

# e-Proceeding

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"SUSTAINABLE ENVIRONMENT, RESILIENCE AND SOCIAL WELL-BEING"

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# A PRELIMINARY STUDY ON SUSTAINABLE APPROACH FOR THE MALAY TRADITIONAL FOOD WRAPPING

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## Abstract

Malay food has tangled in changes of their wrapping practices. The use of plastic as wrapping has replaced leaves-wrapping practice which has been passed down from generations. This change is believed to bring a negative long-term effect to our health and environment. This paper presents an ongoing study to investigate the sustainable approach for the Malay traditional food wrapping. This study focused on current Malay traditional food wrapping practices and factors of changes in Malay traditional food wrapping practices. Quantitative approach was employed by using Pearson correlation and multiple regression data analysis to study the phenomenon. Collected data and findings of this research will help Malay traditional food producers to apply sustainable approach in wrapping practices of Malay traditional food wrapping.

**Keywords:** *sustainable approach; malay traditional food wrapping; food wrapping practices; changes in malay traditional food wrapping*

## 1.0 INTRODUCTION

Food is one of the main sources needed in life. Each food contains its own benefits and nutrition. Consuming healthy foods is a must as it may affect an individual's long-term health. Nutritional values and benefits in food not only source from the ingredients of the food, but the process and wrapping also influence food quality (Perez-Vicente et al., 2004). Food wrapping not only affects people's health but it also affects our surrounding and environment. In terms of benefits to the surrounding environment, a person or a consumer needs to avoid choosing food that is prepared or processed by using material which contributes to pollution. As stated by Colton (2019), food and beverage packaging are major contributors to plastic pollution. However, the food and beverage packaging has developed from traditional packaging to new modern packaging.

The term traditional is synonymous with generation. Traditional food refers to food that is consumed and available locally or regionally for many generations (Pieniak et al., 2009). The term "Malay traditional food" itself represents various kinds of traditional foods existing in Malay culture, the use of specific ingredients, specific wrapping and specific cooking techniques vary in each type of traditional food in Malay community. In this study, Malay traditional food produced by using leaves as its wrapping were focused. Traditional food such as ketupat, kuih koci, lepat pisang, nagasari, tapai, pulut panggang, nasi lemak, tepung pelita and dodol are some of the example of food involved with the use of leaves as its wrapping. In Malay traditional food, different type of leaves are used to wrap different kind of traditional food respectively, for example type of leaves used in Malay traditional food are banana leaf, upih pinang, baharu leaves, ketapang leaves, yam leaves, pandanus leaves, coconut leaves and rubber tree leaves (Fuziah & Rusli, 2007).

## 2.0 LITERATURE REVIEW

### 2.1 The Problem of Plastic Material as Food Wrapping

The changes towards plastic wrapping instead of using natural material wrapping has significantly affected our health and environment. Plastic materials are not easy to rot or decompose, they will contribute to environmental degradation. Most types of plastic are not biodegradable. According to Song et al (2009), even if plastic does eventually biodegrade, it will temporarily break into smaller fragments, which then produce so-called 'microplastics' which still lead to plastic pollution. This has shown that waste of plastic material is not environmentally friendly, and it takes a long time to decompose and disintegrate.

Contented by Idris (2006), plastic materials used for packaging foods can cause adverse effects to the human body. The results of a study by the Institute of Materials Science and Technology, Princeton, USA, revealed that plastic material, when heated at a level of heat, will secrete Volatile Organic Compounds (VOC), a type of chemical that can destroy the human hormone that also causes cancer. Similar result obtained by Rahmat (2006), from a survey conducted by several scientists from the National Poison Centre (Pusat Racun Negara), Universiti Sains Malaysia, Pulau Pinang, Malaysia

### 2.2 Factors of Changes in Malaysia Traditional Foods Wrapping

Traditional food is not only a simple daily base food, it has values and deep meaning as it has been passed by generation to generation. The uniqueness of traditional food wrapping becomes important because it symbolizes values and brings significant meaning to a culture and ethnicity (Zahari et al., 2011). One of the main factors affecting the changes in Malay traditional food wrapping is the rapid development of plastic materials. The rapid development of plastic industries, easy to get and less cost is among the main reasons everything is wrapped and packed with plastic (Keneth, 2007). The influence can be clearly seen in the existence of modern Ketupat wrapped in plastic material called Nasi Impit, traditional food such as Kuih Tapai, Nasi Lemak and Kuih Tepung Pelita, also are now wrapped with plastic and plastic containers (Persatuan Aktivist Sahabat Alam, 2018). However, the use of plastic materials in Malay traditional foods is not only because of the rapid development of plastic industries only, as stated by Luqman (2018), Persatuan Aktivist Sahabat Alam (2018) and Ros (2019), there are several factors which influence the use of plastic instead using leaves as wrapping in Malay traditional foods as shown in table 2 below.

**Table 2: Factors of changes in Malaysia traditional foods wrapping**

Factor	Information
Personal insight factor	The lack of consumers awareness concerning environmental issues in context of food packaging
Behavior factor	Unpracticed traditional food process causing loss of recipe and technique
Environment factor	Reachability of leaves in their surrounding living area to be used as wrapping

(Source: Luqman, 2018; Persatuan Aktivist Sahabat Alam, 2018; Ros, 2019)

### 2.3 Sustainable Approach in Foods Wrapping

Behavior of humans towards sustainable lifestyle can be classified as living sustainably with applying sustainable approach when choosing and making decisions in their life. As contented by Rinkesh (n.d), choosing not to consume a product that is made using practices that do not promote sustainability is one of practices in sustainable living and can be seen as sustainable approaches of choice. This is closely related with packaging because in our daily life, packaging is one of the most important elements in food products even for non-food product because every product in our daily life comes in its packaging.

People today live in fast consumption behavior. Especially in the food industry, where most of the food and their packaging is considered as single time use. Consumers will throw out the packaging after consuming the food and this action is repeated on a daily basis through time. This life-style approach has various effects on their life directly or indirectly without awareness of pollution, consequences of their actions and many other environmental and health-related risks (Bostrom & Klintman, 2008). Phil (n.d), specified that sustainable approach in packaging where using packaging that reduces its environmental footprint during its production, during disposal, during the preparation, in the food chain, and its distribution.

Plastic materials as wrapping is still a relatively new material, which means the problem of plastic waste has only recently been realised and the society is still trying to figure out the best way to solve this plastic waste issue. In Malaysia, non-government organization and government organization seem to take part in this movement, ban of plastic use campaign has been widely spread throughout Malaysia especially in supermarket where sellers are regulating ni providing plastic bag to their customers for every Saturday and customers will be charged for one day a week (Saturdays) (Irina et al., 2013). tThese efforts have encouraged researchers to study more on current wrapping practices and what factors of changes in order to reduce the use of plastic in Malay traditional food practices.

### 3.0 METHODOLOGY

Researchers implemented a quantitative method in this survey research method because it is able to provide a description of trends, attitudes or opinions of a population and to collect data and analyze the relationship between variables (Creswell et al., 2017). Noldus (2019) stated, quantitative measurements are used to quantify preferences, opinions, facts, behaviors, and generalize the results from a larger sample population. They are particularly helpful in understanding the context of phenomena which is the current practice of Malay traditional food wrapping, and how the environment they lived affect individuals and groups behavior or decisions. The technique and procedures of methodology in this study basically is based on four research stages.

**Table 1: Research stages**

Stage 1: Clarification of the related traditional Malay food which subtly changes from natural wrapping to plastic wrapping is being identified.
Stage 2: Identifying the factor of changes in Malay Traditional food wrapping which act as hypotheses in the study.
Stage 3: Forming the questionnaire based on variables and social cognitive theory.
Stage 4: Data collection from questionnaire surveyed & Pearson correlation data analysis and multiple regression data analysis.

### 4.0 CONCLUSION

The research aims to identify the current practice of the Malay traditional food producers whether they still use natural resources as a wrapping material or simply have changed to plastic material. Besides, what are the key factors that influence them to keep or change the current practice of wrapping Malay traditional food? It is clearl that the continuous use of natural materials as Malay traditional food wrapping brings more benefits rather than changing to plastic wrapping. Perhaps through this research, in future, Malay traditional food producers can keep a sustainable approach in food wrapping practices for the benefit of health and environment. In future research, researchers are looking forward towards the application of natural materials in designing food wrapping as it helps reduce the use of plastic and preserve the aesthetician value of natural material as food wrapping.

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