products

This subsection explores Question 14, which examines the barriers that prevent informers from consuming plant-based meat products more frequently. Understanding these barriers is essential for identifying the factors that hinder the widespread adoption of plant-based alternatives. To explore these views, informers were asked: "What barriers prevent you from consuming plant-based meat products more frequently?" Their responses were analysed using inductive coding, identifying key themes that reflect their thoughts and attitudes toward plant-based meat. The findings are presented below, ordered from highest to lowest frequency.

a) <u>Price as a Primary Barrier</u>

Economic concerns became the most significant barrier to regular consumption of plant-based meat products among Malaysian youth, with nine informers (n=9) clearly stating that cost is the main reason they do not use these products more often. This financial challenge is central to their food choices, reflecting the economic realities many young people face in Malaysia's developing economy, where limited budgets shape everyday decisions. The following responses illustrate this perspective:

> *"The main barriers are cost and availability. Sometimes, they are not in my local store, or they are more expensive than regular meat. That makes it harder to buy regularly."*
>
> (Informer 1)

"The biggest obstacles are accessibility and the high price."
(Informer 2)

"Accessibility and high price."
(Informer 3)

"The lack of availability, accessibility, and the high price."
(Informer 4)

"The taste and price are the biggest barriers. I prefer the taste of conventional meat, and plant-based options are often too expensive."
(Informer 5)

"The main barrier that prevents me from consuming plant-based meat products more frequently is the price. They tend to be more expensive compared to traditional meat, which can make it less affordable for regular consumption."
(Informer 15)

"Price, availability, and sometimes taste are the biggest barriers for me."
(Informer 16)

"The barriers preventing me from consuming plant-based meat products more frequently are mainly related to availability and cost. I do not come across many options in my local stores or restaurants, and when I do, the prices are often higher than traditional meat. These factors make it difficult for me to consider incorporating them into my regular diet."
(Informer 17)

"Mostly the price and the availability and also taste of it that is rather unique."
(Informer 19)

These Malaysian youth navigate brutal financial realities, where the higher prices of plant-based meat products make regular use challenging. Their concerns show the struggle between wanting to support environmental sustainability and needing to stick to a tight budget, revealing how economic limits directly affect decisions about sustainable eating among university students in Malaysia.

b) <u>Accessibility Challenges</u>

Alongside economic concerns, access to plant-based meat products remains a key challenge for Malaysian youth, with six informers (n=6) clearly pointing to limited availability in stores and uneven distribution between urban and rural areas. This gap in

access highlights unequal opportunities to try or buy these products, showing that where youth live significantly affects their ability to engage with plant-based alternatives. The following responses illustrate this perspective:

> *"The main barriers are cost and availability. Sometimes, they are not in my local store, or they are more expensive than regular meat. That makes it harder to buy regularly."*
>
> (Informer 1)

> *"The lack of availability, accessibility, and the high price."*
>
> (Informer 4)

> *"I do not think I have ever come across it in my area. One of the obstacles I face is accessibility, as it is difficult to find it in stores or supermarkets in my area."*
>
> (Informer 10)

> *"Some products may not taste as delicious as real meat, be more expensive than ordinary meat, and be harder to find in some locations."*
>
> (Informer 13)

> *"The barriers preventing me from consuming plant-based meat products more frequently are mainly related to availability and cost. I do not come across many options in my local stores or restaurants, and when I do, the prices are often higher than traditional meat. These factors make it difficult for me to consider incorporating them into my regular diet."*
>
> (Informer 17)

> *"Mostly the price and the availability and also taste of it that is rather unique."*
>
> (Informer 19)

These accounts highlight Malaysia's uneven food landscape, where differences between urban and rural areas result in unequal access to plant-based meat products. Their availability is often limited to high-end or specialty stores rather than familiar shopping places, creating geographic and practical barriers. As a result, many Malaysian youths, especially those outside major cities, find it difficult to include these alternatives in their everyday meals.

c) Taste Preferences and Satisfaction

Furthermore, sensory experience became a key factor in how often Malaysian youth consume plant-based meat products, with five informers (n=5) clearly stating that taste, compared to conventional meat, influences their decisions. This demonstrates how intensely local food culture and familiar flavours shape openness to alternatives. It highlights that acceptance depends on values or price, and on whether the product feels right in the context of everyday Malaysian meals. The following responses illustrate this sensory dimension:

> *"The taste and price are the biggest barriers. I prefer the taste of conventional meat, and plant-based options are often too expensive."*
>
> (Informer 5)

> *"The biggest thing that stops me from eating plant-based meat products more often is the price and the fact that it is not always easy to find. It is also not always as satisfying as conventional meat for me, so I do not always think to buy it. If it were easier to get, I might try it more."*
>
> (Informer 8)

> *"The price and taste because if I spent good money on a product, I expect the best product especially when it comes to taste or not it will be like a bit wasteful if I spend money, I do not really like the taste."*
>
> (Informer 9)

> *"The first issue is the taste, and the second is the price. The taste was not great. Actually, the first time I tried plant-based meat products was when I was in Australia. The price of plant-based meat products in Australia was actually quite cheap compared to Malaysia. I was thinking that if I wanted to try it again, it might be because there are a lot of consumers there, which drives up the market demand."*
>
> (Informer 12)

> *"Mostly the price and the availability, and also taste of it that is rather unique."*
>
> (Informer 19)

Malaysian youth's food choices are deeply influenced by taste preferences shaped by their rich culinary traditions. Their feedback shows that for plant-based meat products to succeed, they must suit local palates and offer fair value. When the taste

does not meet expectations, high prices become even harder to justify, making it difficult for these products to gain traction in Malaysia's competitive food market.

d) <u>Cultural and Personal Factors</u>

Finally, cultural and personal factors influenced plant-based meat products consumption, with three informers (n=3) clearly linking their views to long-standing food preferences and family traditions. This shows how personal identity and cultural background shape what youth are willing to try or adopt, even as they consider health, cost, and availability. While these factors play a more minor role than price and access in this group, they still contribute to how comfortable youth feel with shifting away from familiar meat-based meals. The following responses illustrate this perspective:

> *"Cultural factors and family influence what kind of food I eat. Another factor is price, as plant-based meat products is a little bit more expensive than conventional meat."*
>
> (Informer 6)

> *"My love for real meat."*
>
> (Informer 14)

> *"The suitability and taste that I am already accustomed to with real meat. Additionally, I do not have any circumstances that require me to stop eating or using real meat."*
>
> (Informer 18)

These perspectives demonstrate how eating habits are closely tied to personal and cultural identity among Malaysian youth. Their preference for conventional meat reflects long-standing food traditions that shape what feels familiar and meaningful to them. This deep connection creates emotional and cultural barriers to trying alternatives, suggesting that shifting eating habits involves more than just lowering prices or improving access. It also requires engaging with the cultural meanings of food in everyday life.

The overall analysis of this subsection reveals a range of barriers that affect how often Malaysian youth consume plant-based meat products. Nine informers (n=9) identified high cost as the main obstacle, six informers (n=6) pointed to limited availability, five informers (n=5) stressed that taste plays a key role in their decisions, and three informers (n=3) mentioned cultural and personal preferences as factors. These

findings show that youth weigh multiple real-life factors, such as budget, access, flavour, and tradition, when making food choices. Hence, addressing these issues through better pricing, wider distribution, improved taste, and respect for cultural eating habits could help increase acceptance. The following subsection highlights the willingness to increase the consumption of plant-based meat products.

4.6.3 Willingness to Increase Consumption of Plant-Based Meat Products

This subsection explores Question 15, which examines informers' willingness to consume plant-based meat products more frequently if they were more accessible or affordable. Understanding this perspective is crucial for identifying the factors that could encourage higher adoption rates of plant-based alternatives. To explore these views, informers were asked: "If plant-based meat products were more accessible or affordable, would you consume them more often? Why or why not?" Their responses were analysed using inductive coding, identifying key themes that reflect their thoughts and attitudes toward plant-based meat. The findings are presented below, ordered from highest to lowest frequency.

a) <u>Affordability as a Key Driver</u>

Financial considerations became the most important factor shaping Malaysian youth's willingness to eat more plant-based meat products, with eight informers (n=8) clearly stating that lower prices would be the main reason for increasing their use. For these youth, affordability is the key condition that would make regular consumption possible, showing that economic factors play a central role in their decision to adopt these alternatives more fully. The following responses illustrate this perspective:

> *"If plant-based meat products were cheaper and more available, I would definitely eat it more often. Convenience and affordability play a big role in my food choices. It would make it easier to switch."*
>
> (Informer 1)

> *"Yes, I will consume it more often because the price will become much cheaper and more affordable. It is also an alternative food that I can include in my diet to keep my body more nourished and healthier."*
>
> (Informer 6)

"Maybe, I would consume it if the taste is good and the price is more affordable."

(Informer 7)

"If plant-based meat products were cheaper and easier to find, I'd definitely eat it more often. I would love to have more affordable options that taste good. It is just that it is usually more expensive, which makes it harder for me to choose."

(Informer 8)

"Yes, because it will be helpful in living a healthier lifestyle."

(Informer 9)

"Yes, if plant-based meat products were more accessible or affordable, I would consume them more often. The benefits of these products, such as being healthier and more sustainable, align with my values, and I would be more inclined to incorporate them into my diet if they were more budget-friendly."

(Informer 15)

"Definitely! If it is easier to find and cheaper, I would include it more in my diet because it aligns with my values."

(Informer 16)

"Yes, if plant-based meat products were more accessible or affordable, I would definitely consume them more often. I have been curious to try them, but the limited availability and higher price have kept me from doing so. If they were more accessible and affordable, I would be more willing to give them a try and possibly incorporate them into my regular meals."

(Informer 17)

These Malaysian youth explain how their everyday financial situation directly affects their food choices, showing that price is the main factor determining how often they would eat plant-based meat products. Their responses highlight that affordability is not just a preference, but an absolute necessity that would turn interest into regular use, especially in the context of tight budgets common among students in Malaysia's developing economy.

b) <u>Accessibility as a Facilitator</u>

Alongside economic concerns, physical access to plant-based meat products became another key factor affecting how often youth consume them, with six informers (n=6) clearly stating that better availability is necessary for them to use these products more regularly. For these youth, wider distribution in everyday stores and easier access,

especially in non-urban areas, is essential to make plant-based meat products a realistic option in their daily meals. The following responses illustrate this perspective:

> *"If plant-based meat products were cheaper and more available, I would definitely eat it more often. Convenience and affordability play a big role in my food choices. It would make it easier to switch."*
>
> (Informer 1)

> *"If plant-based meat products were cheaper and easier to find, I would definitely eat it more often. I would love to have more affordable options that taste good. It is just that it is usually more expensive, which makes it harder for me to choose."*
>
> (Informer 8)

> *"If it was more affordable and easier to find, I would definitely try to eat it more often. It just needs to be practical for everyday meals."*
>
> (Informer 11)

> *"Yes, if plant-based meat products were more accessible or affordable, I would consume them more often. The benefits of these products, such as being healthier and more sustainable, align with my values, and I would be more inclined to incorporate them into my diet if they were more budget-friendly."*
>
> (Informer 15)

> *"Definitely! If it is easier to find and cheaper, I would include it more in my diet because it aligns with my values."*
>
> (Informer 16)

> *"Yes, if plant-based meat products were more accessible or affordable, I would definitely consume them more often. I have been curious to try them, but the limited availability and higher price have kept me from doing so. If they were more accessible and affordable, I would be more willing to give them a try and possibly incorporate them into my regular meals."*
>
> (Informer 17)

These accounts together highlight Malaysia's uneven food landscape, where how and where plant-based meat products are distributed create real barriers to regular use. The gap between urban and rural areas and their presence mainly in high-end stores rather than common supermarkets or wet markets limits access for many. This makes it difficult for plant-based meat products to become part of everyday eating habits, especially for Malaysian youth outside major cities or those relying on affordable, local food outlets.

c) Taste as a Determinant

Furthermore, sensory experience became a key factor in whether youth are willing to eat more plant-based meat products, with five informers (n=5) clearly stating that taste, compared to conventional meat, influences their decision. This demonstrates how intensely local food preferences and familiar flavours shape openness to alternatives, highlighting that for these products to be widely adopted, they must meet the taste expectations rooted in Malaysia's diverse and flavour-rich cuisine. The following responses illustrate this perspective:

> *"Maybe, but I would still prefer conventional meat. I might buy plant-based meat products more often if it tasted better or if I felt like trying something different. I will consume more often but it depends on the taste."*
>
> (Informer 5)

> *"Maybe, I would consume it if the taste is good and the price is more affordable."*
>
> (Informer 7)

> *"I guess I would consume plant-based meat products more often, but they need to work on the taste first. It does not taste great for someone who is used to consuming conventional meat."*
>
> (Informer 12)

> *"Most likely, but only if the nutritional value and flavour were also favourable."*
>
> (Informer 13)

> *"If plant-based meat products were more accessible or affordable, I might still not consume them more often unless they were tasty. Taste is a key factor in whether society chooses them regularly or not."*
>
> (Informer 14)

Malaysian youth's food choices are profoundly shaped by taste expectations tied to their rich culinary traditions. Their feedback shows that for plant-based meat products to gain wider acceptance, they must suit local palates and offer fair value. When the flavour falls short, high prices become harder to justify, making it difficult for these products to compete in Malaysia's diverse and price-sensitive food market.

d) Health and Ethical Considerations

Building on the practical factors previously discussed, health and sustainability became additional reasons influencing youth's willingness to eat more plant-based meat products, with four informers (n=4) clearly linking their interest to personal wellbeing and environmental care. These values do not replace concerns about price or taste but work alongside them, indicating that a mix of practical needs and personal beliefs about health and the planet shapes dietary decisions. The following responses illustrate this perspective:

> *"I would consume it more often because plant-based meat products also have their own nutrients and are produced with the aim of reducing animal exploitation and safeguarding their welfare."*
> (Informer 2)

> *"Yes, because it will be helpful in living a healthier lifestyle."*
> (Informer 9)

> *"Yes, I would consume it more frequently because I want to adopt a healthier lifestyle and eating habits, as frequent consumption of conventional meat can have an impact on health."*
> (Informer 10)

> *"Yes, if plant-based meat products were more accessible or affordable, I would consume them more often. The benefits of these products, such as being healthier and more sustainable, align with my values, and I would be more inclined to incorporate them into my diet if they were more budget-friendly."*
> (Informer 15)

These perspectives determined that Malaysian youth are becoming more aware of how their food choices affect their health and the environment. Their responses indicate that concerns about sustainability and ethics matter. However, they often become more important only after they overcome fundamental practical barriers, like high cost and limited access. This suggests that while values play a supporting role now, they can grow in influence as plant-based meat products become more affordable and widely available, reflecting a gradual shift toward food choices that align with personal values and sustainable habits.

e) Scepticism and Resistance

Finally, a small group of informers expressed hesitation about increasing their use of plant-based meat products, with two informers (n=2) sharing specific concerns that would still limit adoption, even if price and access improved. These include strong preferences for real meat and doubts about the nutritional quality of alternatives. This shows that for some youth, long-standing eating habits and personal beliefs about food can create lasting barriers, highlighting that changes in behaviour depend on more than just practical improvements. The following responses illustrate this perspective:

> *"Maybe not, because the protein content in plant-based meat products may not be on par with real meat."*
>
> (Informer 18)

> *"I would give it a try, as to why just because I would be curious on how different dishes can be created by using plant-based meat."*
>
> (Informer 19)

These perspectives represent how food habits are tied to personal identity for some Malaysian youth. Their hesitation reflects long-standing traditions and concerns about nutrition, which shape how they view plant-based meat products. These factors create emotional and cultural barriers beyond cost or access, suggesting that lasting change in eating habits requires practical improvements and meaningful engagement with cultural beliefs and everyday food practices.

The overall analysis of this subsection reveals a complex picture of what influences Malaysian youth to increase their use of plant-based meat products. Eight informers (n=8) said lower prices would be the main reason for eating them more often, highlighting affordability as the top factor. On the other hand, six informers (n=6) pointed to better access and wider availability as important for regular use. In comparison, five (n=5) stressed that taste must match conventional meat to support long-term adoption. Four informers (n=4) linked their willingness to personal health and care for the environment, showing that values can support change when practical barriers are reduced. At the same time, two informers (n=2) remained hesitant, citing strong preferences for real meat and concerns about nutrition, even if price and access improve. These findings show that youth make food decisions based on financial, sensory, cultural, and personal factors. Efforts to increase adoption will need to address

cost, availability, taste, and trust while respecting food's cultural and identity-based meanings. The following subsection highlights the summary of consumption patterns of plant-based meat products.

4.6.4 Summary on Consumption Patterns of Plant-Based Meat Products

This summary synthesises findings from Questions 13 to 15, which explore Malaysian youth perspectives on consumption patterns, barriers, and willingness to adopt plant-based meat products across three key areas of food behaviour. Drawing on in-depth responses from youth informers in tertiary institutions, it reveals how this group balances economic limits, taste expectations, and personal values when making food choices. The following summaries reflect their practical concerns, realistic openness, and everyday decision-making around plant-based meat products. Affordability, access, and cultural food habits are central to how these products fit or do not fit into regular meals within the context of Malaysia's developing economy. Note that some youth show interest in increasing use, especially if price and availability improve. In contrast, others remain hesitant due to taste or tradition. Each summary captures key insights from the data while staying true to the voices of the youth who shared their views. This subsection offers a clear picture of how Malaysian youth navigate the realities of adopting alternative proteins daily. Below is the detailed interpretation of youth perspectives. It is systematically organised to illuminate how Malaysian youth perceive the practical realities of incorporating plant-based meat products into their dietary routines within their socioeconomic and cultural environments. Summary data interpretation of consumption patterns of plant-based meat products is presented in Table 4.4 below:

Table 4.4
Summary Data Interpretation of Consumption Patterns of Plant-based Meat Products

Question	Summary
Question 13 Consumption Experience and Context	Malaysian youth show varied ways of engaging with plant-based meat products, with cost being the most common concern (n=7). Many link their eating habits to financial limits, demonstrating how money shapes food choices in Malaysia's developing economy. At the same time, seven

	informers (n=7) expressed openness to trying these products in the future, suggesting that not using them now is often due to practical barriers, not personal beliefs. Six informers (n=6) pointed to access issues, especially in rural areas where these products are rarely discovered outside high-end stores. Taste and texture (n=6) also matter greatly, as youth prefer flavours that match their cultural food traditions. A smaller group (n=3) mentioned health, either seeing benefits for long-term well-being or having doubts about nutrition. Together, these views show how youth balance real-life limits with interest in new options, and how improving price, access, and taste could help more youth adopt plant-based meat products.
Question 14 Barriers to Consuming Plant-based meat Products	Cost is the most significant barrier to regular use of plant-based meat products for Malaysian youth, with nine informers (n=9) clearly stating that high prices make them hard to afford. Youth describe the challenge of wanting to help the environment while staying within tight budgets, showing how financial reality shapes what they buy. Six informers (n=6) also noted access problems, highlighting unequal availability between cities and rural areas, where these products are primarily sold in specialty or expensive stores. Taste matters too (n=5), as youth expect satisfying flavour, especially when asked to pay more. For some (n=3), personal and cultural ties to real meat create emotional resistance, making change difficult even if price and access improve. These findings show that many factors shape decisions at once. To increase use, efforts should focus on fair pricing, wider distribution, better taste for local palates, and messaging that respects cultural food values among Malaysian youth.
Question 15 Willingness to Increase Consumption of	Malaysian youth demonstrate strong but conditional interest in eating more plant-based meat products, with lower prices seen as the main reason they would increase use (n=8). They clearly state that reducing costs is the most direct way to turn

Plant-based Meat Products	interest into regular eating habits within their budget limits. Better access through wider availability (n=6) is also essential, as youth want these products in everyday stores, not just for special occasions. Taste remains key (n=5), meaning long-term use depends on how well the products match real meat in flavour and texture. Health and ethics (n=4) support this shift, becoming more important once cost and access are no longer barriers. However, two informers (n=2) remain doubtful, mainly due to concerns about nutrition, even if the products become cheaper and easier to find. These findings show how youth weigh practical needs and personal values when considering food. To turn interest into action, efforts must focus on affordability and taste, helping youth align their eating habits with their budgets and growing desire to make responsible choices.

The next section presents the impact of consuming plant-based meat products among youths in tertiary institutions in Malaysia.

4.7 Impact of Consuming Plant-Based Meat Products Among Youths in Tertiary Institutions in Malaysia

The growing adoption of plant-based meat products has sparked discussions about their implications for the environment, public health, and animal welfare. This section explores informers' perspectives on the impact of consuming plant-based meat products across these three key areas. By examining their insights, the researcher aims to understand how plant-based meat products reshape modern dietary choices and address critical global challenges. Each subtopic delves into specific themes, highlighting the opportunities and challenges of this emerging trend.

4.7.1 Impact of Consuming Plant-Based Meat Products on Nature and the Environment

This subsection explores Question 16, which examines informers' opinions and feelings about the impact of consuming plant-based meat products on nature and the environment. Hence, understanding these perspectives is essential for assessing how individuals perceive the environmental implications of plant-based alternatives to conventional meat. To explore these views, informers were asked: “In your opinion, what is the impact of consuming plant-based meat products on nature and the environment?” Their responses were analysed using inductive coding, identifying key themes reflecting their thoughts and attitudes toward the environmental effects of consumption of plant-based meat products. The findings are presented below.

a) <u>Environmental Benefits of Deforestation Reduction</u>

When Malaysian youth think about how their food choices affect the environment, protecting natural ecosystems is a key concern that strongly reflects their environmental awareness. Five informers (n=5) clearly linked eating plant-based meat products to saving forests and protecting animal habitats, explaining that producing these alternatives uses less land and causes less harm to nature compared to raising animals for meat. The following responses illustrate this perspective:

> *“It can reduce deforestation and habitat destruction because there is no need to build farms for animals, as we have alternative food sources like plant-based meat products.”*
>
> (Informer 3)

> *“Reducing livestock farming is important because raising animals like cows and goats requires large amounts of land. This can lead to deforestation as more land is cleared to accommodate livestock.”*
>
> (Informer 6)

> *“Reducing deforestation for animal farming, thus protecting biodiversity.”*
>
> (Informer 7)

"It reduces the needs to create raising land for life stock because livestock farming often involves clearing forest, or grazing or growing feet crops and shifting to plant-based meat products reduce the demand for such land preserving biodiversity and carbon-absorbing forest."

(Informer 9)

"In my opinion, for example, forests would be better preserved because when we want to engage in farming, it requires a large area of land, not only for livestock but also for growing plants to feed the animals. This means it uses a vast amount of land. If forests are constantly being cut down, it will disrupt the ecosystem."

(Informer 10)

Their understanding of land use shows how Malaysian youth link food choices to tangible impacts on forests and nature. This awareness reflects a generation that cares deeply about protecting biodiversity, especially in Malaysia, where deforestation is a serious environmental challenge.

b) <u>Resource Efficiency Through Water Conservation</u>

Alongside concerns about deforestation, saving natural resources became another strong environmental reason that resonates with Malaysian youth, especially regarding limits on water and climate stability. Four informers (n=4) clearly explained that plant-based meat products use less water and produce fewer greenhouse gas emissions than raising animals for meat. Their responses show how youth connect food choices to broader environmental impacts, seeing plant-based options as a more sustainable way to eat within planetary boundaries. The following responses illustrate this perspective:

"I think plant-based meat products is better for the environment because it does not involve raising animals. It is more sustainable, and we do not use as many resources. For me, the less impact it has on the planet, the better."

(Informer 8)

"Lowers water use, greenhouse gas emissions, and deforestation than traditional meat production."

(Informer 13)

"It reduces deforestation, greenhouse gas emissions, and water usage compared to traditional meat production"

(Informer 16)

"Consuming plant-based meat products generally has a positive impact on nature and the environment. The production of plant-based meats typically uses fewer natural resources, such as land and water, compared to conventional animal farming. Additionally, plant-based options tend to generate less greenhouse gas emissions and contribute less to deforestation. By reducing reliance on animal agriculture, plant-based meat products can help mitigate climate change and preserve biodiversity, making them an environmentally sustainable choice in the long term."

(Informer 17)

The straightforward way they describe environmental impacts shows that Malaysian youth can understand and engage with complex sustainability issues. Their attention to measurable savings, like less water used or lower emissions, reflects a practical mindset that aligns with Malaysia's increasing focus on water conservation and efforts to address climate change.

c) <u>Pollution Reduction Across Environmental Systems</u>

Furthermore, concerns about environmental pollution became an important factor in how Malaysian youth view the benefits of plant-based meat products. Four informers (n=4) clearly linked eating these alternatives to cleaner air, water, and soil, explaining that raising fewer animals for meat could reduce pollution from farms, such as waste runoff and harmful emissions. Their responses show that youth see plant-based options as a way to support a healthier environment beyond just saving resources or forests. The following responses illustrate this perspective:

"Plant-based meats do have a positive impact on the environment. For example, raising animals can damage the environment due to issues like odour and waste. On the other hand, plants are beneficial in this regard."

(Informer 4)

"I think it is a good thing for the environment since it uses fewer resources than animal farming. If more people switched, it could really help reduce pollution. Livestock farming contributes to air and water pollution, greenhouse gas emissions, and deforestation. Plant-based meat products production generally requires fewer resources like water and land, and it produces less carbon emissions. So, I think switching to plant-based alternatives could help reduce some of these environmental issues."

(Informer 11)

"Consuming plant-based meat products can help reduce greenhouse gas emissions, conserve water and land, lower pollution, and preserve biodiversity, all contributing to a healthier environment."

(Informer 14)

"I believe consuming this product will have a positive impact on the environment, as it can reduce the use of natural resources and help decrease pollution."

(Informer 18)

These youth clearly understand how pollution affects their surroundings by pointing to problems like animal waste and unpleasant odours from livestock farming. Their awareness reveals that Malaysian youth see a direct link between food choices and tangible improvements in environmental quality, such as cleaner neighbourhoods and healthier ecosystems, highlighting a grounded, locally relevant perspective on sustainability.

d) <u>Balanced Perspectives on Plant-Based Meat Products Consumption</u>

Meanwhile, a small but thoughtful group of Malaysian youth took a balanced view of the consumption of plant-based meat products, recognising its environmental benefits while being aware of real-life challenges in changing eating habits. Two informers (n=2) shared perspectives that acknowledged the advantages of these products, such as reducing harm to nature, while also noting practical barriers like cost, taste, and access. Their responses reflect careful thinking, demonstrating that supporting sustainable food does not mean overlooking everyday realities. The following responses illustrate this perspective:

"I think plant-based meat products might help reduce environmental damage, like pollution, but I do not believe it will make a huge difference. Meat consumption is part of the food system, and I believe balance is more important than completely replacing meat."

(Informer 5)

"I think it has its pros, such as I would be choosing another option rather than a real animal. Also, plant-based meat products production has a lower carbon footprint than animal-based meat production. But the cons, there would be a lot of artificial ingredients in used, and also plant-based meat can be highly processed."

(Informer 19)

Their recognition of both environmental benefits and concerns about food processing shows that Malaysian youth can think carefully and realistically about sustainable eating. This balanced view reflects their ability to weigh pros and cons, showing a mature understanding of food choices within the cultural, economic, and environmental realities in which they live.

The overall analysis of this subsection reveals a well-rounded understanding of the environmental impacts linked to the consumption of plant-based meat products among Malaysian youth. Five informers (n=5) identified reduced deforestation and protection of wildlife habitats as key benefits. Meanwhile, four informers (n=4) pointed to greater resource efficiency, noting lower water use and fewer greenhouse gas emissions than conventional meat. Another four informers (n=4) emphasised the role of plant-based alternatives in reducing air, water, and soil pollution from livestock farming. Additionally, two informers (n=2) offered balanced views, recognising environmental advantages while considering practical challenges in switching diets. Together, these insights show that Malaysian youth engage thoughtfully with environmental issues when making food choices. Their awareness of ecological impacts shapes the openness to plant-based meat products nationwide in tertiary education settings. The following section highlights the impact of consuming plant-based meat products on public health.

4.7.2 Impact of Consuming Plant-Based Meat Products on Public Health

This subsection explores Question 17, which examines informers' opinions and feelings about the impact of consuming plant-based meat products on public health. Understanding these perspectives is essential for assessing how individuals perceive the health implications of plant-based alternatives to conventional meat. To explore these views, informers were asked: “In your opinion, what is the impact of consuming plant-based meat products on public health?” Their responses were analysed using inductive coding, identifying key themes reflecting their thoughts and attitudes toward the health effects of consumption of plant-based meat products. The findings are presented below.

a) <u>Positive Health Outcomes Reducing Chronic Disease Risks</u>

Central to Malaysian youth's health considerations is the potential of plant-based meat products to reduce chronic disease risks. Eight informers (n=8) specifically linked these alternatives to lower chances of heart disease, high cholesterol, and obesity, citing their lower saturated fat content and perceived benefits for long-term health. The following responses illustrate this perspective:

> *"It might be better for health, but I do not know if it is that much healthier than regular meat."*
>
> (Informer 1)

> *"In my opinion, the impact of consumption may be good depending on the product consumed, but I believe regular meat products also have health benefits for the public, so both are good."*
>
> (Informer 2)

> *"It will have a positive impact because plant-based meat products encourage a healthier diet and may reduce the risk of heart disease."*
>
> (Informer 3)

> *"If consumers are unhealthy or obese, which is a major issue in Malaysia, I think consuming plant-based meat products could be beneficial for them. However, if the person is fit, consuming conventional meat may be more beneficial. In general, plant-based meats are beneficial because our community is overly dependent on meat."*
>
> (Informer 4)

> *"Plant-based meat products could offer a healthier option for some people, but I believe conventional meat is also healthy if consumed in moderation. But both are good but it depends on your diet and lifestyle"*
>
> (Informer 5)

> *"Public health will improve because we will consume less conventional meat. Conventional meat contains saturated fat, which leads to high cholesterol, gout, and high blood pressure. So, by consuming plant-based meat products, we will be healthier, and our diet will be better managed."*
>
> (Informer 10)

> *"In my opinion, consuming plant-based meat products can have a positive impact on public health. These products are often lower in saturated fat and contain no cholesterol, which can contribute to better heart health and reduce the risk of chronic diseases like cardiovascular disease (CVD)."*
>
> (Informer 15)

> *"Plant-based meat products can have a positive impact on public health, especially when consumed as part of a balanced diet. These products tend to have less saturated fat and cholesterol compared to traditional meats, which can reduce the risk of heart disease and other health issues. They are often fortified with essential nutrients like vitamins and minerals, making them a healthy alternative for those looking to cut back on meat consumption. However, it is important to note that some plant-based meat products can be processed and may still contain high levels of sodium or additives, so moderation and balance are key."*
>
> (Informer 17)

Their clear understanding of heart health indicates a generation actively seeking healthier food options in Malaysia's changing diet environment. This awareness aligns with growing national concerns about rising rates of obesity and heart disease among youths.

b) <u>Balanced Perspectives on Health Benefits and Limitations</u>

Alongside these health benefits, several informers offered balanced views, with five informers (n=5) recognising both the advantages and limitations of plant-based alternatives. They emphasised that while these products can support healthier eating, they should be consumed in moderation as part of a balanced diet. The following responses illustrate this perspective:

> *"It helps Malaysians improve their health and reduce the obesity rates in Malaysia, which is a significant health issue. Consuming plant-based meat products can contribute to addressing this problem and provide overall health benefits."*
>
> (Informer 6)

> *"Reducing the risk of diseases related to conventional meat, such as high cholesterol and heart disease, caused by excessive consumption of conventional meat."*
>
> (Informer 7)

"It could be better for public health if it is lower in fat and does not have as many chemicals. But some plant-based meats are still processed a lot, so it is not always a healthy option."

(Informer 11)

"If people stop eating processed meats, there may be advantages such as decreased incidence of obesity and heart disease. Plant-based meat product substitutes that are highly processed might still be harmful, though."

(Informer 13)

"I think in moderately it is fine, but as you may know we need iron, and red meat is one of the richest sources of iron. So, I think we cannot rule out animal-based products in their entirety."

(Informer 19)

The practical mindset these youth show reflects their ability to assess health claims in the context of everyday eating habits. Their focus on balance highlights an understanding of nutritional needs within Malaysian food culture, while still recognising the potential benefits of including plant-based alternatives in their diet.

c) <u>Improved Nutritional Benefits for Digestive Health</u>

Beyond preventing chronic diseases, Malaysian youth recognised specific nutritional benefits of plant-based meat products. Four informers (n=4) pointed out that these alternatives can support gut health by providing more fibre and aiding digestion, which they see as an advantage over conventional meat that lacks fibre. The following responses illustrate this perspective:

"It will encourage people to adopt healthier eating habit overall because plant-based meat products usually rich in fibre, and you cannot really get in conventional meat and fibre rich diet really help support gut health, reduces inflammation, promotes a healthier digestive system."

(Informer 9)

"Plant-based meat products can be a healthier choice, lowering risks of heart disease and improving digestion. However, some are highly processed and lack nutrients, so balance is key."

(Informer 14)

"It can promote better health outcomes by reducing heart disease risks and encouraging plant-based diets"

(Informer 16)

> *"In terms of public health, this product can help reduce issues such as weight gain, obesity, and cholesterol that can be found in real meat, especially if the product is made from healthier ingredients."*
> (Informer 18)

By recognising fibre's role in digestion, these youth clearly understand nutrition. Their awareness links plant-based meat products to better gut health and connects these choices to broader efforts to address rising obesity in Malaysia, demonstrating how young consumers see their food decisions as part of improving health in their communities.

d) <u>Special Dietary Needs for Health Condition Management</u>

While general health benefits were the primary focus, a smaller group of informers highlighted specific uses, with two informers (n=2) noting that plant-based meat products can help those with medical conditions that limit their ability to eat conventional meat. Their responses demonstrate how these alternatives can be practical for managing health-related dietary restrictions. The following responses illustrate this perspective:

> *"It could be better for public health because it is often lower in fat and cholesterol. But it depends on what is in it. If it is made with healthy ingredients, I think it is a better choice for health overall."*
> (Informer 8)

> *"If someone has a health issue that requires them to avoid conventional meat, like people with gout or other health problems that prevent them from eating red meat, then plant-based meat products could be an alternative for them to still enjoy the taste of meat. However, for me, that is the only aspect where plant-based meat products truly have an impact on health."*
> (Informer 12)

Their thoughtful understanding of dietary needs shows that Malaysian youth see plant-based alternatives as practical options for those with specific health conditions. Recognising uses such as managing gout or other medical concerns, they demonstrate awareness of and care for the diverse health needs within their families and communities.

The overall analysis of this subsection reveals a well-rounded understanding of the health impacts linked to the consumption of plant-based meat products among Malaysian youth. Eight informers (n=8) identified lower risks of chronic diseases such as heart disease and obesity as the main benefit. On the other hand, five informers (n=5) offered balanced views, recognising advantages while noting limitations and the importance of moderation. Four informers (n=4) highlighted better digestion and gut health due to higher fibre content. Additionally, two informers (n=2) pointed out that these products can support individuals with specific health conditions, such as gout, where meat intake must be limited. Together, these insights show how youth think carefully about health when making food choices. Their awareness of personal and community well-being is key in shaping openness to plant-based meat products in tertiary education settings across Malaysia. The following subsection highlights the impact of consuming plant-based meat products on animals.

4.7.3 Impact of Consuming Plant-Based Meat Products on Animals

This subsection explores Question 18, which examines informers' opinions and feelings about the impact of consuming plant-based meat products on animals. Understanding these perspectives is essential for assessing how individuals perceive the ethical and welfare implications of plant-based alternatives to conventional meat. To explore these views, informers were asked: “In your opinion, what is the impact of consuming plant-based meat products on animals?” Their responses were analysed using inductive coding, identifying key themes reflecting their thoughts and attitudes toward the effects of consumption of plant-based meat products on animal welfare. The findings are presented below.

a) <u>Positive Impact on Animal Welfare Through Reduced Suffering</u>

Central to Malaysian youth’s ethical concerns is the potential of plant-based meat products to improve animal welfare. Eight informers (n=8) clearly linked these alternatives to less animal suffering and fewer animals being slaughtered, explaining that choosing plant-based options can reduce harm and support kinder treatment of animals. The following responses illustrate this perspective:

"Plant-based meats are better for animals since they do not require animal farming. It reduces the need for factory farming and animal slaughter. So, it is a positive impact on animal welfare."

(Informer 1)

"In my opinion, the impact of consuming this product can certainly improve the quality of life for animals, as it exposes companies that do not maintain ethical standards. Animals that are farmed will be treated better, exploitation will be stopped, and the animal population will also increase."

(Informer 2)

"It can promote animal welfare because it will reduce the demand for factory farming and slaughter, allowing the animal population to increase."

(Informer 3)

"Plant-based meat products do have a positive impact on animals. The more plant-based meat products are produced and consumed, the fewer animals will be slaughtered or killed in the process. This could lead to an increase in animal populations, helping to balance the numbers of animals like cows and chickens."

(Informer 4)

"From an animal perspective, plant-based meat products are definitely better because it does not involve any harm to animals. I think it helps reduce the need for factory farming and could reduce animal suffering. It is a way to enjoy meat-like products without causing harm."

(Informer 8)

"Few animals would need to be raise and slaughtered for food because like factory farming often involve animal being kept like confined in human condition, so when we start consuming plant-based meat, demand for conventional meat will lessen and will reduce the factory farming, and animal population will be increase."

(Informer 9)

"In my opinion, the animal population will increase because there will be less exploitation of animals and fewer animal slaughtering."

(Informer 10)

"For animals, it is definitely better since no animals need to be raised or slaughtered. I feel good about that part. The animal population will be increase."

(Informer 11)

Their strong concern for animal welfare shows how Malaysian youth link food choices to real reductions in animal suffering. This compassionate outlook reflects a growing ethical awareness, with many youths making dietary decisions based on values of kindness and care for animals.

b) <u>Ethical Improvements Addressing Factory Farming Practices</u>

Building on concerns about animal welfare, ethical issues around industrial farming became another important factor, with five informers (n=5) pointing out that plant-based meat products can help reduce the inhumane treatment and tight confinement of animals in conventional farming systems. Their responses show that youth see these alternatives as a way to oppose harmful practices and support more ethical food production. The following responses illustrate this perspective:

> *"Reducing the need for animal farming, thus decreasing animal exploitation and suffering. Supporting conservation efforts for endangered species due to reduced deforestation for animal farms."*
>
> (Informer 7)

> *"One significant advantage is the decrease in animal abuse and factory farming, which is highly morally beneficial."*
>
> (Informer 13)

> *"Consuming plant-based meat products has a positive impact on animals by reducing the demand for animal slaughter and farming, promoting animal welfare, and encouraging more cruelty-free food options."*
>
> (Informer 14)

> *"In my opinion, consuming plant-based meat products has a positive impact on animals. By choosing plant-based alternatives, we reduce the demand for animal farming and slaughter, which helps minimize the suffering and exploitation of animals."*
>
> (Informer 15)

> *"It significantly reduces animal suffering and the need for industrial farming"*
>
> (Informer 16)

The clarity of their ethical thinking illustrates that Malaysian youth can identify specific problems in industrial farming, such as overcrowding and poor animal living conditions. Their awareness of confinement and mistreatment reflects how discussions

about animal welfare, especially in campus settings, influence their food choices and encourage more conscious eating habits.

c) <u>Balanced Perspectives on Animal Welfare Impact</u>

Despite the strong ethical reasons for choosing plant-based meat products, some informers carefully and thoughtfully approached the topic. Three informers (n=3) shared balanced views, recognising the potential benefits for animals while questioning how much real impact these products can have, given that only a few people use them regularly. Their responses show a realistic understanding of the limits of individual action within a larger system. The following responses illustrate this perspective:

> *"I do not think it will change much. People who eat meat are likely to continue doing so. Plant-based options are just another choice for those who prefer them, but they will not stop meat production or consumption. I do not think plant-based meat products will have a major impact on animals because, for now, I believe the demand for plant-based meat products is not likely higher than that for conventional meat. If the demand were higher, maybe farming and meat production would decrease."*
>
> (Informer 5)

> *"There is not much impact, actually, because I do not really see the correlation with veganism itself. There will always be a reason why meat is included in the food pyramid as a protein source. That is why I think, as long as you are not consuming animals that are on the verge of extinction or those that are bad for your health, I do not really think eating plant-based food can have a significant beneficial impact on animals."*
>
> (Informer 12)

> *"It is good for the animals so that we will not be mass producing them, and the carbon footprint would be lesser. This will lead to a better environment for the animals to live."*
>
> (Informer 19)

This practical view shows that Malaysian youth can assess ethical claims in light of real-world conditions. Their awareness of low adoption rates reflects an understanding that while personal food choices help, meaningful change requires broader shifts beyond what individuals can achieve alone.

d) <u>Broader Conservation Benefits Supporting Animal Habitats</u>

Additionally, a small group of informers recognised indirect benefits for animals, with two informers (n=2) linking plant-based consumption to protecting natural habitats and maintaining balanced ecosystems. They explained that reducing land use for livestock farming helps preserve forests and wildlife, supporting a wider range of animal life beyond just reducing slaughter. The following responses illustrate this perspective:

> *"It could reduce the demand for livestock farming, such as cows and goats, allowing us to sustain more food for our country and community, thereby ensuring a more balanced food resource."*
>
> (Informer 6)

> *"Consuming plant-based meat products has a clear positive impact on animals, as it reduces the demand for animal farming. By choosing plant-based alternatives, people are contributing to less animal suffering, as fewer animals are raised and slaughtered for food. It supports animal welfare by promoting cruelty-free food options, which is a major reason many people turn to plant-based diets. This shift can help reduce the ethical concerns surrounding factory farming and animal exploitation, encouraging more humane practices in the food industry."*
>
> (Informer 17)

What becomes clear is a broad and connected understanding among some Malaysian youth of how food choices affect animal welfare, environmental health, and biodiversity. This awareness shows their ability to see the bigger picture, linking diet, nature, and animal well-being, reflecting a growing capacity to think holistically about sustainability in a way that goes beyond individual actions.

The overall analysis of this subsection reveals a well-rounded understanding of how the consumption of plant-based meat products affects animal welfare among Malaysian youth. Eight informers (n=8) identified reduced animal suffering as a key benefit, seeing these products as a way to decrease the number of animals killed and improve overall treatment. Meanwhile, five informers (n=5) pointed to better farming practices, noting that shifting away from conventional meat can reduce cruel conditions in industrial farming. Three informers (n=3) offered balanced views, recognising these benefits while questioning the scale of real-world impact. Additionally, two informers (n=2) highlighted wider environmental benefits, such as protecting animal habitats

through less land use. These insights show that youth think deeply about animals when making food choices. Their concern for animal welfare shapes openness to plant-based meat products in tertiary education settings across Malaysia. The following subsection summarises the impact of consuming plant-based meat products.

4.7.4 Summary on the Impact of Consuming Plant-Based Meat Products

This summary synthesises findings from Questions 16 to 18, which explore Malaysian youth perspectives on the impacts of plant-based meat product consumption across three key areas: environmental sustainability, public health, and animal welfare. Drawing on in-depth responses from youths in tertiary institutions, it reveals how this group sees food choices as more than personal preference. They are linked to wider societal effects. The following summaries reflect their understanding, ethical concerns, and practical considerations regarding plant-based meat products. Environmental awareness, health consciousness, and care for animals shape how youth view sustainable eating and the role these products can play. Some see benefits in reducing harm to nature, improving public health, and protecting animals. In contrast, others remain cautious due to cost, taste, or trust in the products. Note that each summary captures key insights from the data while staying close to the voices of the youth who shared their views. This section highlights how Malaysian youth think about the broader consequences of their food choices. It demonstrates that values, lived experiences, and real-world constraints in everyday life shape their decisions. Below is the detailed interpretation of youth perspectives, systematically organised to illuminate how Malaysian youth perceive plant-based meat products' environmental, health, and ethical implications within their sociocultural context. Summary of data interpretation on the impact of consuming plant-based meat products is presented in Table 4.5 below:

Table 4.5
Summary of Data Interpretation on the Impact of Consuming Plant-based Meat Products

Question	Summary
Question 16 Impact of Consuming	Malaysian youth clearly understand how plant-based meat products affect the environment, with protecting forests as a key benefit (n=5). They explain that raising animals for meat uses

Plant-based Meat Products on Nature and the Environment	large land areas, leading to deforestation and loss of animal habitats. They see plant-based options as a way to reduce this harm. Saving resources like water and lowering pollution were also common concerns (n=4 each), with youth noting these products produce fewer greenhouse gases and cause less damage to air, water, and soil. A small group (n=2) recognised environmental benefits but also expressed caution about how processed these products can be. These views show that youth can link everyday food choices to real environmental outcomes. Their awareness of ecological issues strongly affects how open they are to using plant-based meat products.
Question 17 Impact of Consuming Plant-based Meat Products on Public Health	Malaysian youth think carefully about how plant-based meat products affect health, with preventing long-term illnesses as the main benefit (n=6). Many connect these products to lower risks of heart disease, high cholesterol, and obesity, mainly because they contain less saturated fat than regular meat. Some youth (n=5) gave balanced views, recognising health advantages and questioning whether these products are fully nutritious or too processed. Better digestion was another benefit (n=4), with youth appreciating the fibre in plant-based options, which conventional meat lacks. A few (n=2) noted that these products can help people with specific conditions like gout. These responses show that youth consider both pros and cons when thinking about health, balancing potential benefits with concerns about food quality within their everyday eating habits.
Question 18 Impact of Consuming Plant-based Meat Products on Animals	For many Malaysian youths, concern for animal welfare is the primary ethical reason for using plant-based meat products, with reducing animal suffering as the most common reason (n=8). They see these products as a way to lower the number of animals killed and improve how animals are treated. Better farming conditions were the next most common point (n=5), with youth linking plant-based eating to fewer animals being kept in tight, unhealthy spaces. A small group (n=3) acknowledged these benefits but questioned how much difference they make, given

	that few people use these products regularly. The smallest group (n=2) highlighted wider environmental benefits, like saving forests and wildlife habitats. These views show that compassion is becoming more important in food choices, with care for animals playing a growing role in how youth decide what to eat in tertiary institutions across Malaysia.

In the following section, a summary of this chapter is presented.

4.8 Summary

This chapter provides a comprehensive qualitative analysis of Malaysian youth's perceptions, motivations, consumption patterns, and opinions regarding plant-based meat products. Based on face-to-face and online interviews with 19 diverse informers, the study shows that although youth acknowledge these products' health, environmental, and ethical benefits, their adoption is primarily limited by high prices, doubts about taste and texture compared to conventional meat, and restricted accessibility. Cultural preferences for traditional meat and religious factors, especially the requirement for Halal certification, also play an important role in shaping their views. Overall, the findings indicate that broader acceptance among this group depends on improving affordability, enhancing sensory quality, and expanding availability while considering cultural and religious contexts. The next chapter discusses the findings on plant-based meat products among Malaysian youths in tertiary institutions.

CHAPTER 5
DISCUSSION

5.1 Introduction

This chapter discusses the findings on plant-based meat products among Malaysian youths in tertiary institutions. The results are primarily based on qualitative data from interviews with the selected informers. The chapter begins by discussing the youths' perceptions of plant-based meat products, followed by an analysis of their motivations for consumption. The informers' consumption patterns, barriers to adoption, and views on plant-based meat products' environmental, health, and ethical impacts are further explored and discussed in this chapter.

5.2 Perception of Plant-Based Meat Products Among Malaysian Youths

This section explores the perceptions as well as understanding of plant-based meat products among Malaysian youths at tertiary institutions. It evaluates the comparison between their understanding and attitudes with existing research and findings. The investigation reveals a multifaceted perspective in which taste, health, culture, and personal beliefs influence Malaysian youth's perceptions of these choices. These findings, when associated with extensive research on plant-based diets, underscore distinctive elements of perception within Malaysia's varied cultural and religious context. This comprehension elucidates how perceptions of plant-based meat products influence the readiness to sample or embrace them. Individuals seeking to promote sustainable food options, including product manufacturers, marketers, and policy makers, may use these data to engage Malaysian youth in significant and respectful manners.

5.2.1 Understanding of Plant-Based Meat

The findings indicate that Malaysian youths perceive plant-based meat products primarily as replicas of traditional meat rather than as a distinct category of cuisine. One informer perceives these alternatives as "fake meat," indicating that they regard plant-based meat products as imitations rather than distinct eating options. This viewpoint aligns with the notion that meat substitutes must precisely replicate the flavour and feel of actual meat to fulfil customer expectations (Forster, 2024). The employment of the term "fake meat" by certain informers necessitates rigorous examination. This framing possesses a stigmatising connotation that may deter experimentation and encourage the belief that plant-based meat products are intrinsically inferior to traditional meat. Language influences consumer acceptance, and when young individuals resort to dismissive labels, it signifies not only personal scepticism but also the wider cultural context in which they have been socialised. In Malaysia, where traditional meat possesses profound cultural, religious, and social importance, the terminology employed to characterise alternatives is likely influenced by this established meat-centric identity. To tackle this framing difficulty, it is essential to enhance the product and implement intentional communication techniques that establish plant-based meat products as a unique and valuable food category, rather than just substitutes for traditional meat.

In comparison to studies from other cultural contexts, Malaysian youth perceptions of plant-based meat products show both parallels and significant variances. Research among young consumers in Japan and China indicates that around 60% possess favourable views on alternative meats and are generally receptive to integrating them into their diets (Huang et al., 2023). Conversely, the Malaysian youth in this study exhibited a more cautious and conditional perspective, frequently categorising plant-based meat products as appropriate primarily for vegetarians, vegans, or individuals with certain dietary constraints, rather than as a conventional meal choice. This disparity can be ascribed to the early stage of the plant-based meat business in Malaysia, in contrast to East Asian markets, where alternative proteins have experienced extended commercial exposure and greater cultural normalisation.

Moreover, the results indicate that youth frequently associate plant-based meat products with vegetarian and vegan diets, perceiving them as alternatives for those with specific dietary needs. This correlation aligns with research indicating that ethical

considerations frequently motivate individuals to adopt plant-based diets (Hwang et al., 2020). Some youth comprehend that plant-based meat items extend beyond conventional substitutes such as tempeh, acknowledging the innovative technologies underlying contemporary alternatives. The misunderstanding between plant-based meat products and conventional plant-based foods like tempeh highlights a significant information gap, especially pertinent in the Malaysian setting, where locally made fermented soy products have historically provided economical protein alternatives. This confusion suggest that consumer education initiatives must distinctly differentiate between conventional plant-based foods and technologically sophisticated plant-based meat products, as these constitute fundamentally disparate product categories with varying nutritional profiles, price points, and sensory experiences. Research demonstrates that replicating the texture and chewiness of meat is crucial, since these attributes significantly affect consumer preference and perceptions of product quality (Godschalk-Broers et al., 2022).

The inquiry into the reasons behind these perceptions among Malaysian youth necessitates thorough examination. Three interconnected aspects seem to influence their comprehension. Cultural standards about meat consumption in Malaysia, where traditional meat is essential to daily meals and celebratory customs, establish a significant benchmark against which plant-based alternatives are evaluated and frequently deemed inadequate. Secondly, restricted commercial availability of plant-based meat products beyond upscale metropolitan retail locations results in many youths encountering these goods predominantly through media rather than firsthand experience, potentially leading to a partial comprehension of their true offerings. Third, some youths recognised that their awareness primarily stemmed from internet sources and media coverage rather than direct consumption, indicating that their perceptions are shaped remotely from actual product experience. The gap between media-generated perceptions and actual experiences may foster the continuation of misunderstandings and wary or dismissive characterisations, such as "fake meat." Thus, the varying levels of comprehension among Malaysian youth indicate that enhanced information is crucial for enabling individuals to create appropriate perceptions of these products, particularly as the market evolves with more sophisticated alternatives.

5.2.2 Advantages and Disadvantages of Plant-Based Meat Products

In addition to the research of general understanding, investigating perceived advantages reveals that health benefits are regularly seen as a predominant favourable attribute among Malaysian youths. Many youths specifically emphasise decreased cholesterol and less saturated fat as significant advantages, perceiving these products as healthier alternatives compared to conventional meat. This discovery aligns with studies that recognise health knowledge as a crucial determinant in the acceptance of plant-based meat alternatives (Abu Bakar et al., 2023). It is essential to explore why health benefits hold a significant status in the perspectives of Malaysian youth. The increasing incidence of diet-related non-communicable diseases in Malaysia presents a significant local background. The National Health and Morbidity Survey (NHMS) 2023 found that the prevalence of diabetes among Malaysian adults is 15.6%, while cardiovascular disease (CVD) accounts for 67% of premature deaths in the nation (Mat Rifin et al., 2025). Increased public health knowledge of these figures is likely to have heightened health consciousness among Malaysians youth, rendering health benefits a particularly prominent framework for assessing plant-based alternatives. Moreover, personal and family health experiences may strengthen these perceptions, as numerous informers indicated an awareness of health risks linked to high conventional meat consumption, demonstrating a health consciousness that surpasses individual dietary preferences to include family and community wellbeing.

Moreover, ethical considerations, especially the absence of animal fatalities, constitute significant advantages. This corresponds with research indicating that ethical considerations influence the use of plant-based meat products, particularly among younger individuals who are increasingly concerned about animal welfare in their dietary selections (Sánchez-Sabaté et al., 2019). Youth specifically indicate that plant-based meat products are suitable for individuals with religious obligations, health concerns, or food allergies, demonstrating their awareness of how these products can accommodate various dietary requirements in Malaysia's varied community.

Conversely, the drawbacks identified by youths primarily pertain to sensory challenges and financial obstacles. Concerns regarding the flavour and texture of plant-based meat not aligning with conventional meat are frequently noted, linking directly to research that underscores the necessity of comparing plant-based meat products with traditional meat to accurately evaluate their texture (Lee, 2024). When compared to

findings from other markets, the intensity of cost worries among Malaysian youth is very significant. Research continually highlights cost as a major obstacle to the global adoption of plant-based meat (Cook, 2023; Reis, 2022). In the Malaysian context, this barrier is more significant as plant-based alternatives are priced at almost double that of conventional meat options (Lou et al., 2024), whilst Malaysian university students struggle with constrained finances and limited purchasing power. This contextual disparity underscores the necessity of comprehending affordability within the distinct socioeconomic conditions of underdeveloped nations, where food subsidies for plant-based products are predominantly lacking in national policy frameworks.

Moreover, the health advantages claimed by youths, particularly those regarding decreased cholesterol and diminished saturated fat, require critical examination. Although several plant-based meat alternatives provide lower saturated fat content than traditional red meat, numerous commercially accessible varieties include high sodium concentrations, dietary additives, and processed components that might outweigh these benefits (Rizzolo-Brime et al., 2023). The propensity of youth to uncritically accept health benefit claims without examining nutritional labels illustrates the health halo effect, wherein products regarded as plant-based are presumed to be intrinsically healthier, irrespective of their actual composition (Curtain et al., 2019). The significant disparity between perceived and actual nutritional benefits highlights the necessity for enhanced consumer education and more transparent product labelling in the Malaysian market. Some informers recognised this tension, noting that although plant-based meat products are typically regarded as healthier, their processed characteristics and additional ingredients could decrease their true health benefits, indicating a more nuanced consumer literacy that surpasses superficial health halo acceptance.

Moreover, concerns regarding the processing and supplementary ingredients in plant-based meat alternatives align with research cautions indicating that not all plant-based meat substitutes are equivalent, as some may include additives or undergo significant processing that may decrease their health benefits (Bogueva et al., 2023; Flint et al., 2023). This thoughtful evaluation shows that Malaysian youth are forming careful views about plant-based meat products, seeing both possible benefits and limitations rather than believing simple claims about them being better. This balanced approach aligns with research indicating that consumers are more cautious regarding the health effects of processed plant-based alternatives (Bogueva et al., 2023).

5.2.3 Nutritional Value of Plant-Based Meat Products

The examination of nutritional views reveals that Malaysian youth had mixed opinions regarding the health benefits of plant-based meat alternatives. Particularly, several youths believe that these alternatives are inherently healthier than traditional meat, citing advantages such as increased fibre content and the lack of animal-derived harmful chemicals. This perspective coincides with research showing that individuals increasingly prefer diets that preserve plant-based nutrients while matching meat's taste (Shireen et al., 2024; Kyriakopoulou et al., 2021). Conversely, some youths exhibit critical thought by acknowledging that nutritional content differs markedly among various brands and recipes. This nuanced perspective indicates an increasing understanding of processing procedures, aligning with research demonstrating that consumers now critically evaluate the health consequences of plant-based meat products (Bogueva et al., 2023).

The formation of nutritional beliefs among Malaysian youth warrants thorough investigation. Some informers based their assessments of the nutritional profile of plant-based meat products on personal experience and general health awareness, while others recognised their limited expertise and depended on information obtained from media and online sources. This indicates that Malaysian youth's understanding of nutrition is influenced by an informal and unstructured combination of personal observation, media exposure, and general health discussions, rather than by rigorous nutritional education focused on plant-based meat products. The implication is that nutritional understanding is inconsistent among the sample, with certain informers exhibiting advanced awareness of processing issues and micronutrient deficiencies, while others maintained more generalised and potentially inaccurate assumptions regarding the health benefits of plant-based options.

In comparison to studies from other locations, issues with protein quality and vitamin sufficiency seem to be notably more significant among Malaysian children. This may indicate Malaysia's robust cultural connection between protein sufficiency and traditional meat intake, where meat is predominantly viewed as the principal and most dependable source of complete protein. Studies indicate that replacing red and processed meat with plant-based alternatives may lead to a diminished intake of essential micronutrients such as protein, zinc, and vitamin B12, while the bioavailability of iron in numerous plant-based products is often limited due to high phytate

concentrations (Labba et al., 2022; Vatanparast et al., 2020). The nutritional concerns align with the sentiments revealed by informers, as numerous youths questioned the ability of plant-based meat products to sufficiently substitute the nutritional value of traditional meat in their diets.

Youths also articulate apprehensions regarding possible nutritional deficiencies, especially concerning protein quality and vital elements commonly present in animal products. This indicates a heightened consumer knowledge that beyond the health halo typically presumed in marketing. Research indicates that although plant-based meat products provide certain advantages, they may be deficient in key nutrients present in traditional meat, necessitating meticulous formulation to correct these deficiencies (Costa-Catala et al., 2023). The health halo effect warrants specific consideration within the Malaysian context. Manufacturers and retailers of plant-based meat products generally employ packaging and marketing language that highlights naturalness, sustainability, and health, frequently lacking comprehensive nutritional information. This marketing strategy may induce youths to alter their diets based on presumed rather than demonstrated health advantages. The demand from informers for enhanced transparency regarding ingredients and processing techniques indicates an increase in nutritional awareness and a rational consumer reaction to marketing practices that may clarify rather than elucidate the true health profile of these products.

Moreover, youths continually underscore the necessity for explicit ingredient information, asserting that transparency regarding processing procedures directly affects their trust. This need corresponds with broad consumer trends, as individuals increasingly seek transparency on the ingredients in their food (Shireen et al., 2024). As a result, Malaysian youth are formulating more advanced assessment standards, transcending fundamental health claims to evaluate ingredient quality and processing methods. Research indicates an increasing desire for products that mimic the sensory experience of meat while preserving nutritional integrity (Kyriakopoulou et al., 2021). This comprehensive understanding signifies a crucial transformation in consumer awareness, necessitating that product manufacturers and marketers prioritise flavour replication and transparent nutritional communication to satisfy the expectations of Malaysian youths in this dynamic market.

5.2.4 Overall Perception and Flavour

The sensory evaluation analysis reveals a key challenge in balancing technology advancement with the preservation of high criteria for meat-like experiences among Malaysian youths. Many youths specifically recognise enhancements in taste and texture, particularly for goods such as burgers and sausages, aligning with industry advancements shown in study (Wang et al., 2022). Nevertheless, despite these advancements, the majority of youths still perceive a distinction between their expectations and the performance of plant-based meat products, stating that these alternatives do not entirely replicate the sensory experience of traditional meat. This study supports research highlighting that the degree to which goods mimic meat's texture and chewiness considerably influences customer acceptance (Godschalk-Broers et al., 2022).

The comparative success of plant-based burgers and sausages relative to other product types warrants more examination. These product categories may achieve greater sensory acceptance not because to superior technology, but because their traditional equivalents are treated and seasoned, rendering flavour and texture duplication relatively more achievable. Conversely, emulating the sensory experience of meals intricately rooted in Malaysian culinary culture poses a significantly greater task. Informers regularly highlighted the rich and complex flavour profiles of Malaysian cuisine as the standard by which plant-based meat products are evaluated. The desire for plant-based alternatives to perform uniformly across all dish kinds sets a very high sensory standard that existing plant-based meat formulations have not consistently achieved.

A significant disparity arises when comparing the sensory expectations of Malaysian youths with those documented in studies from other regions. Research among US consumers indicates that the sensory evaluation of plant-based meat products predominantly occurs within standardised eating situations, such as burgers, where traditional meat is consistently favoured over plant-based alternatives in taste scenarios (Caputo et al., 2022). The inclination towards conventional meat over plant-based alternatives among Malaysian youths reflects a cultural complexity that exceeds just taste preference. Malaysian youths apply sensory evaluation criteria influenced by a diversified and richly spiced culinary scene, wherein meat is employed across numerous cooking techniques and flavour traditions. This indicates that the sensory threshold for

the consumption of plant-based meat is established within a more intricate and culturally distinctive context in Malaysia.

Youth responses distinctly illustrate the influence of cultural background on sensory expectations in Malaysia. Youth anticipate that plant-based meat products will replicate the classic flavours and textures of meat dishes, as these hold significant cultural value, enhancing personal enjoyment and communal dining experiences. Research indicates that the location and context of dining, whether at home, at restaurants, or during social events, impact individuals' openness to exploring plant-based alternatives (Ohlau et al., 2022; Wang et al., 2022). The influence of social environments on sensory acceptance warrants specific consideration within the Malaysian context. Informers indicated that community meals on significant festive occasions are closely linked to particular meat-centric recipes that embody emotional and cultural importance beyond basic sustenance. Integrating plant-based alternatives into these situations necessitates not only sensory equivalence but also cultural acceptability, representing a significantly complex barrier to overcome. In the context of Malaysian food culture, the street food scene, which is a significant aspect of youth dining habits, presents a challenging environment for the adoption of plant-based alternatives, as food courts and night markets primarily offer traditional meat dishes that are economical, accessible, and culturally familiar. The social and cultural aspects of consumption strengthen the sensory barrier by integrating traditional meat into collective experiences that plant-based substitutes remain unable to replicate.

Although several youths exhibit optimism for future enhancements and demonstrate a readiness to continue experimenting with these products as technology evolves, the persistent sensory gap is a considerable obstacle, particularly for individuals with deep ties to conventional meat cuisine. Consequently, producers acknowledge the necessity of enhancing taste and texture to bolster popularity (Wang et al., 2022), indicating that product development should prioritise not only technical replication but also adaptation to local Malaysian preferences to achieve broader acceptance among youth.

5.2.5 Factors Influencing Perception

Expanding upon the sensory analysis, investigating the factors that influence perceptions elucidates how sensory experience, cost, and information collectively influence the acceptance of plant-based meat products among Malaysian youth. Taste and texture are crucial, since youths repeatedly state that products must emulate the sensation of real meat for frequent consumption. This conclusion aligns with research indicating that the degree to which products replicate meat's texture directly influences customer perceptions of quality (Godschalk-Broers et al., 2022). Although taste and cost are recognised as important elements, their relationship is not only additive. Instead, they interact in a cumulative manner, in which sensory dissatisfaction makes the elevated price increasingly challenging to justify. Numerous informers clearly expressed this phenomenon, observing that investing additional funds in a product that does not provide gratifying flavour and texture represents a dual loss, both financial and experiential. This indicates that among Malaysian youths, taste satisfaction serves as a precondition rather than a parallel factor to cost, implying that price reductions alone are insufficient for sustained adoption unless paired with significant enhancements in sensory quality.

Secondly, cost constitutes a major challenge, as youth indicate that plant-based meat products frequently exceed the price of conventional meat, rendering them financially inaccessible, particularly for students with constrained budgets. This financial obstacle corresponds with research demonstrating that, despite theoretical support for plant-based choices, elevated prices can hinder consistent utilisation (Lin-Schilstra et al., 2020). The impact of Malaysian cultural and social norms on perception necessitates further investigation. Communal dining traditions, characterised by communal rather than individual food selections, indicate that a single youth's inclination towards plant-based meat may be influenced or limited by the group's tastes. In family contexts where parents dictate food purchasing choices, youths' interest in plant-based alternatives may likewise be shaped by the household's food culture. The student lifestyle, marked by dependence on economical campus canteens, food courts, and cheap restaurants where plant-based options are infrequently offered, further restricts the exposure and normalisation of these goods among Malaysian youths in tertiary institutions.

The differentiation between local and international plant-based meat brands is a significant aspect of perception among Malaysian youths. Numerous informers explicitly noted price disparities among product alternatives. Within the wider Malaysian market, international brands possess significant global recognition and are linked to technological advancement; however, their elevated pricing renders them inaccessible to the majority of tertiary students. According to the pricing statistics in Chapter 2, local brands like Nanka and Phuture Daging are priced at roughly half the cost of foreign premium brands such as Beyond Meat (Lee, 2021), although they may not yet achieve the same level of market recognition among youths. Establishing trust in local brands through transparent communication regarding ingredients, Halal certification, and nutritional information may thus constitute a more effective strategy for enhancing youth adoption.

Concerning the influence of media on perspective, informers consistently identified the internet and media as the initial means, through which they were aware of plant-based meat products. This corresponds with prior studies indicating that social media marketing of plant-based meat might elevate youth purchase intentions by augmenting awareness and stimulating interest in the product (Li et al., 2022). Nonetheless, as informers said, media exposure by itself does not result in consistent consumption, especially when cost and taste barriers are not resolved. The precision and comprehensiveness of information conveyed through media channels is significantly inconsistent, and youths who base their perceptions predominantly on these channels may cultivate impressions influenced more by trend affiliation than by substantial product understanding.

Furthermore, youth increasingly attentive to the components of plant-based meat products, expressing apprehension regarding processing techniques and supplementary substances. This awareness indicates research demonstrating that consumers are becoming cautious of the potential health impacts of processing (Bogueva et al., 2023; Flint et al., 2023). Furthermore, youths state that their interactions with particular brands influence their general perception of plant-based meat products, highlighting considerable variation in quality across different possibilities. These variables establish a thorough framework for Malaysian youths to evaluate plant-based meat products, indicating that effective market penetration necessitates meeting taste expectations, reducing costs, offering transparent ingredient information, and using social networks to foster good experiences.

5.2.6 Cultural and Religious Influences

Cultural and religious beliefs strongly influence Malaysian youth's perceptions of plant-based meat products, beyond general perception issues. Halal certification and compliance to Islamic dietary regulations are crucial for Muslim youths. Informers exhibited an understanding of the significance of certification processes and the reliability of certifying authorities, beyond merely necessitating Halal certification as a label. In Malaysia, the Department of Islamic Development Malaysia, referred to as JAKIM, is the principal body for giving Halal certification, and its endorsement is highly regarded by Muslim customers as a symbol of religious adherence and food safety. Consequently, youth confidence in plant-based meat products relies not only on the existence of a Halal label but also on the legitimacy of the certifying organization that issues it. The institutional aspect of Halal trust is notably important in Malaysia, where JAKIM's certification framework is highly formalised and internationally acknowledged, offering businesses a clear yet rigorous compliance route to engage Muslim youth consumers.

An in-depth analysis of the perceptions of various informers about plant-based meat products uncovers substantial variations that mirror Malaysia's multicultural culinary environment. Malay Muslim informers, representing the predominant portion of the sample, consistently assessed plant-based meat products in terms of Halal compliance and cultural affinity for traditional meat-centric dishes. For these informers, plant-based alternatives were predominantly regarded as supplemental possibilities rather than substitutes for traditional meat, with adoption contingent upon the clear establishment of Halal certification. Conversely, the Chinese informer in this study exhibited a relatively more receptive attitude towards plant-based alternatives, potentially due to the tradition of vegetarianism within Chinese Buddhist practices in Malaysia, where mock meat products have traditionally been included in the everyday cooking and eating traditions. The Indian informers in this study demonstrated openness to plant-based diets, framing it within individual dietary preferences and lifestyle factors rather than rigid religious restrictions, so highlighting the variety of dietary practices present within Hindu communities in Malaysia. The Dayak informer, hailing from a regional food culture in Sarawak where locally sourced meat is culturally significant, had a more hesitant stance toward plant-based alternatives, illustrating the impact of unique indigenous food tradition on openness to dietary change.

The inquiry into how Muslim youth harmonise contemporary technological food products with traditional Islamic dietary principles is complex, and the findings start to clarify this issue. Certain informers indicated satisfaction with plant-based meat products, stating that they originate from acceptable plant sources and do not involve animal slaughter, hence aligning with Islamic dietary laws, provided that no forbidden elements are used in their production. Some individuals voiced concerns regarding the additives, flavourings, and processing agents employed in production, observing that these components might potentially compromise Halal certification. The tension between the superficial plant-based composition of the product and the details of its industrial processing illustrates a broader challenge associated with novel food technologies, where the distinction between acceptable and unacceptable may not always be readily apparent to the consumer (Ho et al., 2023).

In comparison to data from other Muslim-majority contexts, Malaysia's focus on Halal certification as a prerequisite for the adoption of plant-based meat seems to align with a wider regional trend. A study in Singapore revealed that Muslim consumers equally emphasised Halal compliance, while assessing plant-based alternatives, with certification being the foremost criterion for approval (Ho et al., 2023). The Malaysian setting is unique due to the robustness and institutionalisation of its Halal regulatory framework through JAKIM, which offers a structured and generally acknowledged certification system. This institutional power may both promote and hinder the adoption of plant-based meat, promoting it by offering a clear and reliable route to Muslim consumer acceptability, while hindering it by imposing a greater compliance burden on producers attempting to enter the market.

Moreover, Malaysia's multicultural environment fosters diverse viewpoints, with youths from various ethnic origins exhibiting differing degrees of familiarity and acceptance of plant-based meat products. This diversity aligns with research indicating that Malaysians favour white meat over red meat, illustrating cultural preferences that influence the evaluation of alternatives (Zayadi, 2021; Drewnowski et al., 2020). Moreover, youths express the necessity for cultural compatibility, indicating that effective integration necessitates plant-based alternatives that harmonise with traditional Malaysian cuisine and culinary techniques. The findings indicate that cultural and religious settings are essential in shaping Malaysian youth's perceptions of plant-based meat products, necessitating strategies that acknowledge and integrate these significant aspects. This insight substantially enhances prior research by demonstrating

how religious considerations, particularly Halal certification and the institutional role of JAKIM, interact with various elements to influence attitudes within Malaysia's largely Muslim context.

5.2.7 Summary of Discussion on Perception of Plant-Based Meat Products

This discussion provided a comprehensive analysis of Malaysian youths in tertiary institutions' perceptions of plant-based meat products, illustrating the various elements that influence their perspectives. Perceptions are shaped by taste expectations, health considerations, financial constraints, cultural backgrounds, and personal beliefs. Malaysian youths have a nuanced comprehension of plant-based meat products, acknowledging both its possible advantages and disadvantages instead of merely adopting simple claims. Their assessments indicate an increasing knowledge of the extent of processing in various alternatives and the necessity for transparent information regarding ingredients and nutrition, along with global trends identified in studies (Shireen et al., 2024; Kyriakopoulou et al., 2021).

These findings both validate and augment prior research significantly. Initially, they emphasise the vital importance of sensory experience in product acceptance, highlighting that taste and texture are fundamental for consistent usage (Godschalk-Broers et al., 2022). Secondly, they emphasise the distinctive impact of cultural and religious backgrounds, particularly the significance of Halal certification and the institutional function of JAKIM within Malaysia's framework. Third, they demonstrate meticulous consideration of nutritional trade-offs, with youths acknowledging that plant-based meat products vary in health advantages (Bogueva et al., 2023). The cross-cultural comparisons presented in this discussion reveal that Malaysian youth perceptions are influenced by a distinct interplay of religious dietary mandates, culturally rooted meat tradition, and socioeconomic limitations that set them apart from consumer demographics in other markets. The critical examination of how terminology like "fake meat" influences consumer acceptability introduces a discursive aspect to perception study that transcends mere sensory and economic considerations. These insights theoretically enhance the Theory of Planned Behaviour (TPB) by illustrating the interaction of cultural and religious influences with attitudes, social norms, and personal control in shaping perceptions of plant-based meat products in Malaysia.

The results indicate that the successful introduction of plant-based meat products in Malaysia necessitates addressing several factors: enhancing flavour through continuous innovation, reducing costs, ensuring appropriate Halal certification, and offering transparent information regarding ingredients and processing methods. Moreover, social networks and digital marketing seem essential for fostering favourable associations and motivating youth to experiment with these items. Future research should explore how perceptions evolve as products enhance and gain prevalence, analyse the enduring impacts of education on attitudes, and analyse the influence of tailoring plant-based meat to diverse cultural tastes on acceptability. As awareness increases regarding the advantages of reducing meat intake (Fonmboh et al., 2021), comprehending these perception patterns will be crucial for formulating effective methods to encourage sustainable eating among Malaysian youths. This comprehension grows progressively significant as Malaysia evolves into a market for plant-based alternatives in Southeast Asia.

5.3 Motivation of Plant-Based Meat Products Among Malaysian Youths

This section discusses the motivational factors shaping Malaysian youth attitudes toward plant-based meat products. The analysis reveals a complex interplay of drivers, including environmental consciousness, health awareness, ethical considerations, and social influences. By connecting these findings to existing literature, this discussion illuminates how young Malaysians navigate their consumption decisions within their unique sociocultural context. These insights provide a valuable understanding of the multifaceted motivations driving the adoption of plant-based meat products among tertiary institution youth in Malaysia.

5.3.1 Opinions and Feelings About Purchasing Plant-Based Meat Products

The findings regarding youth perspectives on purchasing plant-based meat products indicate a nuanced interplay of motivations and obstacles, thereby enhancing and broadening the current body of study. Price sensitivity emerged as the foremost issue, with the majority of youths recognising cost as the principal barrier to consistent usage. This corresponds with studies indicating that plant-based meat products are

frequently perceived as pricier than animal-based alternatives, rendering them unaffordable, particularly for individuals with limited financial resources (Reis, 2022). In Malaysia, the gap is clear, conventional meat products often costs less than RM10 for regular servings, whereas plant-based options may exceed RM18 for comparable quantities (Lee, 2021). For university students with constrained finances, this difference renders plant-based solutions impractical for daily meals, underscoring that affordability is a crucial determinant of consumption.

The intensity of cost concerns among Malaysian youths is underscored when seen within the wider socioeconomic framework. In contrast to consumers in higher-income markets, where the price premium for plant-based products may be more readily accommodated, Malaysian youths in tertiary institutions face considerably stricter budgetary limitations. The lack of institutional support aimed at enhancing the affordability of plant-based foods places the financial burden of this pricing disparity squarely on individual students. The differences between urban and rural settings compound this issue, as youths in major cities may have increased access to plant-based options but also contend with elevated living expenses, whilst individuals in semi-urban or rural locales confront both inflated prices and restricted product availability. The convergence of affordability and geography establishes a twin barrier that is especially pronounced in the Malaysian context.

Furthermore, environmental issues and health advantages emerged as equally compelling incentives, illustrating how youths weigh both personal wellness and ecological sustainability in their dietary decisions. The results align with prior studies that identify health and sustainability as primary motivators for interest in plant-based foods (Havermans et al., 2021; Austgulen et al., 2018). The equal emphasis on environmental and health motivations is significant, as prior research frequently identifies health as the predominant factor (Abu Bakar et al., 2023). This transition indicates that environmental consciousness is attaining equal significance to personal health among Malaysian youth, likely as a result of increased exposure to sustainability discussions through education and media. The comparison of significant cost sensitivity and authentic environmental and health motivation among Malaysian youths is a distinctive trend when compared to findings from other markets. In higher-income markets, environmentally motivated consumers are typically more financially equipped to bear the price premium of plant-based alternatives. Conversely, Malaysian youth

exhibit a scenario where positive motivation and practical constraints coexist, resulting in a notable gap between intention and behaviour.

Taste and texture were identified as considerable obstacles, highlighting the profound cultural significance attributed to sensory experience in Malaysian culinary traditions. This supports other studies indicating that numerous consumers see plant-based meat as less fulfilling than conventional meat, potentially diminishing their inclination to transition (Katare et al., 2022). The cultural elevation of sensory issues among Malaysian youth deserves particular focus. Informers indicated that plant-based meat products are perceived as less appropriate, both in terms of overall flavour and in the context of specific Malaysian culinary traditions. This indicates that sensory barriers in Malaysia are not merely related to product quality in theoretical terms, but are intricately connected to the cultural expectations of what constitutes a fulfilling meal within the Malaysian culinary heritage.

Collectively, these insights indicate that Malaysian youths make dietary choices by balancing values and practical constraints. This corresponds with the TPB, wherein attitudes, social factors, and perceived control influence individuals' actions (Graça et al., 2015). The distinction between environmental concern and the affordability of plant-based alternatives underscores how financial limitations might impede favourable dispositions. This disconnect between intention and action has been previously seen in consumer research (Lin-Schilstra et al., 2020). Despite the increasing environmental awareness, financial obstacles persist as a considerable hurdle. For substantive change to occur, initiatives must extend beyond awareness-raising to prioritise the affordability and accessibility of plant-based meat products for Malaysian youths.

5.3.2 Importance of Purchasing Plant-Based Meat Products Considering Environmental Concerns

Building upon the previous analysis of general opinion, an examination of the significance of environmental issues indicates that Malaysian youth possess a comprehensive and informed comprehension of plant-based meat products. The predominant rationale stated by youths was the environmental advantages, as many articulated that these items conserve resources, reduce carbon emissions, and safeguard the ecosystem. This corresponds with prior studies that recognise environmental

sustainability as a primary factor influencing individuals to select plant-based alternatives (Erfanian, 2024; Sánchez-Sabaté et al., 2019). Numerous informers acknowledged that animal agriculture substantially contributes to global greenhouse gas emissions, around 14.5% according to existing data (Sharma et al., 2021), indicating that environmental awareness reaches this demographic through education and public communication.

Furthermore, environmental awareness and personal values surfaced as a significant subject, demonstrating that sustainability is not merely an idea but rather a component of youth's self-perception during their university years. This extends previous findings by demonstrating that environmental awareness is now linked to identity and moral convictions among certain Malaysian youths, providing a robust rationale for embracing plant-based diets (Sánchez-Sabaté et al., 2019). The convergence of environmental issues with Malaysia's cultural and religious framework necessitates examination. Certain informers articulated their environmental concerns in a manner that demonstrated a sincere moral obligation to the natural world, conveying that environmental stewardship was perceived as an ethical imperative beyond mere practical considerations. This ethical stance on environmental protection, although not explicitly expressed in religious language by informers, aligns with broader literature indicating that personal values and ethical beliefs significantly influence environmental motivation among youth (Sánchez-Sabaté et al., 2019). In Malaysia, where religious and cultural values are vital to daily life, it is reasonable to note that moral frameworks, whether religious or personal, may serve as a fundamental basis for environmental concern among youth, even if not explicitly identified as such.

A significant finding is the manner in which teenagers reconcile environmental goals with practical problems. This study demonstrates that Malaysian youths value environmental concerns alongside cost, taste, and accessibility, despite previous research emphasising environmental issues. The concerns raised by certain informers regarding the genuine environmental effects of plant-based meat products merit examination. The doubts seem to stem from several factors, including exposure to contradictory information in the media, insufficient transparency in product labelling concerning environmental claims, and a general scepticism about the impact of individual dietary choices on significant environmental issues. This critical perspective, although it may occasionally result in inaction, also signifies an advancing

environmental literacy that requires substantiation instead of accepting assertions uncritically.

The environmental awareness exhibited by Malaysian youths reveals both alignment with and deviation from global trends when compared to data from other regions. Research repeatedly indicates that environmental concern is an increasing driver for the adoption of plant-based meat among younger populations worldwide (Erfanian, 2024). In the Malaysian context, environmental motivation among youth is unique due to the presence of significant practical barriers associated with cost and cultural food identity, indicating that environmental awareness alone cannot facilitate adoption without concurrent enhancements in affordability and accessibility.

Some youths expressed scepticism regarding the environmental advantages of plant-based meat products, challenging the validity of the assertions supported by empirical research. This corroborates with studies indicating that not all consumers perceive environmental arguments as sufficiently compelling to alter their behaviours (Jähn et al., 2021). Nevertheless, the essence of this scepticism, centred on evidence and openness, indicates that Malaysian youths engage in critical thinking and seek trustworthy information prior to endorsing assertions. These findings indicate that Malaysian youth engage with environmental concerns in a balanced manner, demonstrating concern for the world while remaining anchored in everyday circumstances. This amalgamation of optimism and pragmatic reasoning aligns with the TPB, wherein environmental attitudes interact with individual limitations to influence teenage dietary choices (Graça et al., 2015).

5.3.3 Perceived Benefits of Purchasing Plant-Based Meat Products

The analysis of perceived benefits reveals that environmental sustainability is the most significant advantage recognised by Malaysian youth. Their results clearly show the impact of dietary selections on the environment, highlighting specific advantages such as reduced carbon emissions, conservation of natural resources, and reduced pollution. The findings robustly support prior research emphasising environmental concerns as a primary factor in the selection of plant-based meat alternatives (Erfanian, 2024; Sharma et al., 2021). These findings correspond with research indicating that an increasing number of customers acknowledge the

environmental implications of meat production and are seeking alternatives with reduced ecological impact (Springmann et al., 2018).

The health benefits were almost as significant, with youths noting decreased saturated fat, lowered cholesterol, and enhanced nutrient content as primary advantages. Simultaneously, many recognised that these products might be deficient in certain vital nutrients. This balanced perspective demonstrates a deeper comprehension than is frequently presumed. While certain studies identify a health halo effect, wherein individuals presume plant-based diets are healthier without comprehensive information (Gonzales et al., 2023), Malaysian youth in this research demonstrated heightened understanding, acknowledging both advantages and potential drawbacks. Their comprehension aligns with research indicating that plant-based meat alternatives can enhance health by reducing saturated fat and increasing fibre, nevertheless, caution is warranted about minerals such as vitamin B12, iron, and zinc (Costa-Catala et al., 2023; Melville et al., 2023).

The inquiry into how youths recognise these dietary advantages and deficiencies is significant. Certain informers exhibited knowledge seemingly derived from personal health experiences, such as addressing diet-related diseases within their families, while others depended on general media exposure. The disparity in nutritional knowledge indicates that formal nutrition education in higher education institutions could significantly aid youth in acquiring a more precise and thorough understanding of the nutritional benefits of plant-based meat products, as well as identifying when supplementation or dietary diversification is required.

Ethical considerations significantly influence, particularly in relation to animal welfare. A significant number of youths perceive the selection of plant-based meat alternatives as a means to advocate for more humane treatment of animals, indicating that ethical considerations are progressively influencing dietary choices. This aligns with research that recognises ethics as a substantial factor in consumer decision-making (Briscoe, 2022; Bir et al., 2019). The ethical impetus among Malaysian youth seems to stem from both international dialogues over animal rights and local cultural and religious principles that underscore compassion and accountability towards sentient beings. Although global awareness has impacted youth through media and online content, the articulation of ethical concern among Malaysian informers was frequently articulated in culturally and religiously specific terms, mirroring the unique moral framework of Malaysian society rather than a mere acceptance of external discourse.

The balanced perspective exhibited by Malaysian youth, which recognises environmental, health, and ethical advantages while remaining cognisant of constraints, represents a unique contribution of this study when compared to findings from other locations. This comprehensive benefit assessment indicates that Malaysian youth are not merely passive recipients of plant-based meat product marketing, rather, they are engaged and discerning assessors who simultaneously analyse several factors. Simultaneously, youths value the novel alternatives these items provide to their meals, perceiving them as a means to enhance diversity while remaining consistent with Malaysian culinary traditions. Some individuals remain uncertain or hesitant, neither dismissing the concept nor rejecting it, but seeking greater clarity regarding flavour, expense, and processing methods. These perspectives indicate that Malaysian youths evaluate numerous criteria when selecting plant-based meat products. Their decisions are influenced by environmental considerations, health, ethics, flavour, and trust, creating a comprehensive perspective that extends beyond just taste. This multifaceted approach aligns with the TPB, wherein attitudes are shaped by reconciling several factors that may either support or contradict one another (Graça et al., 2015).

5.3.4 Motivation to Try or Consume Plant-Based Meat Products

The data indicates that curiosity and interest in novel culinary trends are the primary motivators for Malaysian youths to experiment with plant-based meat products. For many, the desire to investigate alternatives is often motivated by experience rather than profound personal convictions. This finding supports the results of prior studies while providing a novel perspective. For Malaysian youths, the transition to plant-based diets frequently initiates not from health or ethical considerations, but from a mere openness to experimentation. Youths exhibit a notable receptiveness to culinary innovation, and their interest may minimise the psychological obstacles to sampling unusual items (Bryant et al., 2020). This indicates that curiosity serves as a crucial initial motivating factor, rendering the first move less intimidating and more comparable to an experiment.

The inquiry into how curiosity is ignited among Malaysian youths merits more exploration. Informers consistently identified media and internet exposure as the principal avenue through which they initially discovered plant-based meat products and

developed an interest in them. Certain informers indicated that the availability of these products at restaurants or at events stimulated their curiosity. Moreover, peer recommendations and the experience of dining with friends or family members who are interested in plant-based alternatives were identified as drivers for interest. This indicates that curiosity in the Malaysian context is not solely inherent but is significantly influenced by social exposure and the normalisation of plant-based options within youth social settings. Strategies that utilise these curiosity triggers, including sampling opportunities in campus environments, prominent menu placement in student-frequented food outlets, and genuine peer-to-peer sharing of product experiences, may be more effective in promoting initial trial than extensive marketing campaigns alone.

Health and nutrition ranked second as a significant incentive, with youths associating plant-based meat products with personal well-being and illness prevention within their typical dietary practices. This corresponds with studies indicating that health is a primary factor influencing individuals to select plant-based alternatives (Abu Bakar et al., 2023; Bryant et al., 2020). Numerous informers identified distinct advantages, including a reduced risk of heart disease and elevated cholesterol levels, confirming findings that these products often include lower saturated fat content and higher dietary fibre than traditional meat (Shireen et al., 2024; Alessandrini et al., 2021). The emphasis on health indicates an increasing knowledge of diet-related health issues among Malaysian youth, as evidenced by previous research (Mamun et al., 2020).

Environmental issues are significant, with youths perceiving plant-based meat products as a means to safeguard the earth. This supports research indicating that individuals concerned about the environment are more inclined to select options that reduce the ecological effects of their diets (Hwang et al., 2020; Austgulen et al., 2018). Ethical considerations, including concern for animal suffering, were noted, alongside personal health objectives such as addressing medical illnesses or altering lifestyle choices. These results align with research regarding the motivations for adopting plant-based diets (Bryant et al., 2021; Sánchez-Sabaté et al., 2019).

The relatively minor role of ethical motivation among Malaysian youths, in comparison to curiosity and health, merits examination. This pattern may illustrate the cultural and religious background of Malaysia, where the ethical aspects of food selection are frequently influenced by religious frameworks like Halal compliance rather than secular animal rights discourse. For numerous Muslim youths, the ethical treatment of animals is already encompassed under Islamic slaughter practices, perhaps

diminishing the desire to pursue plant-based alternatives solely on ethical grounds. This contrasts with Western environments, where animal welfare campaigning has traditionally served as a principal motivator for adopting plant-based diets outside religious considerations (Sánchez-Sabaté et al., 2019). The Malaysian model indicates that ethical motivation is there, however manifested and perceived differently within the local cultural and religious framework.

These data indicate that Malaysian youths are attracted to plant-based meat products in various manners. Curiosity frequently leads the opportunity to cultivate interest in health, environmental preservation, and ethics throughout time. This aligns with the TPB, wherein actions originate from basic intents and intensify as they align with personal values and social standards (Graça et al., 2015). To promote broader adoption, initiatives should initially render these items attractive and accessible for trial, subsequently reinforcing that experience with messages aligned with youth values.

5.3.5 Ethical and Animal Welfare Concerns When Choosing Plant-Based Meat Products

Upon a closer analysis of ethical issues, it is evident that numerous Malaysian informers prioritise animal welfare in their decision-making about plant-based meat products. For them, compassion for animals has become a significant aspect of food-related values. This conclusion supports previous research indicating that individuals with a strong commitment to animal welfare are more inclined to diminish their meat consumption (Sánchez-Sabaté et al., 2019; Fuseini et al., 2018). Informers in this study frequently demonstrated a nuanced understanding of animal rights, the implications of industrial farming, and the ethical obligations associated with consumption. Their reflections align with the profound dedication exhibited by ethically motivated vegetarians (Ruehlman et al., 2022). Furthermore, the informers extended their worries beyond animals. Numerous individuals also associated animal welfare with environmental and health concerns, establishing a more comprehensive ethical framework (Chen et al., 2022). This indicates that for numerous Malaysian informers, dietary selections encompass not merely health or convenience but also adherence to profound ideals of compassion and accountability towards animals.

The manner in which various young groups articulate ethical issues demonstrates significant diversity within the Malaysian sample. Malay Muslim informers occasionally contextualised their ethical concerns on animal welfare within Islamic dietary principles, perceiving Halal slaughter as a humane and divinely endorsed procedure. This perspective indicates that certain Muslim youth may not view traditional meat intake as ethically concerning, as Halal protocols are regarded as sufficiently addressing animal welfare during slaughter. Consequently, the motivation to select plant-based alternatives for ethical reasons may be less persuasive for this demographic compared to youth from non-Muslim families. Non-Muslim informers, comprising Chinese Buddhist, Indian Hindu, and Dayak Christians in this study, articulated ethical concerns influenced by their respective cultural and religious traditions, so illustrating the diversity of ethical frameworks within Malaysia's multicultural culture. This variance highlights the significance of perceiving ethical motivation not as a universal drive but as a culturally and religiously influenced concern that varies among several sectors of the Malaysian youth demographic.

The scenarios where ethical considerations transcend health and environmental objectives also warrant exploration. Informers with robust personal values regarding animal welfare articulated their interest in plant-based alternatives predominantly in ethical terms, whereas those with practical food choices prioritised cost and flavour. This indicates that the significance of ethical motivation is not static but fluctuates based on individual values, personal experiences, and engagement with animal welfare discussions. Comprehending these contextual variances is crucial for formulating communication tactics that resonate authentically with the ethical reasons of diverse young segments, without presuming a uniform moral framework among youth.

Simultaneously, certain informers addressed ethical concerns with diligence and, at times, a critical perspective. Many contemplated whether animal welfare issues had same significance in Islamic eating traditions or if choosing for plant-based meat alternatives can effect change. These perspectives expand upon prior studies by demonstrating how cultural and religious circumstances influence the interpretation of ethical issues (Ho et al., 2023). Moreover, numerous informers prioritised environmental and health issues, frequently influencing their decisions alongside or even beyond animal welfare considerations. This discovery corroborates prior research indicating that ethical, health, and environmental motivations frequently converge in individuals adhering to plant-based diets (Sánchez-Sabaté et al., 2019).

Collectively, these data indicate that Malaysian youths navigate ethical food decisions by integrating values with practical considerations. Their viewpoints allow for diverse interpretations of ethical eating within their cultural context. Instead of perceiving ethics as a static concept, youths rely on cultural, religious, and daily experiences when determining dietary choices. These findings highlight the difficulty of reconciling ethical aspirations with practical realities, similar to the internal conflict noted in previous studies, wherein individuals struggle with aligning their meat intake with their ethical convictions (Bastian, 2018). This conflict appears to be influenced distinctly in Malaysia due to the significant importance of community and religious values in decision-making.

5.3.6 Influence of Social Circle on Willingness to Consume Plant-Based Meat Products

In addition to the ethical analysis, the investigation of social influence reveals that positive reinforcement from social networks is a significant determinant of Malaysian youth's willingness to try plant-based meat products. This underscores the connection between dietary choices and interpersonal interactions as well as social contexts, rather than being solely individual decisions. This finding aligns with previous research indicating that social norms and peer interactions significantly influence dietary behaviour, particularly the choice to embrace plant-based diets (Hwang et al., 2020; Sharps et al., 2020). Informers recounted how relatives, acquaintances, and colleagues motivated them to explore plant-based alternatives, frequently by example, initiating discussions, or facilitating opportunities to share these products during meals. Their descriptions correspond with research indicating that individuals are more inclined to endorse plant-based diets when they observe their peers and networks engaging in similar behaviours (Sharps et al., 2020). In Malaysia, this effect is heightened by a collectivist society where communal dining and family meals are integral to daily life. Due to the communal nature of eating, social approval plays a crucial role in the decision to try plant-based meat alternatives.

The significance of digital media and online communities as a mechanism of social influence warrants particular consideration. Informers indicated that the internet and media served as channels through which they discovered plant-based meat products

and developed an interest in them. Although informers did not elaborate on specific platforms, their references to online content and media exposure imply that digital social contexts significantly contribute to the normalisation of plant-based solutions among Malaysian youth. Research indicates that social media marketing of plant-based meat can enhance youth purchasing intentions through peer-generated material and exposure to internet trends (Li et al., 2022). The digital realm of social influence broadens the scope of peer norms beyond in-person interactions, allowing kids without friends or family who consume plant-based meat to nonetheless encounter societal proof of its acceptability through online platforms.

Comparing the collectivist social influence patterns evident among Malaysian youths with those from more individualistic cultural contexts underscores a significant gap. In Western countries, where individual autonomy in dietary selection is more prominently highlighted, social influence often functions more discreetly, with peer norms affecting attitudes without the necessity of direct encouragement or shared dining experiences (Veen et al., 2023). Conversely, within Malaysian youths, the social aspect of food selection is more pronounced and immediate, as communal dining and family food practices provide direct and observable avenues for social influence to manifest. The collectivist dynamic suggests that including plant-based alternatives into communal meal settings, such as family dinners or campus activities, could be an especially successful approach for normalising these items among Malaysian youth.

The interplay between social influence and additional incentive elements, including health, environmental concern, and ethics, warrants investigation. Informers indicated that peer encouragement does not only replace other incentives but can enhance them, rendering health or environmental rationales more socially validated and thus more actionable. When a reliable friend or family member presents plant-based eating as a healthy or responsible option, it confirms the informer's ideals and grants social endorsement to pursue them. This indicates that social influence operates not just as a supplementary motivator but also as a catalyst that enhances the relationship between values and behaviour among Malaysian youth.

Conversely, certain informers reported making decisions independently and influenced by personal investigation and individual logic instead than collective standards. This exemplifies a type of deliberate autonomy, wherein youths consciously place their ideals and expertise above societal norms. This pattern both mirrors and expands upon prior research on social influence. While previous studies have

underscored the significant influence of societal norms, the present findings indicate that certain Malaysian youths deliberately depend on their own assessments. This supports results that perceived behavioural control (PBC), or the capacity to make independent decisions, might reduce the influence of social norms on (Veen et al., 2023; Sharps et al., 2020; Graça et al., 2015).

Conversely, detrimental or indirect influence was also evident. Certain informers observed that the lack of discussions on plant-based meat products within their social networks constituted an unacknowledged obstacle to adoption. In many instances, it was not overt discouragement but rather quiet, along with the prevalence of traditional eating habits, that rendered plant-based solutions less prominent or attainable. This research builds upon prior studies by demonstrating that social influence encompasses not just encouragement or pressure but also the recognition of plant-based choices in daily interactions.

The significance of social norms and group dynamics is evident. The results indicate that communal behaviours and visibility in social contexts significantly influence the acceptance of plant-based meat products. This corroborates extensive research indicating that individuals are more inclined to embrace plant-based diets when they observe such options normalised in their surroundings (Veen et al., 2023; Talegawkar et al., 2021). These insights indicate that the adoption of plant-based meat products requires persuading individuals and fostering favourable social contexts where these goods are visible, normalised, and easily accessible. This discovery aligns with the TPB, which elucidates how subjective standards, individual attitudes, and perceived control over choices influence intents and decisions (Chen, 2023; Xie et al., 2021; Graça et al., 2015).

5.3.7 Summary on Discussion on Motivation of Plant-Based Meat Products

This section has presented a comprehensive analysis of the motivations of Malaysian youths for consuming plant-based meat products. The study indicates that their decisions are influenced by a confluence of elements that interact in complex ways. The adoption of plant-based meat products among youths in tertiary institutions is influenced by multiple factors, rather than a singular reason. Their decision-making paradigm reconciles idealistic incentives, including ethical principles and

environmental considerations, with practical realities such as cost, flavour, and availability. This paradigm integrates environmental awareness, health considerations, ethical issues, sensory expectations, financial constraints, and social impact, so forming a comprehensive understanding of decision-making processes. Consequently, comprehending the acceptance of plant-based meat products among Malaysian youths necessitates examining the concurrent operation of several reasons, rather than separating them into distinct explanations.

These findings both support and enhance prior studies in several significant aspects. Initially, curiosity surfaced as the primary reason for experimenting with plant-based meat products, presenting a novel addition to the literature that has predominantly emphasised health, environmental, and ethical motivations. The equal emphasis placed on environmental and health considerations indicates that climate awareness may now be regarded as equally significant as health concerns among Malaysian youth, demonstrating an increasing acknowledgement of environmental challenges. The study emphasises the influence of cultural and religious backgrounds on the interpretation of ethical issues. The cross-cultural comparisons presented in this discussion indicate that the motivational patterns of Malaysian youth are influenced by a unique combination of collectivist social influences, religiously informed ethical frameworks, and significant economic limitations, distinguishing them from youth consumers in other cultural settings. The significance of curiosity as motivating factor for the testing of plant-based meat, principally stimulated by media exposure and social sharing, underscores a uniquely Malaysian approach to adoption that remains under-represented in current studies. These findings possess both theoretical and practical importance. They theoretically extend the TPB by illustrating how attitudes, social norms, and individual decision-making autonomy interact variably within distinct cultural contexts to influence the uptake of plant-based meat products.

The findings indicate that attempts to promote plant-based meat products must concurrently address multiple characteristics. While curiosity may initiate interest, enduring adoption is more probable when these items align with personal beliefs, conform to societal conventions, and satisfy practical requirements such as cost-effectiveness and flavour. The report additionally identifies avenues for future investigation. This encompasses longitudinal studies to determine if initial interest results in sustained adoption, a thorough analysis of the impact of religious beliefs on ethical perspectives, and an investigation into the variability of social influence across

cultural contexts. Subsequent studies should investigate how adoption trends evolve as the taste and affordability of plant-based meat products improve.

In conclusion, this discourse has elucidated the complexities of Malaysian youth's perceptions and attitudes towards plant-based meat products. This section contextualises these findings within the broader theoretical framework and research, providing a deeper comprehension of the adoption of sustainable food practices in Malaysia. These insights are essential for academic researchers, policymakers, food producers, and other stakeholders seeking to advance plant-based meat products and enhance the transition to more sustainable food systems in Malaysia.

5.4 Consumption Patterns of Plant-Based Meat Products Among Malaysian Youths

This section examines the consumption patterns and barriers influencing Malaysian youth engagement with plant-based meat products. The analysis reveals a complex interplay of economic constraints, accessibility challenges, and sensory considerations that shape consumption decisions. By connecting these findings to existing literature, this discussion illuminates how young Malaysians navigate their dietary choices within their unique socioeconomic context. These insights provide a valuable understanding of the practical factors determining the adoption of plant-based meat products among tertiary institution students in Malaysia.

5.4.1 Consumption Patterns and Attitudes

The main concern articulated by informers regarding plant-based meat products was their expense. Numerous informers regarded price as the pivotal issue in their purchase decisions, frequently characterising plant-based alternatives as excessively costly in comparison to conventional meat. This conclusion aligns with previous research indicating that plant-based meat products are commonly regarded as premium-priced, hence limiting access for customers with constrained financial means (Cook, 2023; Reis, 2022). This matter was particularly pertinent for Malaysian youths in a developing economy, where meticulous budgeting is crucial to daily existence. Consequently, their consumption decisions demonstrated a practical assessment of

value, with elevated costs posing substantial barriers to the regular adoption of plant-based meat products.

The intersection of cost with other socioeconomic conditions uncovers more aspects of this obstacle that extend beyond just price comparison. Malaysian youth frequently face limitations on food expenditure due to fixed allowances or part-time earnings, indicating that considerably increased spending on plant-based alternatives necessitates a conscious and ongoing financial commitment that many cannot or will not undertake. The lack of subsidies, student discounts, or institutional procurement of plant-based options in campus eating facilities places the entire economic burden of adoption on individual students. Numerous informers indicated a willingness to frequently explore plant-based alternatives if prices were decreased or if economical options were provided in their campus dining settings, implying that institutional and policy interventions aimed at campus food systems could significantly mitigate this obstacle.

Simultaneously, numerous informers conveyed a conditional readiness to sample plant-based meat products, despite not being existing consumers. This indicates that their minimal interaction with these things is primarily influenced by practical obstacles rather than open dismissal or ideological resistance. This pattern supports recent research indicating that youth curiosity and openness significantly influence the acceptance of novel food technology (Li et al., 2022). Nevertheless, informers highlighted challenges in obtaining certain products, especially in rural areas or non-premium supermarkets. Numerous informers expressly stated that they had never observed plant-based meat items at the stores near their residences or educational institutions, with some specifically attributing this absence to residing or studying outside of large urban centres. This directly illustrates the wider Malaysian retail environment, where plant-based meat products are primarily available in large supermarkets and specialised health food stores located in major urban centres, while convenience stores and smaller retail establishments frequented by students in semi-urban or rural regions rarely offer these products. As a researcher, I observe that the uneven distribution of accessibility, as highlighted by informers, indicates that accessibility surpasses simply product availability, it reveals a structural gap in the retail environment that disadvantages youth in less urbanised areas, thereby underscoring the significant impact of geographic location on consumption opportunities.

A significant aspect affecting acceptability was the sensory experience of the products. Numerous informers underscored that flavour and texture were essential in their selection of plant-based alternatives, frequently drawing direct similarities with traditional meat. These views correspond with research that identifies sensory attributes as pivotal to consumer acceptability of plant-based meat products (Forster, 2024; Fiorentini et al., 2020). The cultural aspect of sensory expectation among Malaysian youths enhances this outcome significantly. Informers did not assess plant-based meat products against a generic criterion of meat quality, but rather against the unique flavour profiles and textures characteristic of the Malaysian dishes they frequently consume. This culturally rooted sensory norm indicates that plant-based alternatives encounter a notably rigorous criterion in the Malaysian market, necessitating not just basic meat-like attributes but also modification to the specific culinary contexts favoured by Malaysian youth.

The data indicate that although Malaysian young are becoming more aware of environmental and health issues, these factors alone do not guarantee the consistent adoption of plant-based meat products. Conversely, economic and sensory barriers persist as primary challenges. Consequently, confronting these practical realities is essential for converting favourable attitudes and conditional readiness into enduring consumption behaviours.

5.4.2 Barriers to Frequent Consumption

Based on the previously discussed consumption patterns, the primary barrier identified by informers was cost. A number of youths articulated that the elevated costs of plant-based meat products hinder their consistent incorporation into their diets. This issue highlights prior studies indicating that plant-based meat alternatives typically incur costs 20–30% higher than traditional meat, posing considerable economic difficulties, particularly in developing nations such as Malaysia (Cook, 2023; Lemken, 2021). Informers articulated that this price gap forces them to balance their environmental principles with the constraints of limited budgets, illustrating how financial limitations significantly influence their dietary selections.

The practical implications of cost as a barrier transcend mere unaffordability. Numerous informers expressed a perception of value disparity, contending that the

elevated cost of plant-based meat products was not warranted by the sensory experience they provided. This indicates that cost reduction strategies may be inadequate without concurrent enhancements in product quality, as the perceived value equation necessitates satisfaction in both aspects. From a policy standpoint, interventions to mitigate this dual barrier may encompass assisting local plant-based food producers in lowering production costs, promoting subsidised plant-based options in campus dining facilities, and investigating the potential extension of existing national food assistance programs to enhance access to plant-based alternatives for lower-income youth.

Accessibility has also become a notable challenge. Numerous informers observed that plant-based meat products are not extensively accessible, with availability predominantly confined to supermarkets or upscale shopping centres. This aligns with previous research indicating that uneven food distribution systems result in gaps in availability between urban and rural regions (Ho et al., 2023; Goh et al., 2020; Seleshe et al., 2014). Concrete examples of this accessibility gap were distinctly revealed through informers' testimonies. Several informers indicated that they had never encountered plant-based meat products in the stores, markets, or food establishments in near to their residences or campuses. Others observed that even when they actively sought these products, they were challenging to locate outside of major retail chains situated in urban centres. The advancement and marketing of locally sourced plant-based meat alternatives, which can be distributed through more accessible retail avenues at reduced price points, thus constitutes a strategically significant opportunity for enhancing both affordability and accessibility concurrently.

Flavour was another significant issue highlighted by informers. Numerous individuals underscored that for plant-based meat alternatives to integrate into their habitual diets, they must provide equivalent sensory gratification to traditional meat. This corroborates prior research highlighting taste and texture as pivotal to consumer acceptance of meat alternatives (Wang et al., 2022; Fiorentini et al., 2020). Numerous informers indicated that the flavour and texture of plant-based meat alternatives did not align with the rich and familiar tastes they associate with traditional Malaysian cuisine. Although informers did not consistently specify particular dishes, their references to genuine taste and texture expectations illustrate the extensive Malaysian culinary landscape, wherein meat is employed across a diverse array of richly spiced and deeply rooted cooking traditions. In this context, product development initiatives aimed at the Malaysian market should investigate the adaptation of plant-based meat formulations

to excel in Malaysian culinary settings, rather than depending on product formats primarily intended for different dining occasions.

The findings indicate that price, accessibility, and sensory quality are the primary barriers to the adoption of plant-based meat products among Malaysian youth. Despite the increasing environmental awareness and health motivations, these elements alone cannot overcome the practical challenges faced by youth in their daily decision-making. To achieve broader acceptance of plant-based meat products, it is crucial to tackle affordability and product development, ensuring that the sensory experience aligns with cultural expectations while enhancing accessibility and economic feasibility.

5.4.3 Willingness to Increase Consumption

Many informers indicated a conditional readiness to augment their consumption of plant-based meat products contingent upon a reduction in price. They articulated that lowering prices would be the most immediate and effective way to convert curiosity into habitual consumption. This finding supports and expands upon prior studies indicating that financial factors are the primary driver for adoption among Malaysian youth (Cook, 2023; Reis, 2022). Furthermore, informers consistently indicated that they would be more inclined to incorporate plant-based alternatives into their daily diets if prices were comparable to those of conventional meat. This underscores that financial limitations, rather than ideological opposition, restrict adoption among Malaysian youths in tertiary institutions.

Informers identified specific strategies to effectively reduce this barrier, including promotional pricing and student discounts, increased availability in everyday retail outlets and campus canteens, and the creation of more affordable locally produced alternatives. These recommendations indicate a pragmatic approach to adoption, wherein youth do not seek convincing regarding the value of plant-based alternatives but rather require the necessary conditions to facilitate regular consumption. The differentiation between motivational readiness and practical enablement is crucial for stakeholders, indicating that investments in distribution infrastructure, local production capacity, and institutional procurement may produce more immediate outcomes than solely investing in awareness campaigns.

In addition to affordability, enhanced accessibility was recognised as a vital factor for increased consumption. Numerous informers emphasised that plant-based meat products should be accessible for regular consumption rather than merely as infrequent trials. This supports the findings from earlier research, indicating that accessibility in local shops and restaurants significantly affects the frequency of consumption of these products (Blézins Moreira et al., 2021). Sources indicated that plant-based meat products remain predominantly available in upscale supermarkets and retail environments, rendering them less feasible for everyday consumption. Affordability and accessibility are interconnected, as wider distribution in everyday retail outlets may lower prices through market competition and enhanced sales volume, thereby rendering these products both more affordable and convenient.

Flavour was a crucial factor for sustained adoption. Informers highlighted that, regardless of the affordability and accessibility of plant-based meat products, sensory gratification, especially in terms of taste and texture, would be crucial for sustained consumption. This finding supports prior studies indicating that flavour and texture are pivotal to consumer approval of meat substitutes (Forster, 2024; Fiorentini et al., 2020). Informers emphasised that enhancements in flavour must be experienced within the framework of daily Malaysian cuisine, rather than solely in product formats that are already relatively simple to reproduce. This culturally specific sensory expectation underscores the necessity of product localisation as an essential element of the market development strategy for plant-based meat products in Malaysia.

The findings indicate that although lowering prices and enhancing accessibility are the most immediate strategies to promote adoption, sensory quality is the critical determinant for ongoing consumption. The sustained incorporation of plant-based meat products into the diets of Malaysian youth will hinge on their affordability, accessibility, and cultural acceptability.

5.4.4 Summary of Discussion on Consumption Patterns of Plant-Based Meat Products

This discussion synthesises the findings from all three research questions, illustrating how Malaysian youths in tertiary institutions navigate the complex realities of plant-based meat product consumption. The evidence suggests that economic

constraints, accessibility challenges, and sensory expectations collaboratively influence adoption patterns, rather than functioning independently. These findings both validate and enhance current research in several significant aspects. Initially, they illustrate how Malaysia's urban-rural divide creates different consumption environments, compounding the economic obstacles encountered by youth. Secondly, they emphasise the strong correlation between price perceptions and taste satisfaction, demonstrating that affordability alone is inadequate if products fail to fulfil sensory expectations. Third, they indicate that youth are generally receptive to embracing plant-based alternatives, yet this openness is primarily constrained by practical barriers rather than entrenched ideological opposition.

The discussion underscores that the lack of institutional support, including campus dining inclusivity or student pricing initiatives, constitutes a structural deficiency that reinforces individual-level barriers. The culturally specific sensory expectations of Malaysian youth, rooted in the flavour traditions of Malaysian cuisine, introduce an additional layer to the consumption barrier that extends beyond findings from studies in other cultural contexts. The unique characteristics of the Malaysian consumption landscape highlight the necessity for research rooted in local contexts and intervention strategies informed by local knowledge.

The results robustly endorse the TPB from a theoretical standpoint. Specifically, they demonstrate that PBC, influenced by economic and accessibility factors, exerts a more significant impact on actual consumption than attitudes or social norms alone among Malaysian youth (Ajzen, 2005). Practically, these insights indicate that interventions aimed at promoting adoption should prioritise affordability via competitive pricing and expanded distribution networks. Simultaneously, sensory quality must be considered to ensure that products align with local culinary standards.

This study ultimately presents numerous avenues for future research. Potential areas of investigation encompass analysing the impact of Halal certification on the acceptance of plant-based meat products among Muslim youth in Malaysia, exploring the influence of campus dining facilities in normalising plant-based options, and examining how locally adapted product formulations may more effectively align with Malaysian sensory preferences.

5.5 Impact of the Consumption of Plant-Based Meat Products Among Malaysian Youth

This section discusses the Malaysian youth's perceptions of the impacts of consuming plant-based meat products. The analysis reveals how young Malaysians conceptualise the consequences of these products across three critical dimensions: environmental sustainability, public health implications, and animal welfare considerations. By connecting these perceived impact assessments to existing literature, this discussion illuminates how Malaysian youth evaluate the broader consequences of dietary choices beyond personal preference. These insights provide a valuable understanding of how young Malaysians interpret the environmental, health, and ethical ramifications of plant-based meat products adoption within their unique sociocultural context.

5.5.1 Impact on Nature and the Environment

Within the framework of environmental sustainability, informers expressed a primary concern regarding the consumption of plant-based meat products, specifically their potential impact on reducing deforestation and preserving natural habitats. Furthermore, numerous informers indicated that substituting traditional meat with plant-based alternatives could reduce the demand for land-intensive livestock agriculture, which frequently contributes to deforestation and ecosystem degradation. This viewpoint aligns with previous research indicating that environmental sustainability significantly influences consumer interest in plant-based meat products (Erfanian, 2024; Sánchez-Sabaté et al., 2019). The correlation established between individual dietary selections and forest preservation demonstrates a profound ecological consciousness among Malaysian youth that transcends superficial environmental issues.

The environmental concerns articulated by informers strongly reflect Malaysia's unique ecological context. Malaysia hosts some of the world's oldest and most biodiverse rainforests, with deforestation caused by agricultural expansion, including livestock grazing and feed crop cultivation, posing a significant environmental challenge in the region. The recognition among informers that livestock farming necessitates extensive land use and leads to deforestation illustrates a locally rooted

environmental awareness that links global sustainability issues with the Malaysian ecosystem. The local ecological aspect enhances the significance of plant-based meat products as an environmental solution in Malaysia, surpassing the general greenhouse gas emission arguments prevalent in global discussions on plant-based meat.

Moreover, numerous informers underscored the significance of resource efficiency as an additional environmental advantage, especially in terms of water conservation and the reduction of greenhouse gas emissions relative to traditional meat production. These findings correspond with prior studies that recognise the reduction of environmental impact as a primary incentive for embracing plant-based diets (Sharma et al., 2021; Austgulen et al., 2018). Malaysian youth comprehended that the production of plant-based meat products typically necessitates fewer resources and generates reduced pollution. The depth of environmental awareness among Malaysian youth is remarkable. Instead of merely acknowledging that plant-based diets benefit the environment, informers exhibited an understanding of particular resource factors, including water consumption, land utilisation, and carbon emissions. This degree of detail indicates that environmental education, whether through formal education, media exposure, or personal interest, has provided numerous Malaysian youths with a sufficiently sophisticated framework for assessing the ecological consequences of their dietary selections.

The ecological awareness exhibited by Malaysian youth aligns with global generational trends when compared to findings from other regions. Studies consistently demonstrate that younger demographics exhibit greater environmental awareness than older generations across various cultural contexts (Erfanian, 2024). The Malaysian youth in this study exhibited an awareness rooted in localised ecological issues, specifically regarding deforestation and biodiversity loss, which introduces a unique aspect to their environmental perspective that may not be as prominent in nations with differing ecological contexts.

Simultaneously, certain informers offered more nuanced perspectives, recognising the ecological advantages of plant-based meat alternatives while raising concern regarding their processing. This refined perspective expands upon prior research by demonstrating that environmentally aware consumers are starting to acknowledge trade-offs within sustainable food systems (Wang et al., 2022). Their recognition that not all plant-based meat products possess equal sustainability indicates

a more developed ecological awareness that evaluates the entire product lifecycle rather than presuming that all plant-based alternatives are inherently advantageous.

The findings indicate that environmental awareness among Malaysian youth in higher education is not only increasing but also becoming more nuanced. Consequently, initiatives to advocate for plant-based meat products in Malaysia must emphasise their environmental advantages and tackle overarching issues related to production methods and overall sustainability to effectively resonate with youth motivations.

5.5.2 Impact on Public Health

In addition to the previously mentioned environmental factors, numerous informers emphasised disease prevention as the primary health incentive for consuming plant-based meat alternatives. They explicitly associated these alternatives with reducing the risks of CVD, high cholesterol, and obesity. This observation aligns with prior research that identifies health as a primary motivation for adopting plant-based diets (Abu Bakar et al., 2023; Bryant et al., 2020). Malaysian youth exhibited awareness of the contribution of elevated saturated fat levels in conventional meat to cardiovascular issues. Their responses indicated an increasing awareness of health that aligns with Malaysia's escalating prevalence of diet-related non-communicable diseases.

The health concerns articulated by informers gain heightened importance when considered within Malaysia's particular dietary framework. The culinary culture of Malaysia is distinguished by a robust tradition of meat-centric dishes, frequently prepared with cooking techniques that use substantial amounts of fat. Festive meals and family gatherings, significant cultural events in Malaysian society, often include dishes with substantial traditional meat content. The dietary context indicates that the health risks linked to excessive meat consumption are not theoretical issues for Malaysian youth, but are ingrained in the food traditions that influence their daily eating habits. The informers' awareness of the correlation between elevated meat consumption and chronic disease risk indicates a health consciousness shaped by personal experiences within this particular dietary culture.

The increasing prevalence of non-communicable diseases in Malaysia underscores the significance of health motivation among the youth. The NHMS 2023

indicates that the prevalence of diabetes among Malaysian adults is 15.6%, while CVD accounts for 67% of premature deaths in the nation (Mat Rifin et al., 2025). The increasing number of these statistics through public health campaigns and media coverage is likely to have intensified health awareness among younger Malaysians, rendering the perceived health advantages of plant-based alternatives more prominent. Numerous informers referenced personal or family health experiences with conditions like high cholesterol and diabetes, underscoring the significance of health impact in their assessment of plant-based meat products.

Many informers also noted digestive health advantages as a rationale for contemplating plant-based meat alternatives. They frequently highlighted higher fibre content of these products relative to conventional meat, associating it with enhanced gut health. This finding corroborates previous research while expanding upon it, demonstrating that Malaysian youth have a more nuanced understanding of nutrition rather than depending on vague or generalised health concepts (Costa-Catala et al., 2023). The association of fibre with gut health by numerous informers demonstrates their conscious linkage of dietary choices to particular physical outcomes. This indicates a heightened level of nutritional comprehension among Malaysian youth, implying they are sourcing information from diverse health resources to inform their dietary choices.

Simultaneously, multiple informers conveyed measured viewpoints. While recognising the health advantages, they also scrutinised the nutritional adequacy of extensively processed plant-based substitutes. This more nuanced perspective contrasts with previous studies that frequently depicted consumers as either wholly embracing or entirely rejecting the health assertions of plant-based meat products (Ohlau et al., 2022). In Malaysia, youth seem to adopt a more critical perspective, potentially influenced by cultural culinary traditions and heightened awareness of the dangers linked to ultra-processed foods. Informers expressed specific concerns regarding high sodium levels, the incorporation of food additives, and the possible long-term health implications of frequent consumption of heavily processed alternatives. These concerns align with existing research indicating that numerous commercially available plant-based meat products possess sodium levels and additive profiles that may negate their benefits compared to conventional meat (Rizzolo-Brime et al., 2023). Responding to these concerns through product reformulation, enhanced ingredient profiles, and improved

nutritional transparency in labelling would directly address the health-related apprehensions articulated by Malaysian youth informers.

The relationship between youth health issues and product development strategies is worth highlighting. Informers' recognition of possible micronutrient deficiencies in plant-based meat alternatives, particularly regarding inadequate protein, iron, and vitamin B12, indicates that fortification methods and enhanced nutritional communication may significantly enhance youth confidence in these products as health-promoting dietary choices. Research endorses the increasing implementation of fortification to address micronutrient deficiencies in plant-based alternatives, however, the extent to which fortification effectively addresses these issues is still contested (Elhalis et al., 2023). For Malaysian youth, who already exhibit awareness of these nutritional aspects, clear communication regarding fortification practices and nutritional profiles could help reconcile the gap between perceived and actual health benefits.

These findings indicate that although health consciousness significantly influences the adoption of plant-based meat products among Malaysian youth, it is not uncritical. The acknowledgement of possible processing issues suggests that product developers should focus on the health benefits, overall nutritional quality, and processing techniques to foster greater trust and promote sustained adoption within this demographic.

5.5.3 Impact on Animals

In addition to environmental and health considerations, numerous informers mentioned ethics, particularly animal welfare, as a significant motivation for adopting plant-based meat. They frequently articulated that selecting these products may reduce animal suffering and exploitation in agriculture. This is closely linked to previous research indicating that concern for animals is a primary motivation for individuals adopting plant-based diets (Sánchez-Sabaté et al., 2019; Fuseini et al., 2018). Malaysian youth perceive their food selections as personal preferences and ethical choices associated with the treatment of animals in food production.

The expression of concern for animal welfare among Malaysian youth must be contextualised within Malaysia's multicultural and religious framework. Malay Muslim

informers, constituting the majority of the sample, have the treatment of animals in food production addressed within the parameters of Islamic Halal slaughter requirements, which mandate humane treatment and the reduction of suffering during the slaughter process. The religious context implies that many Muslim youths do not inherently regard conventional meat consumption as ethically concerning regarding animal welfare, as Halal practices are considered to guarantee adequate treatment of animals. For this group, the desire to select plant-based alternatives for animal welfare reasons is consequently less persuasive than it may be for consumers in secular environments, where no religious framework influences the connection between food selection and animal treatment.

Conversely, informers from non-Muslim backgrounds, such as Chinese Buddhist, Indian Hindu, and Dayak Christians, articulated animal welfare concerns influenced by their respective cultural and religious traditions. For the Chinese Buddhist informer, the tradition of vegetarianism in Buddhist practice, driven in part by compassion for all sentient beings, naturally aligns with the animal welfare rationale for plant-based meat. For the Indian Hindu informer, dietary practices within Hindu traditions that prioritise non-harm have established a cultural framework conducive to animal welfare issues. The ethnic and religious disparities in animal welfare motivations underscore the necessity of acknowledging Malaysia's multicultural diversity as a significant factor in comprehending how ethical considerations influence food selections.

The interconnection between ethical implications and Halal integrity constitutes a notably important aspect of animal welfare issues among Malaysian Muslim youth. In this study, Muslim informers cannot assess the ethical superiority of plant-based meat products over conventional meat without considering Halal compliance. In Islamic dietary principles, the humane treatment of animals is not simply an ethical choice but a fundamental aspect of what renders food permissible and virtuous. For Malaysian Muslim youth, the ethical implications of their dietary selections are inherently integrated within the Halal framework, wherein the consumption of properly slaughtered Halal meat is perceived as an ethically justified and religiously endorsed action rather than a morally questionable one. The ethical argument for selecting plant-based alternatives based on animal welfare does not hold the same significance for Muslim youth as it does in secular contexts, as Halal compliance is perceived as already satisfying the ethical responsibility toward animals. This discovery enhances the current

literature on ethical food motivation by emphasising that in religiously diverse and Muslim-majority settings like Malaysia, the notion of ethical impact must be comprehended within the distinct moral and religious frameworks that influence how youth conceptualise and assess ethical eating (Ho et al., 2023). Recognising this aspect is crucial for formulating ethical communication strategies that are culturally relevant and significant to Malaysian Muslim youth, rather than merely imposing Western animal welfare arguments in a context where they may lack the same persuasive impact.

The interplay between animal welfare considerations and other motivational factors, such as health and environmental awareness, is worth examining. Informers who articulated significant animal welfare concerns typically contextualised them within a wider ethical framework that included environmental stewardship and health-oriented dietary choices, rather than viewing them as a singular issue. This indicates that for Malaysian youth motivated by animal welfare, this concern tends to enhance rather than conflict with other motivations, establishing a mutually reinforcing ethical framework that simultaneously supports the adoption of plant-based meat across various dimensions. Comprehending this interrelation is crucial for formulating communication strategies that comprehensively resonate with the values of ethically driven youth, rather than treating animal welfare, environmental concerns, and health as distinct and unrelated selling propositions.

Simultaneously, numerous informers identified factory farming as a significant issue. They condemned practices like confining animals in overcrowded conditions and subjecting them to maltreatment, emphasising that plant-based alternatives may reduce the necessity for such systems. This contributes to existing research by demonstrating that Malaysian youth possess awareness of general animal welfare issues and particular farming practices (Briscoe, 2022). Their concerns were notably detailed, indicating that they may be acquiring knowledge about animal welfare through media and education, both of which significantly influence young people's perspectives on food ethics.

Conversely, certain informers adopted a more cautious position. Although they concurred that plant-based meat alternatives could benefit animals, they questioned the magnitude of the impact given the current low consumption rates of these products. This illustrates the attitude-behaviour gap identified in other studies, indicating that individuals may value animal welfare but fail to adjust their dietary choices accordingly (Lin-Schilstra et al., 2020). In Malaysia, this more cautious perspective may stem from

cultural traditions surrounding meat consumption and the limited availability of plant-based meat products.

The results indicate that animal welfare is significant to Malaysian youth and serves as a compelling rationale for contemplating plant-based meat. Nonetheless, their support is occasionally constrained by uncertainties regarding the impact of these decisions. Consequently, ethical campaigns may be more effective if they integrate moral arguments with compelling evidence demonstrating how plant-based meat products can directly mitigate animal suffering.

5.5.4 Summary of Discussion on Impact of the Consumption of Plant-Based Meat Products Among Malaysian Youth

This discussion illustrates Malaysian youth's perspectives on the various effects of consuming plant-based meat products in three primary domains which is environmental sustainability, public health, and animal welfare. The results support and enhance previous research in several significant aspects. This study demonstrates that Malaysian youth perceive distinct interconnections among environmental, health, and ethical impacts within their social and cultural context, in contrast to most previous studies that examine these areas in independence. Secondly, rather than maintaining simplistic or unilateral perspectives, the informers demonstrated a more nuanced comprehension of the advantages and limitations of plant-based meat products. This indicates that their viewpoints are more nuanced and knowledgeable than commonly presumed in Malaysian studies.

These findings contribute to the TPB by demonstrating that youth perceptions of these impacts significantly influence their attitudes toward plant-based meat. The Attitude to Intention pathway within the TPB suggests that favourable attitudes toward a behaviour result in heightened intentions to perform that behaviour, however, this relationship seems to function in a more nuanced and complex manner among Malaysian youth than is usually shown in Western TPB models. In the Malaysian context, attitude formation is a complex and non-linear process influenced concurrently by cultural identity, religious dietary frameworks, socioeconomic limitations, and exposure to global sustainability discourse. This indicates that, despite favourable attitudes towards plant-based meat products, the conversion of these attitudes into

consumption intentions may be influenced or restricted by factors external to the standard TPB framework, such as Halal compliance requirements, family food norms, and limited availability of affordable options. Recognising this complexity is essential for researchers aiming to implement the TPB in non-Western, religiously diverse, and economically constrained environments.

Moreover, for Malaysian youth, the ethical impacts of plant-based meat consumption are closely linked to the question of Halal integrity. The ethical treatment of animals and compliance to Halal standards are not opposing frameworks but are fundamentally interconnected within the Islamic dietary tradition, where humane animal treatment is a prerequisite for Halal compliance. For Muslim youth, selecting plant-based meat products as a manifestation of ethical concern for animals is not merely a secular moral decision but necessitates assessment within the religious context of permissible and ethical dietary practices. Future research should explicitly investigate how Malaysian Muslim youth reconcile animal welfare ethics with Halal compliance when assessing plant-based meat products, as this intersection constitutes a significant and underexplored aspect of ethical food motivation in Malaysia.

The manner in which youth connect environmental, health, and ethical issues indicates that attitude formation is more complex and interrelated than previous food choice research has represented. Practically, these points underscore the necessity for clear and transparent communication strategies that directly tackle the concerns of Malaysian youth, encompassing reliable information regarding environmental impacts, balanced health messages, and ethically relevant considerations within the Malaysian context.

Simultaneously, these findings pave the way for new paths in future research. This encompasses studies examining the evolution of perceptions regarding plant-based meat products in Malaysia, investigations into the influence of religious and cultural values on concepts of animal welfare and Halal integrity, and analyses of how pricing strategies may correlate with the perceived value of environmental and health advantages. Therefore, comprehending these multifaceted perceptions is crucial for developing evidence-based strategies that assist Malaysian youth in making informed decisions regarding plant-based meat products in higher education institutions.

5.6 Summary

This chapter synthesises the qualitative findings by examining how Malaysian youths in tertiary institutions perceive, are motivated by, and consume plant-based meat products while reflecting on their broader impacts. Youth recognize the health, environmental, and ethical benefits. However, high costs, unmet sensory expectations of taste and texture, and limited accessibility restrict their adoption. Simultaneously, cultural and religious factors play a strong role. Halal certification is considered essential, and the institutional role of JAKIM in providing trusted Halal endorsement is particularly significant for Muslim youth. Traditional meat dishes remain deeply preferred. Moreover, curiosity and social influence act as key entry points for trial, but sustained consumption depends on affordability, product quality, and availability improvements. Cross-cultural comparisons introduced throughout this chapter highlight that Malaysian youth perceptions and motivations are shaped by a distinctive combination of religious dietary requirements, collectivist social norms, culturally entrenched meat traditions, and acute economic constraints that differentiate them from youth consumers in other markets. The TPB Attitude to Intention pathway operates in a more complex and culturally mediated manner in the Malaysian context than Western models typically represent, with Halal compliance, family food norms, and structural accessibility barriers all shaping the translation of positive attitudes into actual consumption behaviour. The chapter concludes that successfully integrating plant-based meat products in Malaysia requires a holistic strategy addressing economic, sensory, cultural, religious, and informational barriers.

CHAPTER 6
CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

The main objective of this study is to explore the perception and motivation behind plant-based meat product consumption among youths in tertiary institutions in Malaysia. Additionally, the study investigates this demographic's overall consumption patterns of plant-based meat products. It also seeks to understand how perception and motivation influence these consumption behaviours. A qualitative method using semi-structured interview questions was employed to gather data for this research. This chapter begins by summarising and highlighting the key findings, followed by a discussion of the study's limitations, implications, and recommendations for future research on plant-based meat product consumption among youths, concluding with final reflections.

6.2 Recapitulation of Findings of the Study

Prior to examining the main findings, the study initially analysed the profiles of the informers in Section 4.3. The 19 informers, Malaysian youths enrolled in diverse tertiary institutions, represented various academic disciplines, ethnicities, religions, and regions of origin. Some originated from urban centres like Selangor, while others came from East Malaysia, specifically Sarawak. This diversity guaranteed that the results encompassed a wide and intricate array of viewpoints regarding the consumption of plant-based meat products in Malaysia, thereby enhancing the study's depth and representativeness.

The primary Research Objective (RO1) was to investigate the impact of perception. Malaysian youth possess a nuanced and complex comprehension of plant-based meat products. Many perceive it as a novel product that tries to replicate the taste, texture, and appearance of traditional meat, rendering it a viable alternative rather than a total dietary transformation. This viewpoint aligns with research indicating that

sensory similarity is a crucial determinant of consumer acceptance (Wang et al., 2022). Numerous individuals acknowledge its potential health and environmental advantages. However, cultural and religious factors significantly influence their perspectives. For Muslim consumers, Halal certification is an essential prerequisite for acceptance (Ho et al., 2023). Simultaneously, profound cultural affiliations with traditional meat-centric cuisines, closely linked to heritage and festivities, pose obstacles to complete acceptance. Youths are typically cognisant of prevalent ingredients like soy and mushrooms, with some linking these products to vegetarian or vegan lifestyles. Nonetheless, their general perspective is cautious. They recognise potential in the concept, yet they harbour scepticism concerning its implementation, especially in relation to taste authenticity and the "health halo" effect, wherein items perceived as healthy may not reliably provide genuine nutritional benefits (Curtain et al., 2019).

The second Research Objective (RO2) aimed to examine the impact of motivation. Multiple factors influence the decision to sample or purchase plant-based meat products, with curiosity emerging as the predominant initial motivator. Numerous informers are attracted by these products to investigate emerging culinary trends and innovations. Health issues, including the reduction of cholesterol and saturated fat, alongside environmental considerations, such as minimising carbon footprint and conserving water, motivate them to experiment. Ethical motivations, particularly the aspiration to safeguard animal welfare, significantly influence a prominent demographic, positioning plant-based meat products as a more humane alternative. Nonetheless, these favourable motivations are frequently contrasted with practical realities. Social influence is often the most critical factor, as endorsements and behaviours from family or friends significantly enhance the propensity to experiment with products. This illustrates the significant influence of social norms on food selection (Hwang et al., 2020; Sharps et al., 2020). Nonetheless, motivations are conditional. Individuals who prioritise ethics or environmental considerations are unlikely to become habitual consumers if the products are prohibitively expensive or do not meet expectations regarding taste and texture.

The third Research Objective (RO3) concentrated on consumption patterns. The results indicated a distinct disparity among perception, motivation, and actual behaviour. Malaysian youth infrequently consume plant-based meat products, primarily as a form of experimentation rather than as a consistent practice. The primary obstacles are economic and practical. The primary barrier is price, as nearly all participants

regarded plant-based meat products as significantly more costly than traditional meat, rendering them unaffordable for students with limited budgets. This mirrors analogous trends observed in international research (Reis, 2022; Lemken, 2021). Accessibility continues to be an issue as the products are not broadly available beyond high-end retailers or urban areas. Moreover, Malaysia's diverse culinary heritage significantly prioritises taste and texture, leading many youths believe that plant-based meat alternatives fail to replicate the genuine experience of consuming actual meat. This discontent, coupled with the elevated cost, frequently deters subsequent acquisitions. The cultural affinity for traditional meat dishes contributes to the hesitance. Nevertheless, despite these obstacles, numerous young individuals indicated a willingness to reconsider plant-based meat products in the future, provided that these products become more economical, accessible, and comparable in taste and texture to traditional meat.

In conclusion, Malaysian youth in higher education institutions are distinctly aware of the health, environmental, and ethical advantages of plant-based meat, and their inquisitiveness and values establish a robust foundation of interest. Widespread adoption is constrained by real barriers, the products are perceived as excessively costly, difficult to locate, and frequently less satisfying than Malaysia's varied and flavourful meat-centric cuisine. To achieve significant acceptance of plant-based meat products, producers and stakeholders must prioritise enhancing affordability, broadening distribution, and improving taste and texture to align with local expectations, while also adhering to cultural and religious standards, including Halal certification. These findings emphasise that success in this market relies on product innovation and a thorough comprehension of the cultural and socioeconomic context influencing Malaysian youth's food selections.

6.3 Discussion and Implications of the Study

This study's findings offer a detailed and empirical understanding of Malaysian youths in tertiary institutions regarding their perceptions, motivations, and consumption of plant-based meat. This discussion illustrates the correlation of these insights with practical, theoretical, and policy implications within Malaysia's evolving food landscape. The study indicates that, despite youth recognising the health,

environmental, and ethical advantages of plant-based meat, their actual consumption remains limited and predominantly experimental. The disparity between awareness and action is not attributable to indifference, but rather to a confluence of practical, economic, and cultural barriers that surpass their favourable dispositions.

The study indicates that this factor serves as the lens through which youths evaluate plant-based meat. According to global studies, sensory attributes like taste and texture were the most significant factors (Wang et al., 2022). Youth did not reject the concept of plant-based meat products. However, they disregarded those that did not align with the rich, meat-centric standards of Malaysian cuisine. This finding underscores that for plant-based meat products to thrive in Malaysia, they must prioritise flavour and textural satisfaction, rather than solely being promoted as healthier or more sustainable options. Some perceived it as "fake" or excessively refined, indicative of widespread consumer scepticism in global studies that increasingly prioritise transparency in labelling and sourcing (Lacy-Nichols et al., 2021). Furthermore, cultural and religious identity was pivotal. Halal certification was mandatory and a stringent requirement for the Muslim majority. This indicates that numerous markets will omit any product lacking a legitimate Halal certification, irrespective of its additional advantages.

The study emphasises a multifaceted array of motivational factors. Curiosity, health considerations, and environmental issues are compelling initial motivations for experimenting with plant-based meat. Nonetheless, these motivations are persistently overshadowed by financial constraints. The price constituted the primary barrier, particularly for students with constrained budgets, supporting previous research that identifies cost as a substantial impediment (Cook, 2023; Reis, 2022). Concurrently, social influence emerged as a significant catalyst. Friends and family significantly influenced the propensity to experiment, and favourable experiences recounted within these groups lowered the barriers to exploration. This indicates that peer networks and community influence may be more efficacious in promoting trial than extensive advertising campaigns.

The study indicates that consumption patterns are inconsistent and exploratory. Youth rarely purchase plant-based meat owing to elevated costs, restricted availability, and recurrent dissatisfaction with flavour and texture. Nonetheless, numerous individuals expressed a willingness to consume it in the future if the products became more economical, more accessible, and more palatable. This indicates a market with

significant potential, albeit currently impeded by practical challenges rather than a deficiency of interest. Producers and retailers should prioritise simplifying the purchasing process and enhancing the consumption experience, rather than attempting to persuade youth of the product's advantages, as they are already cognisant of them. Broadening distribution to supermarkets, wet markets, campus cafeterias, and providing competitively priced alternatives would enhance the accessibility of plant-based meat products for students and young consumers.

The broader implications of these findings are evident. Industry stakeholders, including producers, retailers, and marketers, must implement strategies that directly confront the barriers identified in this study to achieve success with Malaysian youth. Products must provide exceptional flavour and texture while being Halal-certified. Pricing must align with the financial circumstances of students. Distribution must extend beyond premium outlets into conventional retail environments. Marketing should depend less on refined advertisements and more on genuine, socially integrated strategies that leverage peer influence. For policymakers and public health advocates, plant-based meat products could contribute to a healthier and more sustainable diet for youth, provided that issues of affordability and accessibility are resolved. Subsidies, tax incentives, and partnerships may facilitate price reductions. Public campaigns must elucidate the production methods of these products, address processing concerns, and emphasise established nutritional and environmental advantages. The study enhances theoretical discourse by affirming that perception and motivation are fundamental determinants of behaviour. It also underscores research deficiencies, particularly the necessity for longitudinal studies, sensory evaluations, and enquiries into non-student youth.

The complexity of plant-based meat adoption in Malaysia indicates that future research and practice would greatly benefit from interdisciplinary methodologies. Integrating food science with cultural studies may provide deeper understanding of how plant-based meat formulations can be tailored to align with the sensory standards of Malaysian cuisine while honouring the cultural significance inherent in traditional food practices. Integrating consumer behaviour research with public health perspectives could facilitate the design of interventions that concurrently address health literacy, affordability, and dietary transition in culturally sensitive manners. This interdisciplinary collaboration would enhance the academic contributions of future

studies and yield more actionable recommendations for manufacturers, policymakers, and educators aiming to foster sustainable dietary changes among Malaysian youth.

This study departs from simplistic claims that youth inherently adopt plant-based meat. It demonstrates that Malaysian youth are careful, value-oriented, and significantly shaped by cultural and religious paradigms. They are not resistant but rather conditionally receptive, which offers a significant opportunity. Producers and policymakers can harness this demographic's potential by reducing costs, improving accessibility, and enhancing flavour while ensuring Halal compliance. The message is clear, the future of plant-based meat products in Malaysia relies not solely on their ethical or environmental merits, but rather on their capacity to provide an affordable, palatable, and culturally pertinent culinary experience that integrates seamlessly into the daily lives of youth.

6.4 Limitations and Suggestions for Future Research

This qualitative study offers valuable insights into the perceptions, motivations, and consumption patterns of Malaysian youths in tertiary institutions regarding plant-based meat, yet it possesses several limitations. The limitations are associated with the research design and context, recognising them is essential for the accurate interpretation of the findings and for informing future research endeavours.

A primary limitation is the sample size and its representativeness. The research utilised interviews with 19 informers, sufficient to achieve thematic saturation in qualitative analysis, however, the findings cannot be generalised to the wider Malaysian youth demographic, which is highly diverse and encompasses ages 15 to 40 (Faizah, 2007). Despite attempts to incorporate diversity in age, gender, ethnicity, religion, region, and field of study, the sample may still inadequately represent youth from rural East Malaysia or lower socioeconomic backgrounds, who may encounter significant financial obstacles (Cook, 2023; Reis, 2022). Youth in rural areas are likely to face a more significant accessibility barrier identified in this study, as plant-based meat products are primarily available in urban supermarkets and speciality stores, which have limited presence in rural retail settings. Lower-income youth, in both urban and rural environments, may encounter an intensified cost barrier, as the price differential of plant-based alternatives compared to conventional meat constitutes a relatively larger

financial strain for households with limited food budgets. Comprehending these heightened barriers faced by under-represented groups is crucial for formulating more inclusive and equitable strategies to encourage plant-based meat adoption among the entirety of Malaysian youth. This concentration may particularly affect findings concerning accessibility, which was recognised as a major challenge. The emphasis on tertiary students neglects other segments of Malaysian youth, including those in the workforce or vocational training, who may possess distinct motivations and consumption behaviours influenced by financial independence and their daily food surroundings.

A further limitation is the potential for social desirability bias. Due to the data being derived from self-reported perceptions, motivations, and behaviours, respondents may have been swayed to provide socially acceptable responses, particularly regarding ethical or environmental considerations (Lin-Schilstra et al., 2020). Some individuals may have exaggerated their commitment to animal welfare or sustainability, as these are regarded as commendable values, despite their actual purchasing choices being predominantly influenced by cost or flavour. The gap between individuals stated intentions and their actual behaviours is prevalent in consumer research, suggesting that the impact of ethical and environmental considerations may be somewhat exaggerated in this study. Future research could use methodological approaches specifically crafted to mitigate this bias. Anonymous online surveys may reduce the social pressure linked to in-person self-disclosure, enabling respondents to articulate more honest perspectives regarding their true dietary behaviours and motivations. Indirect questioning techniques, which involve enquiring about the behaviours and attitudes of individuals similar to the respondents rather than direct self-inquiry, constitute an alternative method that has demonstrated efficacy in diminishing socially desirable responses in consumer research settings. Integrating these strategies into future mixed-methods designs that leverage the qualitative insights from this study would enhance the precision and dependability of findings concerning ethical and environmental motivations among Malaysian youth.

Another limitation pertains to the temporal scope of the study. The findings provide a simultaneous overview of youth perspectives, yet do not indicate potential changes in these views. As informers age, achieve financial independence, or as the plant-based meat products market evolves with enhanced offerings, reduced costs, and increased accessibility, their perceptions and behaviours may undergo substantial

transformation. A longitudinal approach, tracking the same informers over time, would be beneficial for comprehending how curiosity and initial motivations may or may not result in enduring changes in consumption. This temporal limitation is especially pertinent in the Malaysian context, where the plant-based meat market is undergoing rapid evolution. Emerging local brands are altering pricing structures as production increases, while youth engagement with sustainability discourse through education and media is rapidly expanding. The swiftly evolving market and cultural conditions indicate that results from a single time-point study may become obsolete more rapidly than in stable market environments, rendering longitudinal research not only desirable but especially imperative for documenting the trajectory of plant-based meat adoption among Malaysian youth. Longitudinal findings may directly guide industry stakeholders in timing and sequencing their product development and marketing investments to align with the changing attitudes and purchasing power of this demographic as they advance through various life stages.

Given these constraints, multiple recommendations for subsequent research can be proposed. Initially, subsequent research should augment the sample size and incorporate a broader geographic and socioeconomic diversity. Engaging rural communities and economically disadvantaged youth would provide a more comprehensive understanding of how affordability and accessibility influence adoption on a national scale and within the broader academic discourse (Cook, 2023; Reis, 2022). These findings could directly guide the development of targeted subsidy programs or pricing interventions that consider the distinct economic constraints of various youth segments, allowing policymakers to allocate resources more accurately to the groups facing the most significant affordability challenges. Secondly, quantitative methodologies, including extensive surveys, should complement these qualitative insights. Surveys would enable researchers to accurately assess which barriers (such as cost, flavour, or accessibility) and motivations (such as health, environmental concerns, or ethical considerations) are most prevalent among the wider youth demographic. The results from these surveys could subsequently guide targeted awareness campaigns or subsidy programs by identifying the youth segments that are most motivated yet most constrained, facilitating more efficient and effective policy and marketing interventions.

Third, longitudinal studies should be prioritised. Monitoring a sample of young consumers over an extended period may elucidate whether their initial curiosity, frequently noted by various informers, transitions into habitual consumption as their

situations evolve. Due to the swiftly changing landscape of Malaysia's plant-based meat market, longitudinal studies are essential, as they would document how variations in product availability, pricing, and cultural narratives affect actual consumption behaviour over time, yielding actionable evidence for industry planning and public health strategies. Fourth, experimental or sensory evaluation studies are essential to address the critical barrier of taste and texture. Consequently, collaborating with food scientists to perform blind taste tests comparing plant-based meat products with conventional meat would yield objective data regarding sensory distinctions and inform product enhancements that align more closely with local culinary standards (Forster, 2024; Wang et al., 2022). The sensory findings may provide direct evidence for product development teams, pinpointing specific flavour and texture attributes that Malaysian youth deem most acceptable or deficient, thus informing formulation decisions that enhance the probability of commercial success in the local market. Incorporating food scientists, cultural studies researchers, and consumer behaviour specialists into sensory research would enhance the findings by situating sensory preferences within the wider cultural significances that Malaysian youth associate with their food experiences.

Subsequently, future research should examine the influence of marketing and educational strategies. Given that peer influence and social networks serve as significant motivators, research could examine how targeted campaigns or community-based initiatives can promote increased trial and acceptance. Utilising frameworks like the Theory of Planned Behaviour (TPB) may aid in forecasting and shaping youth intentions by elucidating the impact of attitudes, norms, and perceived control on actual behaviour (Chen, 2023; Graça et al., 2015). The practical significance of this research lies in its potential to guide campus-based educational initiatives, enabling universities and colleges to effectively normalise plant-based options through curriculum integration, inclusion in campus dining, and peer-led sustainability programs that utilise the social influence dynamics identified in this study. By focusing on these aspects, subsequent research can enhance this study and yield more robust, actionable insights to facilitate the sustainable expansion of Malaysia's plant-based meat products market. The next section presents a summary of the chapter.

6.5 Summary

In summary, this study offers meaningful insights into the perceptions, motivations, and consumption behaviours related to plant-based meat products among youths in Malaysian tertiary institutions. The findings indicate that curiosity, concern for health, awareness of environmental issues, and ethical considerations are key factors shaping their attitudes and encouraging them to consider plant-based alternatives. Despite these largely positive views, consumption remains relatively low, hindered by barriers such as high prices, limited availability, concerns about taste and texture, and cultural or religious preferences.

The research highlights the need for product development and marketing strategies to align closely with consumer expectations, particularly regarding affordability, ease of access, and sensory satisfaction. It also emphasises the critical role of Halal certification and cultural sensitivity in influencing acceptance among Malaysia's diverse youth population. The institutional role of JAKIM in providing trusted Halal endorsement represents a particularly significant enabler for Muslim youth acceptance, and manufacturers seeking to reach this demographic should prioritise obtaining recognised Halal certification as a foundational market entry requirement. Moreover, digital platforms emerge as powerful tools for raising awareness and engaging young consumers on the benefits of adopting plant-based diets, though the information conveyed through these channels must be accurate and substantive to build genuine trust rather than superficial trend association.

Although there is evident interest in plant-based meat products among young Malaysians, the study reveals a notable gap between intention and actual behaviour. Closing this gap will require coordinated efforts among industry stakeholders, government bodies, and educational institutions. Key actions should include improving product quality, making affordable plant-based options, expanding distribution channels, and implementing targeted awareness campaigns. Interdisciplinary collaboration across food science, cultural studies, consumer behaviour research, and public health will be essential for generating the holistic understanding needed to design interventions that are both scientifically grounded and culturally resonant.

Ultimately, plant-based meat products have the potential to play a vital role in promoting healthier eating habits, advancing environmental sustainability, and supporting ethical food systems in Malaysia. These products can move beyond niche

markets through strategic, locally informed interventions and become widely accepted dietary choices. In doing so, they can contribute to building a more sustainable and inclusive food future for the nation.

REFERENCES

Abu Bakar, A. R., Mahzan, N. A., Tarmazi, S. A. A., & Tumin, S. A. (2023). Plant-base Meat as Future Alternative: A Study of Malaysian Consumers Purchase Intention. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, *8*(7), e002397. https://doi.org/10.47405/mjssh.v8i7.2397

Ajzen, I. (2005). Atitudes, Personality and Behavior. In *Mapping social psychology*.

Alcorta, A., Porta, A. Della, Tárrega, A., Álvarez, M. D., & Vaquero, M. P. (2021). Foods for Plant-Based Diets: Challenges and Innovations. *Foods*, *10*(2), 293. https://doi.org/10.3390/foods10020293

Alessandrini, R., Brown, M. K., Pombo-Rodrigues, S., Bhageerutty, S., He, F. J., & MacGregor, G. A. (2021). Nutritional Quality of Plant-Based Meat Products Available in the UK: A Cross-Sectional Survey. In *Nutrients*. https://doi.org/10.3390/nu13124225

Al-Swidi, A. K., Huque, S. M. R., Hafeez, M. H., & Shariff, M. N. M. (2014). The Role of Subjective Norms in Theory of Planned Behavior in the Context of Organic Food Consumption. *British Food Journal*, *116*(10), 1561–1580. https://doi.org/10.1108/bfj-05-2013-0105

Ambedkar, B. R. (2023). *Ecological impacts of poultry waste on urban raptors: conflicts, diseases, and climate change implications amidst pandemic threats-Nishant Kumar*. https://doi.org/10.1101/2023.07.13.546415

Andreani, G., Sogari, G., Marti, A., Froldi, F., Dagevos, H., & Martini, D. (2023). Plant-Based Meat Alternatives: Technological, Nutritional, Environmental, Market, and Social Challenges and Opportunities. *Nutrients*. https://doi.org/10.3390/nu15020452

Anjum, S. (2021). Teaching English Through Critical Pedagogy (CP): Challenges and Coping Strategies in Pakistani EFL Classrooms. *Pakistan Social Sciences Review*, *5*(II), 764–776. https://doi.org/10.35484/pssr.2021(5-ii)58

Apostolidis, C., & McLeay, F. (2016). Should we stop meating like this? Reducing meat consumption through substitution. *Food Policy*, *65*, 74–89. https://doi.org/https://doi.org/10.1016/j.foodpol.2016.11.002

Arshad, M., Anwar, S., Pasha, I., Ahmad, F., & Aadil, R. M. (2022). Development of Imitated Meat Product by Utilizing Pea and Lentil Protein Isolates. *International Journal of Food Science & Technology*. https://doi.org/10.1111/ijfs.15631

Asif, M., Xuhui, W., Nasiri, A., & Ayyub, S. (2018). Determinant factors influencing organic food purchase intention and the moderating role of awareness: A comparative analysis. *Food Quality and Preference*, *63*, 144–150. https://doi.org/https://doi.org/10.1016/j.foodqual.2017.08.006

Austgulen, M. H., Skuland, S. E., Schjøll, A., & Alfnes, F. (2018). Consumer Readiness to Reduce Meat Consumption for the Purpose of Environmental Sustainability: Insights from Norway. *Sustainability*. https://doi.org/10.3390/su10093058

Awang, B. (2023). *New Youth Age Limit to Enhance Their Maturity Level – Experts*. https://www.bernama.com/en/bfokus/news.php?current&id=2256380

Azizi, D. (2020). *Dominican Scholar Dominican Scholar Evaluation of New Dietary Guideline Recommendations on Red Evaluation of New Dietary Guideline Recommendations on Red Meat Consumption Meat Consumption Evaluation of New Dietary Guideline Recommendations on Red Meat Consumption*. https://doi.org/10.33015/dominican.edu/2020.PAS.02

Bagozzi, R. P. (2007). The legacy of the technology acceptance model and a proposal for a paradigm shift. *Journal of the Association for Information Systems*, *8*(4), 244–254. https://doi.org/10.17705/1jais.00122

Bailey-Rodriguez, D. (2021). Qualitatively Driven Mixed-methods Approaches to Counselling and Psychotherapy Research. *Counselling and Psychotherapy Research*, *21*(1), 143–153. https://doi.org/10.1002/capr.12383

Barbera, F. La, & Ajzen, I. (2020). Control Interactions in the Theory of Planned Behavior: Rethinking the Role of Subjective Norm. *Europe's Journal of Psychology*, *16*(3), 401–417. https://doi.org/10.5964/ejop.v16i3.2056

Bassaganya-Riera, J., Berry, E. M., Blaak, E. E., Burlingame, B., le Coutre, J., van Eden, W., El-Sohemy, A., German, J. B., Knorr, D., Lacroix, C., Muscaritoli, M., Nieman, D. C., Rychlik, M., Scholey, A., & Serafini, M. (2021). Goals in Nutrition Science 2020-2025. *Frontiers in Nutrition*, *7–2020*. https://doi.org/10.3389/fnut.2020.606378

Bastian, B. (2018). Changing Ethically Troublesome Behavior: The Causes, Consequences, and Solutions to Motivated Resistance. *Social Issues and Policy Review*. https://doi.org/10.1111/sipr.12048

Bennett, D., Kajamaa, A., & Johnston, J. L. (2020). How to … Do Longitudinal Qualitative Research. *The Clinical Teacher*, *17*(5), 489–492. https://doi.org/10.1111/tct.13203

Bianchi, F. R., Aveyard, P., Astbury, N. M., Cook, B., Cartwright, E., & Jebb, S. A. (2019). Replacing Meat with Alternative Plant-Based Products (RE-MAPs): Protocol for a Randomised Controlled Trial of a Behavioural Intervention to Reduce Meat Consumption. *BMJ Open*. https://doi.org/10.1136/bmjopen-2018-027016

Bianchi, F. R., Stewart, C., Astbury, N. M., Cook, B., Aveyard, P., & Jebb, S. (2022). Replacing Meat with Alternative Plant-Based Products (RE-MAP): A Randomized Controlled Trial of a Multicomponent Behavioral Intervention to Reduce Meat Consumption. *American Journal of Clinical Nutrition*, *115*(5), 1357–1366. https://doi.org/10.1093/ajcn/nqab414

Bir, C., Davis, M., Widmar, N. O., Zuelly, S. M. S., & Erasmus, M. A. (2019). Perceptions of Animal Welfare with a Special Focus on Turkeys. *Frontiers in Veterinary Science*. https://doi.org/10.3389/fvets.2019.00413

Blézins Moreira, M. N., Pereira Veiga, C. R., Su, Z., Reis, G. G., Pascuci, L., & da Veiga, C. P. (2021). Social Media Analysis to Understand the Expected Benefits by Plant-Based Meat Alternatives Consumers. *Foods*. https://doi.org/10.3390/foods10123144

Bochkarev, D. O. (2023). Trends And Prospects for the Development of the Ukrainian Market of Plant-Based Milk Substitutes in The War and Postwar Period. *Economic Innovations*, *25*(1(86)), 34–43. https://doi.org/10.31520/ei.2023.25.1(86).34-43

Bogueva, D., & McClements, D. J. (2023). Safety and Nutritional Risks Associated with Plant-Based Meat Alternatives. In *Sustainability*. https://doi.org/10.3390/su151914336

Boonchooduang, N., Likhitweerawong, N., & Louthrenoo, O. (2019). Association Between Smoking, Alcohol Consumption, and Dietary Habits in Northern Thai Adolescents in Thailand, 2016 - 2017. *Journal of Comprehensive Pediatrics*, *10*(3). https://doi.org/10.5812/compreped.68342

Botezatu, A. (2021). *The Relationship Between Nursing Students' Perceived Sense of Belongingness and Their Willingness to Self-Report Medication Errors in the Clinical Practice Setting: A Feasibility Study*. https://doi.org/10.32920/ryerson.14662908.v1

Boukid, F. (2020). Plant-Based Meat Analogues: From Niche to Mainstream. *European Food Research and Technology*. https://doi.org/10.1007/s00217-020-03630-9

Boukid, F., Hassoun, A., Zouari, A., Tülbek, M. Ç., Mefleh, M., Aït-Kaddour, A., & Castellari, M. (2023). Fermentation for Designing Innovative Plant-Based Meat and Dairy Alternatives. *Foods*, *12*(5). https://doi.org/10.3390/foods12051005

Braun, V., & Clarke, V. (2020). Thematic Analysis. In F. Maggino (Ed.), *Encyclopedia of Quality of Life and Well-Being Research* (pp. 1–7). Springer International Publishing. https://doi.org/10.1007/978-3-319-69909-7_3470-2

Briscoe, M. D. (2022). The Meatless Menu Paradox? Environmental Theory and Plant-Based Fast-Food Options. *Society and Animals*. https://doi.org/10.1163/15685306-bja10105

Bryant, C. (2019). We Can't Keep Meating Like This: Attitudes Towards Vegetarian and Vegan Diets in the United Kingdom. *Sustainability*, *11*(23), 6844. https://doi.org/10.3390/su11236844

Bryant, C., & Barnett, J. (2018). Consumer acceptance of cultured meat: A systematic review. *Meat Science*, *143*, 8–17. https://doi.org/https://doi.org/10.1016/j.meatsci.2018.04.008

Bryant, C., & Barnett, J. (2020). Consumer Acceptance of Cultured Meat: An Updated Review (2018–2020). *Applied Sciences*. https://doi.org/10.3390/app10155201

Bryant, C., & Dillard, C. (2019). The Impact of Framing on Acceptance of Cultured Meat. *Frontiers in Nutrition*. https://doi.org/10.3389/fnut.2019.00103

Bryant, C. J., & Krelling, F. (2020). *Alternative Proteins in Brazil: Nomenclature for Plant Based &Amp; amp; Cultured Meat*. https://doi.org/10.31219/osf.io/zp79k

Bryant, C., & Sanctorum, H. (2021). Alternative Proteins, Evolving Attitudes: Comparing Consumer Attitudes to Plant-Based and Cultured Meat in Belgium in Two Consecutive Years. *Appetite*. https://doi.org/10.1016/j.appet.2021.105161

Bunge, A. C., Mazac, R., Clark, M., Wood, A., & Gordon, L. (2024). Sustainability benefits of transitioning from current diets to plant-based alternatives or whole-food diets in Sweden. *Nature Communications*, *15*(1). https://doi.org/10.1038/s41467-024-45328-6

Busetto, L., Wick, W., & Gumbinger, C. (2020). How to Use and Assess Qualitative Research Methods. *Neurological Research and Practice*, *2*(1). https://doi.org/10.1186/s42466-020-00059-z

Campbell, K., Orr, E., Durepos, P., Nguyen, L., Li, L., Whitmore, C., Gehrke, P., Graham, L., & Jack, S. M. (2021). Reflexive Thematic Analysis for Applied Qualitative Health Research. *The Qualitative Report*. https://doi.org/10.46743/2160-3715/2021.5010

Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., Bywaters, D., & Walker, K. (2020). Purposive Sampling: Complex or Simple? Research Case Examples. *Journal of Research in Nursing*, *25*(8), 652–661. https://doi.org/10.1177/1744987120927206

Caputo, V., Sogari, G., & Van Loo, E. J. (2022). Do Plant-based and Blend Meat Alternatives Taste Like Meat? A Combined Sensory and Choice Experiment Study. *Applied Economic Perspectives and Policy*. https://doi.org/10.1002/aepp.13247

Carfora, V., Cicia, G., & Conner, M. (2021). Editorial: Mind the Sustainable Food: New Insights in Food Psychology. *Frontiers in Psychology*, *12*. https://doi.org/10.3389/fpsyg.2021.725579

Cerami, C. (2023). Alternative meat in the diets of young children. *BMJ Nutrition, Prevention and Health*, *6*, S22–S26. https://doi.org/10.1136/bmjnph-2023-000696

Charlesworth, M., Klein, A. A., & White, S. (2019). A Bibliometric Analysis of the Conversion and Reporting of Pilot Studies. *Six Anaesthesia Journals*, *75*(2), 247–253. https://doi.org/10.1111/anae.14817

Chen, G., Tan, W., Ran, N., Zhang, J., & Yan, B. (2022). Do Urban Tourists Prefer Vegetarianism? An Urban-Rural Comparison of Vegetarian Consumption in China. *Frontiers in Nutrition*. https://doi.org/10.3389/fnut.2022.996158

Chen, M.-F. (2023). Consumer Food Choice Motives and Willingness to Try Plant-Based Meat: Moderating Effect of Meat Attachment. *British Food Journal*, *126*(3), 1301–1324. https://doi.org/10.1108/bfj-04-2023-0330

Cho, D., Nguyen, N., Strong, L. L., C. Wu, I. H., John, J. C., Escoto, K. H., Wetter, D. W., & McNeill, L. H. (2019). Multiple Health Behaviors Engagement in an African American Cohort: Clustering Patterns and Correlates. *Health Education & Behavior*. https://doi.org/10.1177/1090198119826207

Ciobanu, M. M., Manoliu, D.-R., Ciobotaru, M.-C., Anchidin, B.-G., Matei, M., Munteanu, M., Frunză, G., Murariu, O. C., Flocea, E.-I., & Boișteanu, P.-C. (2023). The Influence of Sensory Characteristics of Game Meat on Consumer Neuroperception: A Narrative Review. *Foods*. https://doi.org/10.3390/foods12061341

Circus, V. E., & Robison, R. A. V. (2019). Exploring Perceptions of Sustainable Proteins and Meat Attachment. *British Food Journal*, *121*(2), 533–545. https://doi.org/10.1108/bfj-01-2018-0025

Çoker, E. N., & Linden, S. van der. (2020). Fleshing Out the Theory of Planned of Behavior: Meat Consumption as an Environmentally Significant Behavior. *Current Psychology*, *41*(2), 681–690. https://doi.org/10.1007/s12144-019-00593-3

Cook, B. C. (2023). *Effective Behaviour Change Strategies to Promote Meat Reduction in Brazil*. https://doi.org/10.15868/socialsector.42496

Costa-Catala, J., Toro-Funes, N., Comas-Basté, O., Hernández-Macias, S., Sánchez-Pérez, S., Latorre-Moratalla, M. L., Veciana-Nogués, M. T., Castell-Garralda, V., & Vidal-Carou, M. C. (2023). Comparative Assessment of the Nutritional Profile of Meat Products and Their Plant-Based Analogues. *Nutrients*. https://doi.org/10.3390/nu15122807

Cote, J. (2013). *Running head: A Literature Review on Health 1 A Literature Review of The Health Effects of Plant-Based Diet Versus an Animal-Based Diet*. https://api.semanticscholar.org/CorpusID:22069232

Crimarco, A., Landry, M. J., Carter, M. M., & Gardner, C. D. (2022). Assessing the Effects of Alternative Plant-Based Meats. Animal Meats on Biomarkers of Inflammation: A Secondary Analysis of the SWAP-MEAT Randomized Crossover Trial. *Journal of Nutritional Science*, *11*. https://doi.org/10.1017/jns.2022.84

Curtain, F., & Grafenauer, S. (2019). Plant-Based Meat Substitutes in the Flexitarian Age: An Audit of Products on Supermarket Shelves. *Nutrients*, *11*(11). https://doi.org/10.3390/nu11112603

Dagevos, H., & Voordouw, J. (2013). Sustainability and meat consumption: is reduction realistic? *Sustainability: Science, Practice and Policy*, *9*(2), 60–69. https://doi.org/10.1080/15487733.2013.11908115

Dai, Z., Han, L., Li, Z., Gu, M., Xiao, Z., & Lu, F. (2022). Combination of Chitosan, Tea Polyphenols, and Nisin on the Bacterial Inhibition and Quality Maintenance of Plant-Based Meat. *Foods*, *11*(10), 1524. https://doi.org/10.3390/foods11101524

Davitt, E. D., Winham, D. M., Heer, M. M., Shelley, M., & Knoblauch, S. T. (2021). Predictors of Plant-Based Alternatives to Meat Consumption in Midwest University Students. *Journal of Nutrition Education and Behavior*. https://doi.org/10.1016/j.jneb.2021.04.459

Dorard, G., & Mathieu, S. (2021). Vegetarian and Omnivorous Diets: A Cross-Sectional Study of Motivation, Eating Disorders, and Body Shape Perception. *Appetite*. https://doi.org/10.1016/j.appet.2020.104972

dos Santos, J. I. A. S., Pinheiro, A. B., Prado, P. H. M., & da Costa, M. F. (2024). Unveiling Consumer Perspectives of Plant-Based Meats: Insights from a Comprehensive Review of the Literature. *Sustainability*, *16*(24). https://doi.org/10.3390/su162410836

Drawsheh, A. (2016). *Motivation Definition and General Chatacterization*. https://api.semanticscholar.org/CorpusID:222220233

Drewnowski, A., Mognard, É., Gupta, S., Ismail, M. N., Karim, N. A., Tibère, L., Laporte, C., Alem, Y., Khusun, H., Februhartanty, J., Anggraini, R., & Poulain, J. (2020). Socio-Cultural and Economic Drivers of Plant and Animal Protein Consumption in Malaysia: The SCRiPT Study. *Nutrients*, *12*(5), 1530. https://doi.org/10.3390/nu12051530

Eckl, M. R., Biesbroek, S., Veer, P. van 't, & Geleijnse, J. M. (2021). Replacement of Meat with Non-Meat Protein Sources: A Review of the Drivers and Inhibitors in Developed Countries. In *Nutrients*. https://doi.org/10.3390/nu13103602

Elhalis, H., See, X. Y., Osen, R., Chin, X. H., & Chow, Y. (2023). Significance of Fermentation in Plant-Based Meat Analogs: A Critical Review of Nutrition, and Safety-Related Aspects. *Foods*. https://doi.org/10.3390/foods12173222

Erfanian, S. (2024). Cultivating a Greener Plate: Understanding Consumer Choices in the Plant-Based Meat Revolution for Sustainable Diets. *Frontiers in Sustainable Food Systems*. https://doi.org/10.3389/fsufs.2023.1315448

Erhardt, J., & Olsen, A. (2021). Meat Reduction in 5 to 8 Years Old Children—A Survey to Investigate the Role of Parental Meat Attachment. *Foods*, *10*(8), 1756. https://doi.org/10.3390/foods10081756

Estell, M., Hughes, J., & Grafenauer, S. (2021). Plant protein and plant-based meat alternatives: Consumer and nutrition professional attitudes and perceptions. *Sustainability (Switzerland)*, *13*(3), 1–18. https://doi.org/10.3390/su13031478

Faizah, Y. (2007). *Youth for Nation Building Youth Employment and Employability in Malaysia.*

Fingerhut, J., Moeyaert, M., Manolov, R., Xu, X., & Park, K. H. (2023). Systematic Review of Descriptions and Justifications Provided for Single-Case Quantification

Techniques. *Behavior Modification*, *47*(5), 1115–1143. https://doi.org/10.1177/01454455231178469

Fiorentini, M., Kinchla, A. J., & Nolden, A. A. (2020). Role of Sensory Evaluation in Consumer Acceptance of Plant-Based Meat Analogs and Meat Extenders: A Scoping Review. *Foods*. https://doi.org/10.3390/foods9091334

Flint, M., Bowles, S., Lynn, A., & Paxman, J. (2023). Novel Plant-Based Meat Alternatives: Future Opportunities and Health Considerations. In *Proceedings of the Nutrition Society*. https://doi.org/10.1017/s0029665123000034

Fonmboh, D. J., Aba, E. R., Awah, T. M., Fokunang, T. E., Ndasi, N. P., Ngangmou, N. T., Tita, B. L., Nono, N. B., Samelle, E. A. E., Fokunang, B. L., Nubia, K. C., & Ntungwen, F. C. (2021). The Advances of Plant Product Meat Alternatives as a Healthier and Environmentally Friendly Option for Animal Meat Protein Consumption. *Asian Journal of Biotechnology and Bioresource Technology*, 23–40. https://doi.org/10.9734/ajb2t/2020/v6i430087

Forster, R. A. (2024). Comparing the Sensory Properties of Commercially Available Animal and Plant-based Burgers. *Journal of Texture Studies*. https://doi.org/10.1111/jtxs.12838

Fresán, U., & Rippin, H. (2021). Nutritional Quality of Plant-Based Cheese Available in Spanish Supermarkets: How Do They Compare to Dairy Cheese? In *Nutrients*. https://doi.org/10.3390/nu13093291

Fuseini, A., & Sulemana, I. (2018). An Exploratory Study of the Influence of Attitudes Toward Animal Welfare on Meat Consumption in Ghana. *Food Ethics*. https://doi.org/10.1007/s41055-018-0028-6

Gao, H., Abu Bakar, S., Maulan, S., Mohd Yusof, M. J., Mundher, R., & Zakariya, K. (2023). Identifying Visual Quality of Rural Road Landscape Character by Using Public Preference and Heatmap Analysis in Sabak Bernam, Malaysia. *Land*, *12*(7). https://doi.org/10.3390/land12071440

Ghammachi, N., Dharmayani, P. N. A., Mihrshahi, S., & Ronto, R. (2022). Investigating Web-Based Nutrition Education Interventions for Promoting Sustainable and Healthy Diets in Young Adults: A Systematic Literature Review. *International Journal of Environmental Research and Public Health*, *19*(3), 1691. https://doi.org/10.3390/ijerph19031691

Godschalk-Broers, L., Sala, G., & Scholten, E. (2022). Meat Analogues: Relating Structure to Texture and Sensory Perception. *Foods*. https://doi.org/10.3390/foods11152227

Goh, E. Von, Azam-Ali, S. N., McCullough, F., & Mitra, S. (2020). The Nutrition Transition in Malaysia; Key Drivers and Recommendations for Improved Health Outcomes. In *BMC Nutrition*. https://doi.org/10.1186/s40795-020-00348-5

Gonzales, G. E., Berry, C., Meng, M. D., & Leary, R. B. (2023). Identifying and addressing the "Health Halo" Surrounding Plant-Based Meat Alternatives in Limited-Information Environments. In *Journal of Public Policy & Marketing*. https://doi.org/10.1177/07439156221150919

Graça, J., Calheiros, M. M., & Oliveira, A. (2015). Attached to Meat? (Un)Willingness and Intentions to Adopt a More Plant-Based Diet. *Appetite*, *95*, 113–125. https://doi.org/10.1016/j.appet.2015.06.024

Graça, J., Godinho, C., & Trüninger, M. (2019). Reducing Meat Consumption and Following Plant-Based Diets: Current Evidence and Future Directions to Inform Integrated Transitions. *Trends in Food Science & Technology*, *91*, 380–390. https://doi.org/10.1016/j.tifs.2019.07.046

Graça, J., Oliveira, A., & Calheiros, M. M. (2015). Meat, beyond the plate. Data-driven hypotheses for understanding consumer willingness to adopt a more plant-based diet. *Appetite*, *90*, 80–90. https://doi.org/https://doi.org/10.1016/j.appet.2015.02.037

Grasso, A. C. (2023). The Potential of Food Fortification as an Enabler of More Environmentally Sustainable, Nutritionally Adequate Diets. *Nutrients*. https://doi.org/10.3390/nu15112473

Grasso, A., Olthof, M. R., Dooren, C. van, Broekema, R., Visser, M., & Brouwer, I. A. (2021). Protein for a Healthy Future: How to Increase Protein Intake in an Environmentally Sustainable Way in Older Adults in the Netherlands. *Journal of Nutrition*. https://doi.org/10.1093/jn/nxaa322

Guedes, M. R., & Klein, M. R. S. T. (2021). Cardiovascular Benefits of Plant-Based Diets. *International Journal of Cardiovascular Sciences*, *35*(1), 11–13. https://doi.org/10.36660/ijcs.20210262

Gupta, N., Patel, H. D., Taylor, J., Borin, J. F., Jacobsohn, K., Kenfield, S. A., Eggener, S. E., Price, C., Davuluri, M., Byrne, N., Bivalacqua, T. J., & Loeb, S. (2022). Systematic review of the impact of a plant-based diet on prostate cancer incidence

and outcomes. *Prostate Cancer and Prostatic Diseases*, *25*(3), 444–452. https://doi.org/10.1038/s41391-022-00553-2

Hagmann, D., Siegrist, M., & Hartmann, C. (2019). Meat Avoidance: Motives, Alternative Proteins and Diet Quality in a Sample of Swiss Consumers. *Public Health Nutrition*. https://doi.org/10.1017/s1368980019001277

Hall, S., & Liebenberg, L. (2024). Qualitative Description as an Introductory Method to Qualitative Research for Master's-Level Students and Research Trainees. *International Journal of Qualitative Methods*, *23*, 16094069241242264. https://doi.org/10.1177/16094069241242264

Hartmann, C., & Siegrist, M. (2017). Consumer perception and behaviour regarding sustainable protein consumption: A systematic review. *Trends in Food Science & Technology*, *61*, 11–25. https://doi.org/https://doi.org/10.1016/j.tifs.2016.12.006

Havermans, R. C., Rutten, G. M., & Bartelet, D. (2021). Adolescent's Willingness to Adopt a More Plant-Based Diet: A Theory-Based Interview Study. *Frontiers in Nutrition*, *8*. https://doi.org/10.3389/fnut.2021.688131

He, J., Evans, N. M., Liu, H., & Shao, S. (2020). A Review of Research on Plant-based Meat Alternatives: Driving Forces, History, Manufacturing, and Consumer Attitudes. *Comprehensive Reviews in Food Science and Food Safety*, *19*(5), 2639–2656. https://doi.org/10.1111/1541-4337.12610

Hearld, L. R., & Rathert, C. (2021). Essentials of Publishable Qualitative Manuscripts. *Health Care Management Review*, *46*(4), 265–265. https://doi.org/10.1097/hmr.0000000000000329

Heng Hong, T. (2020, February 6). *Much-hyped Beyond Meat is now at Village Grocer, Jaya Grocer*. Minime Insights.

Heßler, J. B., Meule, A., Holzapfel, C., Brandl, B., Greetfeld, M., Skurk, T., Schlegl, S., Hauner, H., & Voderholzer, U. (2020). Orthorexic Tendencies Moderate the Relationship Between Semi-Vegetarianism and Depressive Symptoms. *Eating and Weight Disorders - Studies on Anorexia Bulimia and Obesity*. https://doi.org/10.1007/s40519-020-00901-y

Ho, S. S., Ou, M., & Vijayan, A. V. (2023). Halal or Not? Exploring Muslim Perceptions of Cultured Meat in Singapore. *Frontiers in Sustainable Food Systems*. https://doi.org/10.3389/fsufs.2023.1127164

Hoek, A. C., Luning, P. A., Stafleu, A., & de Graaf, C. (2004). Food-related lifestyle and health attitudes of Dutch vegetarians, non-vegetarian consumers of meat

substitutes, and meat consumers. *Appetite*, *42*(3), 265–272. https://doi.org/https://doi.org/10.1016/j.appet.2003.12.003

Hopwood, C. J., Bleidorn, W., Schwaba, T., & Chen, S. (2020). Health, Environmental, and Animal Rights Motives for Vegetarian Eating. *Plos One*. https://doi.org/10.1371/journal.pone.0230609

Huang, S., & Uehara, T. (2023). Young Consumers' Perceptions of and Preferences for Alternative Meats: An Empirical Study in Japan and China. *Frontiers in Sustainable Food Systems*, *7*. https://doi.org/10.3389/fsufs.2023.1290131

Hwang, J., You, J., Moon, J., & Jeong, J. (2020). Factors Affecting Consumers' Alternative Meats Buying Intentions: Plant-Based Meat Alternative and Cultured Meat. *Sustainability*. https://doi.org/10.3390/su12145662

Ihsan, A., Ahmad, Z., Zheng, J., Bilal, M., Muhammad Rizwan Abid, H., & Hu, A. (2024). New trends in functionalities and extraction of plant proteins in designing plant-based meat analogues: A critical review. *Food Bioscience*, *57*, 103476. https://doi.org/https://doi.org/10.1016/j.fbio.2023.103476

Iqbal, S., Ramadas, A., Fatt, Q. K., Shin, H. L., Onn, W. Y., & Kadir, K. A. (2020). Relationship of Sociodemographic and Lifestyle Factors and Diet Habits with Metabolic Syndrome (MetS) Among Three Ethnic Groups of the Malaysian Population. *Plos One*, *15*(3), e0224054. https://doi.org/10.1371/journal.pone.0224054

Ismail, I., Hwang, Y.-H., & Joo, S.-T. (2020). Meat Analog as Future Food: A Review. *Journal of Animal Science and Technology*. https://doi.org/10.5187/jast.2020.62.2.111

Jähn, S., Furchheim, P., & Strässner, A.-M. (2021). Plant-Based Meat Alternatives: Motivational Adoption Barriers and Solutions. In *Sustainability*. https://doi.org/10.3390/su132313271

Jessie Satia. (2003). Dietary Acculturation : Definition, Process, Assessment, and Implications. *International Journal of Human Ecology*, *4*, 71–86. https://api.semanticscholar.org/CorpusID:17561575

Jeżewska-Zychowicz, M., Sajdakowska, M., Gębski, J., Kosicka-Gębska, M., & Gutkowska, K. (2024). Predictors of Eating Less Meat and More Plant-Based Food in the Polish Sample. *Nutrients*, *16*(11), 1646. https://doi.org/10.3390/nu16111646

Kaczmarska, K., Taylor, M. C., Piyasiri, U., & Frank, D. (2021). Flavor and Metabolite Profiles of Meat, Meat Substitutes, and Traditional Plant-Based High-Protein Food Products Available in Australia. In *Foods*. https://doi.org/10.3390/foods10040801

Karupaiah, T., Chuah, K.-A., Chinna, K., Pressman, P., Clemens, R. A., Hayes, A. W., & Sundram, K. (2019). A Cross-Sectional Study on the Dietary Pattern Impact on Cardiovascular Disease Biomarkers in Malaysia. *Scientific Reports*, *9*(1), 13666. https://doi.org/10.1038/s41598-019-49911-6

Katare, B., Yim, H., Byrne, A. T., Wang, H. H., & Wetzstein, M. E. (2022). Consumer Willingness to Pay for Environmentally Sustainable Meat and a Plant-based Meat Substitute. *Applied Economic Perspectives and Policy*, *45*(1), 145–163. https://doi.org/10.1002/aepp.13285

Kee, C. C., Tan, L. K., Ghazali, S. M., Cheah, Y. K., Lim, H. L., & Omar, M. A. (2023). *Trends in Fruit and Vegetables Consumption Among Malaysian Adults, 2006-2019*. https://doi.org/10.21203/rs.3.rs-3390961/v1

Kenyon, G. N., & Sen, K. C. (2015). The Perception Process. In *The Perception of Quality: Mapping Product and Service Quality to Consumer Perceptions*. Springer London. https://doi.org/10.1007/978-1-4471-6627-6_5

Khusun, H., Februhartanty, J., Anggraini, R., Mognard, É., Alem, Y., Noor, M. I., Karim, N. A., Laporte, C., Poulain, J.-P., Monsivais, P., & Drewnowski, A. (2022). Animal and Plant Protein Food Sources in Indonesia Differ Across Socio-Demographic Groups: Socio-Cultural Research in Protein Transition in Indonesia and Malaysia. *Frontiers in Nutrition*, *9*. https://doi.org/10.3389/fnut.2022.762459

Kim, G., Oh, J., & Cho, M. S. (2022). Korean Vegetarian Values: Ethics, Sustainability and Quality of Life. *British Food Journal*. https://doi.org/10.1108/bfj-07-2021-0750

Kim, H.-J., Lee, K., Rebholz, C. M., & Kim, J. (2020). Plant-Based Diets and Incident Metabolic Syndrome: Results from a South Korean Prospective Cohort Study. In *Plos Medicine*. https://doi.org/10.1371/journal.pmed.1003371

Knaapila, A., Michel, F., Jouppila, K., Sontag-Strohm, T., & Piironen, V. (2022). Millennials' Consumption of and Attitudes Toward Meat and Plant-Based Meat Alternatives by Consumer Segment in Finland. *Foods*. https://doi.org/10.3390/foods11030456

Kocaadam-Bozkurt, B., Sözlü, S., & Macit-Çelebi, M. S. (2023). Exploring the Understanding of How Parenting Influences the Children's Nutritional Status,

Physical Activity, and BMI. In *Frontiers in Nutrition*. https://doi.org/10.3389/fnut.2022.1096182

Konttinen, H., Halmesvaara, O., Fogelholm, M., Saarijärvi, H., Nevalainen, J., & Erkkola, M. (2021). Sociodemographic Differences in Motives for Food Selection: Results From the LoCard Cross-Sectional Survey. *International Journal of Behavioral Nutrition and Physical Activity*. https://doi.org/10.1186/s12966-021-01139-2

Krispenz, A., & Bertrams, A. (2020). Correlates of the Intention to Reduce Meat Consumption. *Sustainability*, *12*(11), 4774. https://doi.org/10.3390/su12114774

Kyriakopoulou, K., Keppler, J. K., & Goot, A. J. van der. (2021). Functionality of Ingredients and Additives in Plant-Based Meat Analogues. In *Foods*. https://doi.org/10.3390/foods10030600

Labba, I.-C. M., Steinhausen, H., Almius, L., Bach Knudsen, K. E., & Sandberg, A. (2022). Nutritional Composition and Estimated Iron and Zinc Bioavailability of Meat Substitutes Available on the Swedish Market. *Nutrients*. https://doi.org/10.3390/nu14193903

Lacy-Nichols, J., Hattersley, L., & Scrinis, G. (2021). Nutritional Marketing of Plant-Based Meat-Analogue Products: An Exploratory Study of Front-of-Pack and Website Claims in the USA. In *Public Health Nutrition*. https://doi.org/10.1017/s1368980021002792

Lap, T. Q., Duyen, T., & Thao, L. T. (2022). Novice Teachers' Professional Identity Reconstruction. *International Journal of Educational Methodology*, *8*(3), 449–464. https://doi.org/10.12973/ijem.8.3.449

Lee, F. (2021, June 21). *It took 5 years & 167 tries to perfect their recipe that turns jackfruit into "meat"*. Vulcan Post. https://vulcanpost.com/749524/nanka-plant-based-meat-jackfruit-malaysia/

Lee, J. J. (2023). Nutritional Quality and Price of Plant-based Dairy and Meat Analogs in the Canadian Food Supply System. *Journal of Food Science*. https://doi.org/10.1111/1750-3841.16691

Lee, Y. Y. (2024). Relationship Between Sensory Attributes and Instrumental Texture Properties in Meat Analog Patty System Substituted with Sweet Potato Stem. *Journal of the Science of Food and Agriculture*. https://doi.org/10.1002/jsfa.13533

Lemken, D. (2021). The Price Penalty for Red Meat Substitutes in Popular Dishes and the Diversity in Substitution. *Plos One*, *16*(6), e0252675. https://doi.org/10.1371/journal.pone.0252675

Lentz, G., Connelly, S., Mirosa, M., & Jowett, T. (2018). Gauging Attitudes and Behaviours: Meat Consumption and Potential Reduction. *Appetite*, *127*, 230–241. https://doi.org/10.1016/j.appet.2018.04.015

Leroy, F., & Cofnas, N. (2019). Should Dietary Guidelines Recommend Low Red Meat Intake? In *Critical Reviews in Food Science and Nutrition*. https://doi.org/10.1080/10408398.2019.1657063

Li, T., Wang, D., & Yang, Z. (2022). Inspiration or Risk? How Social Media Marketing of Plant-Based Meat Affects Young People's Purchase Intention. *Frontiers in Psychology*. https://doi.org/10.3389/fpsyg.2022.971107

Lincoln, Y., & Guba, E. (1985). *Naturalistic Inquiry*. Sage Publications.

Lin-Schilstra, L., & Fischer, A. R. H. (2020). Consumer Moral Dilemma in the Choice of Animal-Friendly Meat Products. *Sustainability*. https://doi.org/10.3390/su12124844

Liu, K. S. N., Chen, J. Y., Sun, K. S., Tsang, J. P. Y., Ip, P., & Lam, C. L. K. (2022). Adolescent Knowledge, Attitudes and Practices of Healthy Eating: Findings of Qualitative Interviews Among Hong Kong Families. In *Nutrients*. https://doi.org/10.3390/nu14142857

Lou, K. J. Q., Rajaram, N. N., & Say, Y.-H. (2024). Availability, price and nutritional assessment of plant-based meat alternatives in hypermarkets and supermarkets in Petaling, the most populated district in Malaysia. *PLOS ONE*, *19*(12), 1–16. https://doi.org/10.1371/journal.pone.0309507

Love, H., & Sulikowski, D. (2018). Of Meat and Men: Sex Differences in Implicit and Explicit Attitudes Toward Meat. *Frontiers in Psychology*. https://doi.org/10.3389/fpsyg.2018.00559

Luciano, C. A. G., Aguiar, L. K. de, Vriesekoop, F., & Urbano, B. (2019). Consumers' Willingness to Purchase Three Alternatives to Meat Proteins in the United Kingdom, Spain, Brazil and the Dominican Republic. *Food Quality and Preference*, *78*, 103732. https://doi.org/10.1016/j.foodqual.2019.103732

Ludden, G. D. S., Cain, R., MacKrill, J., & Allen, F. (2017). *Design for behaviour change for health and wellbeing*. https://api.semanticscholar.org/CorpusID:158834985

Lusk, J. L., Blaustein-Rejto, D., Shah, S., & Tonsor, G. T. (2022). Impact of Plant-Based Meat Alternatives on Cattle Inventories and Greenhouse Gas Emissions. *Environmental Research Letters*. https://doi.org/10.1088/1748-9326/ac4fda

Ma, C.-C., & Chang, H.-P. (2022). The Effect of Novel and Environmentally Friendly Foods on Consumer Attitude and Behavior: A Value-Attitude-Behavioral Model. *Foods*. https://doi.org/10.3390/foods11162423

Macdiarmid, J. I. (2014). Seasonality and dietary requirements: Will eating seasonal food contribute to health and environmental sustainability? *Proceedings of the Nutrition Society*, *73*(3), 368–375. https://doi.org/10.1017/S0029665113003753

Macdiarmid, J. I. (2021). The Food System and Climate Change: Are Plant-Based Diets Becoming Unhealthy and Less Environmentally Sustainable? *Proceedings of the Nutrition Society*. https://doi.org/10.1017/s0029665121003712

Mamun, A. Al, Hayat, N., & Zainol, N. R. (2020). Healthy Eating Determinants: A Study Among Malaysian Young Adults. In *Foods*. https://doi.org/10.3390/foods9080974

Marinová, D., & Bogueva, D. (2019). Planetary Health and Reduction in Meat Consumption. *Sustainable Earth Reviews*. https://doi.org/10.1186/s42055-019-0010-0

Mat Rifin, H., Mohd Yusoff, M. F., & Abd Hamid, H. A. (2025). Conducting the National Health and Morbidity Survey 2023 in Malaysia with focus on methodology and main findings on non-communicable diseases. *Scientific Reports*, *15*(1), 25531. https://doi.org/10.1038/s41598-025-08311-9

Matharu, M., Jain, R., & Kamboj, S. (2020). Understanding the Impact of Lifestyle on Sustainable Consumption Behavior: A Sharing Economy Perspective. *Management of Environmental Quality an International Journal*, *32*(1), 20–40. https://doi.org/10.1108/meq-02-2020-0036

McInnes, C., Carstairs, S. A., & Cecil, J. E. (2023). A qualitative study of young peoples' thoughts and attitudes to follow a more plant-based diet. *Frontiers in Psychology*, *Volume 14-2023*. https://doi.org/10.3389/fpsyg.2023.1196142

Md Asadul Islam, & Faraj Mazyed Faraj Aldaihani. (2021). Justification for Adopting Qualitative Research Method, Research Approaches, Sampling Strategy, Sample Size, Interview Method, Saturation, and Data Analysis. *Journal of International Business and Management*. https://doi.org/10.37227/jibm-2021-09-1494

Melville, H., Shahid, M., Gaines, A., McKenzie, B., Alessandrini, R., Trieu, K., Wu, J., Rosewarne, E., & Coyle, D. H. (2023). The Nutritional Profile of Plant-based Meat Analogues Available for Sale in Australia. In *Nutrition & Dietetics*. https://doi.org/10.1111/1747-0080.12793

Michel, F., Hartmann, C., & Siegrist, M. (2021). Consumers' associations, perceptions and acceptance of meat and plant-based meat alternatives. *Food Quality and Preference*, *87*, 104063. https://doi.org/https://doi.org/10.1016/j.foodqual.2020.104063

Mihalache, O. A., Dellafiora, L., & Dall'Asta, C. (2022). Risk–benefit Assessment of Shifting from Traditional Meat-based Diets to Alternative Dietary Patterns. *Efsa Journal*. https://doi.org/10.2903/j.efsa.2022.e200919

Mohammed, A. M. (2024). A Study of Babylon University's TEFL Postgraduate Candidates and Teaching Staff's Perspectives on Qualitative and Quantitative Methods: Problems, Challenges and Prospective. *International Journal of Social Science and Human Research*, *07*(03). https://doi.org/10.47191/ijsshr/v7-i03-23

Mohd Azman, N. M., Muhammad, R., Ramli, N., & Abu Bakar, S. K. (2023). A Review of Product Knowledge and Determinants of Consumer Purchase Intention on Plant-Based Meat Products In Malaysia. *Environment-Behaviour Proceedings Journal*, *8*(SI15), 157–163. https://doi.org/10.21834/e-bpj.v8isi15.5106

Moisey, L. L., Campbell, K., Whitmore, C., & Jack, S. M. (2022). Advancing Qualitative Health Research Approaches in Applied Nutrition Research. *Journal of Human Nutrition and Dietetics*, *35*(2), 376–387. https://doi.org/10.1111/jhn.12989

Moonaisur, N., Marx-Pienaar, N., & de Kock, H. L. (2024). Plant-based meat alternatives in South Africa: An analysis of products on supermarket shelves. *Food Science and Nutrition*, *12*(1), 627–637. https://doi.org/10.1002/fsn3.3765

Morelli, J. (2011). *Environmental Sustainability: A Definition for Environmental Professionals*. https://api.semanticscholar.org/CorpusID:17475090

Mukanu, M. M., Thow, A. M., Delobelle, P., & McHiza, Z. J. R. (2022). School Food Environment in Urban Zambia: A Qualitative Analysis of Drivers of Adolescent Food Choices and Their Policy Implications. *International Journal of Environmental Research and Public Health*, *19*(12). https://doi.org/10.3390/ijerph19127460

Murali, M. (2024). How to Write Pilot and Feasibility Studies. *Anaesthesia*, *79*(6), 650–655. https://doi.org/10.1111/anae.16283

Muschalik, C., Crutzen, R., Candel, M. J. J. M., Elfeddali, I., & Vries, H. de. (2020). Implicit Attitudes and Explicit Cognitions Jointly Predict a Reduced Red Meat Intake: A Three-Wave Longitudinal Study. *Health Psychology and Behavioral Medicine*, *8*(1), 73–95. https://doi.org/10.1080/21642850.2020.1730843

Muttuvelu, D. V, Wyke, S. C. S., & Vollertsen, J. (2022). Are Permeable Pavements a Sustainable Solution? A Qualitative Study of the Usage of Permeable Pavements. *Sustainability*, *14*(19), 12432. https://doi.org/10.3390/su141912432

Nardi, V. A. M., Jardim, W. C., Ladeira, W. J., & Santini, F. de O. (2019). Predicting Food Choice: A Meta-Analysis Based on the Theory of Planned Behavior. *British Food Journal*, *121*(10), 2250–2264. https://doi.org/10.1108/bfj-08-2018-0504

Neufingerl, N., & Eilander, A. (2022). Nutrient Intake and Status in Adults Consuming Plant-Based Diets Compared to Meat-Eaters: A Systematic Review. *Nutrients*, *14*(1). https://doi.org/10.3390/nu14010029

Niewiadomska, K., Kosicka-Gębska, M., Gębski, J., Gutkowska, K., Jeżewska-Zychowicz, M., & Sułek, M. (2020). Game Meat Consumption—Conscious Choice or Just a Game? *Foods*. https://doi.org/10.3390/foods9101357

Ning, J., Chen, J., Song, J., & Zhang, J. (2023). Plant-based Meat Products and Their Research and Development Progress. *International Journal of Biology and Life Sciences*. https://api.semanticscholar.org/CorpusID:266356667

Niva, M., Mäkelä, J., Kahma, N., & Kjærnes, U. (2019). Eating Sustainably. *Everyday Eating in Denmark, Finland, Norway and Sweden*. https://api.semanticscholar.org/CorpusID:263516372

Oerther, S. (2021). Designing Interview Guides on Stress and Coping Related to Parenting Pre-teen Children: An Example from a Hermeneutic Phenomenological Study. *Nursing Open*, *8*(5), 2142–2152. https://doi.org/10.1002/nop2.778

Ohlau, M., Spiller, A., & Risius, A. (2022). Plant-Based Diets Are Not Enough? Understanding the Consumption of Plant-Based Meat Alternatives Along Ultra-processed Foods in Different Dietary Patterns in Germany. *Frontiers in Nutrition*, *9*. https://doi.org/10.3389/fnut.2022.852936

Päivärinta, E., Itkonen, S. T., Pellinen, T., Lehtovirta, M., Erkkola, M., & Pajari, A.-M. (2020). Replacing Animal-Based Proteins with Plant-Based Proteins Changes the

Composition of a Whole Nordic Diet—A Randomised Clinical Trial in Healthy Finnish Adults. *Nutrients*, *12*(4), 943. https://doi.org/10.3390/nu12040943

Papies, E. K., Johannes, N., Daneva, T., Semyte, G., & Kauhanen, L.-L. (2020). Using Consumption and Reward Simulations to Increase the Appeal of Plant-Based Foods. *Appetite*. https://doi.org/10.1016/j.appet.2020.104812

Pater, L., Kollen, C., Damen, F. W. M., Zandstra, E. H., Fogliano, V., & Steenbekkers, B. L. P. A. (2022). The perception of 8- to 10-year-old Dutch children towards plant-based meat analogues. *Appetite*, *178*, 106264. https://doi.org/https://doi.org/10.1016/j.appet.2022.106264

Paula Valente, J. de, Fiedler, R. A., Heidemann, M. S., & Maiolino Molento, C. F. (2019). First Glimpse on Attitudes of Highly Educated Consumers Towards Cell-Based Meat and Related Issues in Brazil. *Plos One*. https://doi.org/10.1371/journal.pone.0221129

Pointke, M., Ohlau, M., & Pawelzik, E. (2022). Plant-Based Only: Investigating Consumers' Sensory Perception, Motivation, and Knowledge of Different Plant-Based Alternative Products on the Market. *Foods*. https://doi.org/10.3390/foods11152339

Profeta, A., & Baune, M. C. (2020). *Consumer preferences for meat products blended with plant-based proteins in Germany*.

Profeta, A., Baune, M.-C., Smetana, S., Broucke, K., Royen, G. Van, Weiß, J., Heinz, V., & Terjung, N. (2020). *Discrete-Choice-Analysis of Consumer Preferences for Meathybrids - Findings from Germany and Belgium*. https://doi.org/10.20944/preprints202012.0241.v1

Raghoebar, S., Kleef, E. van, & Vet, E. de. (2020). Increasing the Proportion of Plant-Based Foods Available to Shift Social Consumption Norms and Food Choice Among Non-Vegetarians. *Sustainability*. https://doi.org/10.3390/su12135371

Raptou, E., Tsiami, A., Negro, G., Ghuriani, V., Baweja, P., Smaoui, S., & Varzakas, T. (2024). Gen Z's Willingness to Adopt Plant-Based Diets: Empirical Evidence from Greece, India, and the UK. *Foods*, *13*(13). https://doi.org/10.3390/foods13132076

Reipurth, M. F. S., Hørby, L., Gregersen, C. G., Bonke, A., & Perez Cueto, F. J. A. (2019). Barriers and facilitators towards adopting a more plant-based diet in a sample of Danish consumers. *Food Quality and Preference*, *73*, 288–292. https://doi.org/https://doi.org/10.1016/j.foodqual.2018.10.012

Reis, G. G. R. (2022). *The Role of Major Retailers and Supermarkets in the Transition from Industrial Animal Agriculture to Alternative Proteins in Low- And Middle-Income Countries: The Case of Brazil*. https://doi.org/10.15868/socialsector.41304

Ritchie, H., Reay, D., & Higgins, P. (2018). Potential of Meat Substitutes for Climate Change Mitigation and Improved Human Health in High-Income Markets. *Frontiers in Sustainable Food Systems*. https://doi.org/10.3389/fsufs.2018.00016

Rizzolo-Brime, L., Orta-Ramirez, A., Puyol Martin, Y., & Jakszyn, P. (2023). Nutritional Assessment of Plant-Based Meat Alternatives: A Comparison of Nutritional Information of Plant-Based Meat Alternatives in Spanish Supermarkets. *Nutrients*, *15*(6). https://doi.org/10.3390/nu15061325

Rosairo, R. (2023). Narrative Approach in Qualitative Research. *Journal of Agricultural Sciences – Sri Lanka*, *18*(1). https://doi.org/10.4038/jas.v18i1.10094

Rosenfeld, D. L., & Tomiyama, A. J. (2019). How Proximal Are Pescatarians to Vegetarians? An Investigation of Dietary Identity, Motivation, and Attitudes Toward Animals. *Journal of Health Psychology*. https://doi.org/10.1177/1359105319842933

Rozin, P., Scott, S., Dingley, M., Urbanek, J. K., Jiang, H., & Kaltenbach, M. (2011). Nudge to nobesity I: Minor changes in accessibility decrease food intake. *Judgment and Decision Making*, *6*(4), 323–332. https://doi.org/DOI: 10.1017/S1930297500001935

Ruehlman, L. S., & Karoly, P. (2022). Adherence Versus Striving to Adhere to Vegan, Vegetarian, or Pescatarian Diets: Applying a Goal-Centered, Self-Regulatory Framework. *Journal of Health Psychology*. https://doi.org/10.1177/13591053221111976

Safdar, B., Zhou, H., Li, H., Cao, J., Zhang, T., Ying, Z., & Liu, X. (2022). Prospects for Plant-Based Meat: Current Standing, Consumer Perceptions, and Shifting Trends. *Foods*, *11*(23), 3770. https://doi.org/10.3390/foods11233770

Samard, S., & Ryu, G. (2019). Physicochemical and Functional Characteristics of Plant Protein-based Meat Analogs. *Journal of Food Processing and Preservation*. https://doi.org/10.1111/jfpp.14123

Sánchez-Sabaté, R., & Sabaté, J. (2019). Consumer Attitudes Towards Environmental Concerns of Meat Consumption: A Systematic Review. *International Journal of Environmental Research and Public Health*. https://doi.org/10.3390/ijerph16071220

Santo, R. E., Kim, B. F., Goldman, S. E., Dutkiewicz, J., Biehl, E., Bloem, M. W., Neff, R. A., & Nachman, K. E. (2020). Considering Plant-Based Meat Substitutes and Cell-Based Meats: A Public Health and Food Systems Perspective. *Frontiers in Sustainable Food Systems*. https://api.semanticscholar.org/CorpusID:221371307

Schorr, K., Beekman, M., Agayn, V., de Vries, J. H. M., De Groot, L. C. P. G. M., & Slagboom, P. E. (2023). *A Healthful Plant-Based Diet Is Associated with Higher Physical and Mental Well-Being Among Older Adults Independent of Circulating CRP*. https://doi.org/10.1101/2023.11.30.23299231

Seleshe, S., Jo, C., & Lee, M. (2014). Meat Consumption Culture in Ethiopia. *Korean Journal for Food Science of Animal Resources*. https://doi.org/10.5851/kosfa.2014.34.1.7

Seltenrich, N. (2020). Diet Impacts on Climate and Health: New Zealand's Experience. In *Environmental Health Perspectives*. https://doi.org/10.1289/ehp6957

Sharma, R., Sharma, G., Goyal, S., & Manivannan, B. (2021). *Key Attributes for Success of Plant-based Meat Alternative - Nutritional Values, Functional Properties, Suitability for Diverse Use and Price Parity*. www.unisciencepub.com

Sharps, M., Fallon, V., Ryan, S. G., & Coulthard, H. (2020). *Preprint: Eating Like Family and Friends: The Role of Perceived Descriptive and Injunctive Norms on the Frequency of Meat and Plant-Based Meal Intake in UK-based Adults*. https://doi.org/10.31219/osf.io/2gjxa

Sharps, M., Raghoebar, S., & Coulthard, H. (2023). *The Influence of Peers and Friends on Young Adults' Meat and Plant-Based Eating in Different Social Contexts: Findings From Two Online Studies*. https://doi.org/10.31219/osf.io/sq5n8

Shireen, A., & Wright, A. J. (2024). The Meat of the Matter: Plant-Based Meat Analogue Versus Traditional Meat Product Nutritional Quality. *Food Science and Human Wellness*. https://doi.org/10.26599/fshw.2023.9250003

Shriver, A. J. (2024). Biotechnological fixes and the Big Three urgent moral challenges facing the global livestock industry. *Frontiers in Animal Science*, *5*. https://doi.org/10.3389/fanim.2024.1305462

Slade, P. (2018). If you build it, will they eat it? Consumer preferences for plant-based and cultured meat burgers. *Appetite*, *125*, 428–437. https://doi.org/https://doi.org/10.1016/j.appet.2018.02.030

Smillie, L. D., Ruby, M. B., Tan, N. P.-J., Stollard, L., & Bastian, B. (2022). *Differential Responses to Ethical Vegetarian Appeals: Exploring the Role of Traits, Beliefs, and Motives*. https://doi.org/10.31234/osf.io/62k3w

Smillie, L. D., Ruby, M. B., Tan, N. P.-J., Stollard, L., & Bastian, B. (2023). Differential Responses to Ethical Vegetarian Appeals: Exploring the Role of Traits, Beliefs, and Motives. *Journal of Personality*. https://doi.org/10.1111/jopy.12866

Sogari, G. (2024). Sensory, Emotional, and Appropriateness of Plant- and Meat-based Burgers. *Journal of Food Science*. https://doi.org/10.1111/1750-3841.17033

Solórzano-Kraemer, M. M., Delclòs, X., Engel, M. S., & Peñalver, E. (2020). A revised definition for copal and its significance for palaeontological and Anthropocene biodiversity-loss studies. *Scientific Reports*, *10*(1), 19904. https://doi.org/10.1038/s41598-020-76808-6

Springmann, M., Wiebe, K., Mason-D'Croz, D., Sulser, T. B., Rayner, M., & Scarborough, P. (2018). Health and Nutritional Aspects of Sustainable Diet Strategies and Their Association with Environmental Impacts: A Global Modelling Analysis with Country-Level Detail. *The Lancet Planetary Health*. https://doi.org/10.1016/s2542-5196(18)30206-7

Subedi, K. R. (2021). Determining the Sample in Qualitative Research. *Scholars Journal*, 1–13. https://doi.org/10.3126/scholars.v4i1.42457

Szczebyło, A., Halicka, E., Jackowska, M., & Rejman, K. (2019). Analysis of the Global Pulses Market and Programs Encouraging Consumption of This Food. *Zeszyty Naukowe SGGW W Warszawie - Problemy Rolnictwa Światowego*. https://doi.org/10.22630/prs.2019.19.3.49

Szejda, K., Stumpe, M., Raal, L., & Tapscott, C. E. (2021). South African Consumer Adoption of Plant-Based and Cultivated Meat: A Segmentation Study. *Frontiers in Sustainable Food Systems*, *5*. https://doi.org/10.3389/fsufs.2021.744199

Szejda, K., Urbanovich, T., & Wilks, M. (2020). *Accelerating Consumer Adoption of Plant-Based Meat: An Evidence-Based Guide for Effective Practice*.

Szenderák, J., Fróna, D., & Rákos, M. (2022). Consumer Acceptance of Plant-Based Meat Substitutes: A Narrative Review. *Foods*, *11*(9). https://doi.org/10.3390/foods11091274

Talegawkar, S. A., Sedlander, E., Ganjoo, R., Behera, S., DiPietro, L., & Rimal, R. N. (2021). A Social Norms-Based Intervention Improves Dietary Diversity Among

Women in Rural India: The Reduction in Anemia Through Normative Innovations (RANI) Project. *Nutrients*. https://doi.org/10.3390/nu13082822

Tárrega, A., Rizo, A., Murciano, A., Laguna, L., & Fiszman, S. (2020). Are Mixed Meat and Vegetable Protein Products Good Alternatives for Reducing Meat Consumption? A Case Study with Burgers. In *Current Research in Food Science*. https://doi.org/10.1016/j.crfs.2020.02.003

Tegegne, H. A., & W Phyo, H. W. (2017). *Food Safety Knowledge, Attitude and Practices of Meat Handler in Abattoir and Retail Meat Shops of Jigjiga Town, Ethiopia*. https://doi.org/10.15167/2421-4248/jpmh2017.58.4.737

Thavamani, A., Sferra, T. J., & Sankararaman, S. (2020). Meet the Meat Alternatives: The Value of Alternative Protein Sources. *Current Nutrition Reports*. https://doi.org/10.1007/s13668-020-00341-1

The Sun. (2022, August 21). *The Phuture lies in plant-based meat products*. The Sun Malaysia. https://thesun.my/news/the-phuture-lies-in-plant-based-meat-products-fe9655777/

Todt, O., & Luján, J. L. (2021). Constructing consumers: regulatory and methodological consequences of defining consumer preferences in European health claim regulation. *Journal of Risk Research*, *24*, 1532–1543. https://api.semanticscholar.org/CorpusID:234148493

Tonsor, G. T., Lusk, J. L., & Schroeder, T. C. (2022). Market Potential of New Plant-based Protein Alternatives: Insights from Four US Consumer Experiments. *Applied Economic Perspectives and Policy*. https://doi.org/10.1002/aepp.13253

Tóth, A., Dunay, A., Battay, M., Illés, C. B., Bittsanszky, A., & Süth, M. (2021). Microbial Spoilage of Plant-Based Meat Analogues. *Applied Sciences*, *11*(18), 8309. https://doi.org/10.3390/app11188309

Tso, R., & Forde, C. G. (2021). Unintended Consequences: Nutritional Impact and Potential Pitfalls of Switching from Animal- To Plant-Based Foods. *Nutrients*. https://doi.org/10.3390/nu13082527

Tso, R., Lim, A. J., & Forde, C. G. (2020). A Critical Appraisal of the Evidence Supporting Consumer Motivations for Alternative Proteins. *Foods*. https://doi.org/10.3390/foods10010024

Vandermause, R. (2024). Leveraging Qualitative Approaches to Guide Sustainable International Research Collaborations. *Plos Global Public Health*, *4*(3), e0002941. https://doi.org/10.1371/journal.pgph.0002941

Vatanparast, H., Islam, N., Shafiee, M., & Ramdath, D. D. (2020). Increasing Plant-Based Meat Alternatives and Decreasing Red and Processed Meat in the Diet Differentially Affect the Diet Quality and Nutrient Intakes of Canadians. In *Nutrients*. https://doi.org/10.3390/nu12072034

Veen, E. J., Dagevos, H., Michielsen, Y. J. E., de Vrieze, A. G. M., & Riedel, S. E. (2023). Eating Apart Together: How Vegetarian and Meat-Eating Students Manage Commensality in a Flexitarian Age. *Consumption and Society*. https://doi.org/10.1332/yqfo9787

Verbeke, W. (2005). Consumer acceptance of functional foods: socio-demographic, cognitive and attitudinal determinants. *Food Quality and Preference*, *16*(1), 45–57. https://doi.org/https://doi.org/10.1016/j.foodqual.2004.01.001

Villamin, P., Lopez, V., Thapa, D. K., & Cleary, M. (2025). A Worked Example of Qualitative Descriptive Design: A Step-by-Step Guide for Novice and Early Career Researchers. *Journal of Advanced Nursing*, *81*(8), 5181–5195. https://doi.org/https://doi.org/10.1111/jan.16481

Viroli, G. (2023). Exploring Benefits and Barriers of Plant-Based Diets: Health, Environmental Impact, Food Accessibility and Acceptability. *Nutrients*. https://doi.org/10.3390/nu15224723

Vliet, S. van, Bain, J. R., Muehlbauer, M. J., Provenza, F. D., Kronberg, S. L., Pieper, C. F., & Huffman, K. M. (2021). A Metabolomics Comparison of Plant-Based Meat and Grass-Fed Meat Indicates Large Nutritional Differences Despite Comparable Nutrition Facts Panels. *Scientific Reports*, *11*(1). https://doi.org/10.1038/s41598-021-93100-3

Vliet, S. van, Kronberg, S. L., & Provenza, F. D. (2020). Plant-Based Meats, Human Health, and Climate Change. In *Frontiers in Sustainable Food Systems*. https://doi.org/10.3389/fsufs.2020.00128

Wang, H., Chen, Q., Chen, Z., & Bao, J. (2022). Paying for the Greater Good?—What Information Matters for Beijing Consumers' Willingness to Pay for Plant-Based Meat? *Foods*, *11*(16), 2460. https://doi.org/10.3390/foods11162460

Wang, Y., Cai, W., Li, L., Gao, Y., & Lai, K. (2023). Recent Advances in the Processing and Manufacturing of Plant-Based Meat. *Journal of Agricultural and Food Chemistry*, *71*(3), 1276–1290. https://doi.org/10.1021/acs.jafc.2c07247

Wang, Y., Tuccillo, F., Lampi, A.-M., Knaapila, A., Pulkkinen, M., Kariluoto, S., Coda, R., Edelmann, M., Jouppila, K., Sandell, M., Piironen, V., & Katina, K. (2022).

Flavor challenges in extruded plant-based meat alternatives: A review. *Comprehensive Reviews in Food Science and Food Safety*, *21*(3), 2898–2929. https://doi.org/https://doi.org/10.1111/1541-4337.12964

Watkins, A., Denney-Wilson, E., Curtis, J., Teasdale, S., Rosenbaum, S., Ward, P. B., & Stein-Parbury, J. (2019). Keeping the Body in Mind: A Qualitative Analysis of the Experiences of People Experiencing First-episode Psychosis Participating in a Lifestyle Intervention Programme. *International Journal of Mental Health Nursing*, *29*(2), 278–289. https://doi.org/10.1111/inm.12683

Wolstenholme, E., Poortinga, W., & Whitmarsh, L. (2020). Two Birds, One Stone: The Effectiveness of Health and Environmental Messages to Reduce Meat Consumption and Encourage Pro-Environmental Behavioral Spillover. *Frontiers in Psychology*, *11*. https://doi.org/10.3389/fpsyg.2020.577111

World Health Organization. (2021). *Adolescent Health*. World Health Organization: WHO. https://www.who.int/southeastasia/health-topics/adolescent-health

Xie, L., Shahzad, M. F., Abrar, Z. ul, & Khattak, J. K. (2021). Determinants of the Intention to Purchase Branded Meat: Mediation of Brand Trust. *Sage Open*, *11*(3), 215824402110326. https://doi.org/10.1177/21582440211032669

Zaal, E., Ongena, Y., & Hoeks, J. (2023). Explaining Vegetarian and Vegan Dietary Behavior Among U.S. And Dutch Samples Applying a Reasoned Action Approach. *Frontiers in Sustainable Food Systems*. https://doi.org/10.3389/fsufs.2023.1040680

Zayadi, R. A. (2021). Current Outlook of Livestock Industry in Malaysia and Ways Towards Sustainability. *Journal of Sustainable Natural Resources*, *2*(2). https://doi.org/10.30880/jsunr.2021.12.02.001

Zhao, S., Wang, L., Hu, W., & Zheng, Y. (2022). Meet the Meatless: Demand for New Generation Plant-based Meat Alternatives. *Applied Economic Perspectives and Policy*. https://doi.org/10.1002/aepp.13232

Zhong, H., Elkamel, B., Li Han, T., & Zahedi, G. (2023). *Optimization of Economic Viability for Meat Alternatives*. https://doi.org/10.46254/eu6.20230216

Zhou, M., Guan, B., & Huang, L. (2022). Would You Buy Plant-Based Beef Patties? A Survey on Product Attribute Preference and Willingness to Pay Among Consumers in Liaoning Province, China. *Nutrients*. https://doi.org/10.3390/nu14204393

Zhu, Y. (2022). Plant-based diet: “Cook up” the sustainable future. *Soil Ecology Letters*, *4*, 289–290. https://api.semanticscholar.org/CorpusID:250181648

Zor, M., Menevşeoglu, A., & Ufuk, S. (2024). Plant-Based Meat: A Sustainable Alternative to Meat. *Gida / The Journal of Food*. https://api.semanticscholar.org/CorpusID:269940401

Zugravu, C. A., Oțelea, M. R., Vlădăreanu, R., Grigoriu, C., Salmen, T., Manolache, F.-A., & Bohîlțea, R. E. (2022). The Effect of Plant-Based Nutrition Diets on Plasma Lipids Profile—A Study Case in Romania. *Sustainability*. https://api.semanticscholar.org/CorpusID:246049670

APPENDICES

APPENDIX 1

Interview Protocol and Sources for Perceptions Toward Plant-Based Meat Products

Variable	Key Code	Questions	Source(s)
Perception	P1	What comes to your mind when you hear the term 'plant-based meat'? Could you explain your understanding of plant-based meat?	(Pater et al., 2022; Dagevos et al., 2013)
	P2	What are your opinions on the advantages and disadvantages of consuming plant-based meat products?	(Pater et al., 2022)
	P3	Do you believe plant-based meat products are nutritious or healthier than conventional meat? Why?	(Pater et al., 2022; Szejda et al., 2020)
	P4	How would you describe your overall perception of plant-based meat products, including their flavor?	(Pater et al., 2022; Hoek et al., 2004)
	P5	What factors influence your perception of plant-based meat products (e.g., taste, texture, price)?	(Michel et al., 2021)
	P6	How does your cultural or religious background influence your views on plant-based meat products?	(Bryant et al., 2018)

APPENDIX 2

Interview Protocol and Sources for Motivational Factors Influencing Consumption of Plant-Based Meat Products

Variable	Key Code	Questions	Source(s)
Motivation	M1	What are your opinions or feelings about purchasing plant-based meat products?	(Asif et al., 2018)
	M2	How important is purchasing plant-based meat products, particularly considering environmental concerns?	(Asif et al., 2018; Hartmann et al., 2017)
	M3	What benefits do you perceive from purchasing plant-based meat products?	(Asif et al., 2018)
	M4	What motivates you to try or consume plant-based meat products?	(Verbeke, 2005)
	M5	Do you consider ethical or animal welfare concerns when choosing plant-based meat? or any other concerns? Why?	(Graça, et al., 2015)
	M6	Does your social circle (friends, family, peers) influence your willingness to consume plant-based meat products? How?	(Rozin et al., 2011)

APPENDIX 3

Interview Protocol and Sources for the Consumption Patterns of Plant-Based Meat Products

Variable	Key Code	Questions	Source(s)
Consumption Patterns	CP 1	Have you ever consumed plant-based meat products? If yes, how frequent and in what context? **If the answer is no** If you have not consumed plant-based meat products, what are the reasons behind it? (e.g., lack of awareness, accessibility, price, or other factors?) Additionally, would you consider consuming plant-based meat products in the future?	(Pater et al., 2022; Reipurth et al., 2019)
	CP 2	What barriers prevent you from consuming plant-based meat products more frequently?	(Apostolidis et al., 2016)
	CP 3	If plant-based meat products were more accessible or affordable, would you consume them more often? Why or why not?	(Slade, 2018)

APPENDIX 4

Interview Protocol and Sources for the Impact of Consuming Plant-Based Meat Products

Variable	Key Code	Questions	Source(s)
Impact	I1	From your opinion, what is the impact of consuming plant-based meat products on nature and the environment?	(Graça, et al., 2015)
	I2	From your opinion, what is the impact of consuming plant-based meat products on public health?	(Graça, et al., 2015)
	I3	From your opinion, what is the impact of consuming plant-based meat products on animals?	(Graça, et al., 2015)

AUTHOR'S PROFILE



Muhammad Faiz bin Saedun holds a Diploma in Culinary Arts and a Bachelor of Science in Culinary Arts Management (Hons) from Universiti Teknologi MARA (UiTM). He is currently pursuing a Master of Science in Food Service Management at UiTM. His academic journey reflects a strong foundation in culinary arts, with research interests in culinary innovation, and sustainable practices in the hospitality industry.

He has actively contributed to academic research and conferences, presenting his work at the International Conference on Hospitality, Tourism, and Entrepreneurship (Inspire 2023). His scholarly contributions continue to expand, with papers accepted for presentation at the 3rd International Conference on Business, Finance, Management, and Economics (BizFAME) 2024 and the 6th Hospitality & Tourism Conference 2025, highlighting his ongoing commitment to advancing knowledge in the fields of hospitality and culinary management.

LIST OF PUBLICATIONS

Saedun, M. F., Muhammad, R., Md. Nor, N., & Abdul Ghani Azmi, I. (2026). Cultural identity, halal assurance and sensory authenticity in plant-based meat adoption: Extending the Theory of Planned Behaviour in a Muslim-majority economy. Journal of Tourism, Hospitality and Culinary Arts, 18(1), 146–166.