

UNIVERSITI TEKNOLOGI MARA

**ASSOCIATION OF SCREEN TIME WITH DIETARY INTAKE
AND PHYSICAL ACTIVITY AMONG ADULTS IN SELANGOR**

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ABSTRACT

Background: Lifestyle factors like screen time, physical activity, and dietary intake significantly impact health outcomes. As global urbanization advances, understanding the adult's lifestyle was crucial for effective public health initiatives.

Objective: This study aims to determine dietary intake, screen time and physical activity among adults in Selangor and the correlation of screen time with dietary intake and physical activity among adults in Selangor. **Methods:** A cross-sectional study involved 428 adults aged 18 to 65 from Selangor. This study used a set of questionnaires that consisted of a 3-day 24-hour diet recall, International Physical Activity Questionnaire – Short Form (IPAQ-SF), and Screen Time Questionnaire. All these questionnaires were in Malay. Data were analysed using Nutritionist Pro and SPSS vers 27. The Spearman's correlation was used to determine the correlation between screen time with dietary intake and PAL. **Result:** Average screen time during weekdays was 88.3 ± 75.5 minutes and weekends screen time was 78.7 ± 60.3 . The average energy intake was 2084 ± 416.3 kcal, fat was 81.7 ± 22.5 g, sodium was 3080.0 ± 1147.7 mg and potassium was 1335.1 ± 452.0 mg. The median for IPAQ-Score was 2565.0 ± 4926.0 MET-min/week while average sitting time was 5.0 ± 5.4 hours. Weekday screen time was significantly correlated with carbohydrates and fat intake while others were not significant. Weekends screen time was significantly correlated with fat intake while others were not significantly correlated. All parameters of screen time were not significantly correlated with the IPAQ score. Background screens used during weekends significantly correlated with sitting time while others were not significant. **Conclusion:** This study depicts imbalanced nutritional intake among adults in Selangor with excessive fat and sodium intake and inadequate fibre intake. Effective public health interventions and nutrition education are crucial to enhancing nutrient consumption and overall health and well-being in this population.

Keywords: Screen time, dietary intake, physical activity level

TABLE OF CONTENTS

AUTHOR’S DECLARATION	II
ACKNOWLEDGEMENT	III
LIST OF FIGURES	VII
LIST OF TABLES	VIII
LIST OF PLATES	IX
LIST OF ABBREVIATIONS	X
ABSTRACT	XI
CHAPTER ONE - INTRODUCTION	1
1.1 Research Background	1
1.2 Problem Statement	3
1.3 Research Justification	5
1.4 Research Question	5
1.5 Objectives	6
1.6 Hypothesis	6
1.7 Research Framework	6
CHAPTER TWO - LITERATURE REVIEW	7
2.1 Dietary Intake among Adults	7
2.2 Screen Time among Adults	11
2.3 Physical Activity Levels among Adults	15
2.4 Association between Screen Time, Dietary Intake and Physical among Adults	20
2.4.1 Association between Screen Time with Dietary Intake among Adults	20
2.4.2 Association between Screen Time with Physical Activity among Adults	22
CHAPTER THREE - RESEARCH METHODOLOGY	24
3.1 Research Design	24
3.2 Study Location	24
3.3 Sampling	28
3.4 Inclusion Criteria	29
3.5 Exclusion Criteria	29

CHAPTER ONE - INTRODUCTION

1.1 Research Background

Eating a healthy diet across one's entire life is essential for preventing malnutrition or noncommunicable diseases (NCDs) and health conditions. According to the World Health Organization (WHO) (2020), the growing production of processed foods, the swift pace of urbanization, and evolving lifestyles have resulted in a transformation of dietary intake. Dietary intake could be affected by physical activity level (PA) and screen time (Niermann et al., 2018). There was a relationship between screen time and physical activity with evidence indicating that individuals who engage in regular PA tend to adopt healthier dietary intake compared to those who lead more sedentary lifestyles or spend more time on screen devices (Sjöblom et al., 2023).

Prolonged screen time exposure among adults has been associated with poor dietary intake and an increased consumption of low-nutrient foods (Vizcaino et al., 2020). Excessive screen time can disrupt the body's natural cues for hunger and fullness, resulting in unhealthy food selections, including the consumption of empty-calorie foods (Tambalis et al., 2020). This relationship is influenced by multiple factors such as income differences. It may contribute to higher screen time among adults with higher personal monthly income, who tend to have better access to electronic devices, video games and computers compared to rural areas (Yaxuan et al., 2021). So, screen viewing can divert their attention from recognising physiological satiety, potentially resulting in mindless eating and an increased risk of overweight (Kamaleddine et al., 2022).

Furthermore, a study found that the association of dietary intake, physical activity and screen time was influenced by residency (Rocka et al., 2022). This relationship is complicated and influenced by multiple factors. One important factor is different household income among adults that affects access to a variety of healthy food options, and opportunities for engaging in PA such as spending money to join Zumba class or buy PA equipment (Nik-Nasir et al., 2022). A recent study supports