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MAPPING HEALTH BEHAVIORS: AN ANALYSIS OF LIFESTYLE AND EATING HABITS AMONG DIPLOMA OF PHARMACY STUDENTS AT UiTM CAWANGAN PULAU PINANG

Wan Nordini Hasnor Wan Ismail[1*], Siti Nur Fadzilah Muhsain[2], Nur 'Ainun Mokhtar[3]

[1] Faculty of Pharmacy, Universiti Teknologi MARA, Cawangan Pulau Pinang, Kampus Bertam, 13200 Pulau Pinang, Malaysia.
Email: nordini.hasnor@uitm.edu.my
[2] Faculty of Pharmacy, Universiti Teknologi MARA, Cawangan Pulau Pinang, Kampus Bertam, 13200 Pulau Pinang, Malaysia.
Email: sitinurfadzilah077@uitm.edu.my
[3] Faculty of Pharmacy, Universiti Teknologi MARA, Cawangan Pulau Pinang, Kampus Bertam, 13200 Pulau Pinang, Malaysia.
Email: nurain2942@uitm.edu.my
[*] Corresponding Author

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Abstract:

Background: The word "eating habits" describes how an individual or group eats food, including what kind of food they eat, how much they eat, and when they eat it. The term "lifestyle" refers to the intricate methods and practices of actions, norms, and beliefs that people or organisations adopt with the goal to perform well in social situations. **Objectives:** The primary objective of this study is to characterise the lifestyle and eating patterns of Diploma of Pharmacy students at the Bertam Campus of Universiti Teknologi MARA (UiTM) Cawangan Pulau Pinang. **Methods:** A number of questionnaires that were issued via Google Form were used to collect data. To provide further details about the research, a thorough analysis of a large number of publications and journals concerning the eating habits and lifestyle of students and the factors that influence them was conducted. A review of the journals and articles shows that students who want to focus on their studies and achieve better exam scores need to lead healthy lifestyles and consume a healthy diet. **Result:** According to survey data, pharmacy students at Universiti Teknologi MARA (UiTM) Cawangan Pulau Pinang (Bertam Campus) have poor dietary and lifestyle choices as a result of the stress and challenges they face in their academic pursuits. **Conclusion**: Thus, we can draw the conclusion that while

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some students lead healthy lifestyles and eat healthily, others do not, and that gender has a partial influence on these behaviours.

Keywords:

Daily Routine; Eating Habits; Food Preference; Lifestyle; Physical Activity

Introduction

The lifestyle of an individual or a collective was established through the convergence of several determinants, including environments, interests, pursuits, attitudes, and behaviours (Musa et al., 2020). An enormous variety of lifestyles are followed by individuals around the globe, spanning from active to sedentary to healthy to unhealthy. Nevertheless, contemporary society is rife with work obligations, and this includes college students who are perpetually pressed to meet the due dates for exams, tests, and assignments. Consequently, they do not appear to make a healthful lifestyle their primary commitment (Oral, B & Cetinkaya, F., 2020).

An active and healthy lifestyle is characterised by an individual's daily dedication to prioritising their health through the adoption of a nutritious diet and participation in outdoor activities (Kumar, 2017). Typically, he or she is productive and would rather spend time in nature than confined indoors. An active and healthful lifestyle is arguably the most advantageous choice for individuals of all ages and backgrounds. A healthy lifestyle encompasses participating in pleasurable activities that elicit positive emotions, thereby promoting emotional and psychological well-being. Adhering to this lifestyle is especially crucial for overcoming health issues including chronic diseases, obesity, fatigue, tension, long-term illnesses, and a lacklustre appearance (Gherasim et al., 2020). They will unquestionably enjoy an extended and disease-free lifespan by embracing this nutritious way of life. Furthermore, it is critical to be able to support an individual in their endeavour to conserve money, as this will prevent them from spending money on superfluous refreshments.

Nevertheless, most individuals today lead a sedentary way of life. Sedentary lifestyles are distinguished by their characteristic absence of physical activity, which often entails prolonged periods of sitting or lying down. These lifestyles are frequently linked to desk jobs, excessive screen time, and a dearth of exercise. Sedentary behaviour has been associated with obesity, cardiovascular diseases, and decreased mobility. Achieving equilibrium between professional and personal life is of the utmost importance, and daily physical activity is an essential component to prevent the adverse effects of a sedentary way of life. Promoting physical activity and giving health due importance can significantly enhance an individual's quality of life and general state of being. The modernization and digitization of the world alter an individual's existence to its core. Given the prevalence of virtual tasks, individuals are compelled to remain indoors in order to complete substantial amounts of work over an extended duration. Students' lives are also impacted by the scenario, particularly in the midst of the COVID-19 pandemic when they are compelled to engage in Online Distance Learning (ODL) to continue their studies. Even so, the majority of college students continue to be ignorant of the advantages that a healthful lifestyle can provide.

Di Renzo et al. (2020) found that the implementation of lockdowns, social distancing protocols, rigorous sanitary standards, isolation, and quarantine measures during the COVID-19 pandemic had a profound effect on human health. As a result, individuals underwent radical

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changes in diet, physical activity, social engagement, and way of life. Everyone should therefore consider each of these factors, but particularly their eating habits. This is due to the fact that sustaining healthy eating habits is crucial during this time, particularly when the immune system requires a boost to combat the disease.

Eating behaviours include the manner and purpose of eating, the timing of meals, and the types of foods consumed. There are two distinct categories of eating habits: healthy eating habits and unhealthy eating habits. Beneficial to a balanced and healthy diet, good eating habits consist of judicious food selections that adhere to the food pyramid. These choices include incorporating a daily breakfast, increasing consumption of fruits and vegetables, adopting a slow dining approach, and limiting intake of sugary beverages. Simultaneously, it may facilitate the prevention of certain malignancies, cerebrovascular disease, ischemic heart disease, and type II diabetes (Hassan et al., 2015). Poor eating habits, on the other hand, manifest as mealtime skipping, excess, consumption of fast food, and ignorance of nutrient requirements. This can result in illness and obesity, which increases the likelihood of developing serious diseases (Hassan et al., 2015).

In essence, the lifestyle of an individual is intricately connected to their dietary practises. A person who wishes to maintain good health must make dietary adjustments. Therefore, individuals, and college students in particular, should consume nutritious foods to maintain good health.

Objectives and Scope of the Study

Focusing on the Bertam Campus of Universiti Teknologi MARA (UiTM) Cawangan Pulau Pinang, this study aims to describe the lifestyle and dietary habits of Diploma of Pharmacy students.

Literature Review

Eating habits pertain to an individual or collective's manner of consuming food, encompassing the specific food choices, quantities, and timing of meals. Eating habits have a significant role in determining an individual's lifestyle level due to the interconnectedness between eating habits and lifestyle. Adhering to proper dietary practises can result in a state of well-being and vitality. Consuming a diverse range of nutrient-rich foods is essential for preserving health and promoting vitality. Hence, it is vital for all individuals, particularly students, to adhere to a nutritious diet due to its numerous advantages and its potential to avert undesirable illnesses.

Lifestyle refers to the intricate methods and patterns of behaviours, beliefs, attitudes, and standards that individuals or groups adopt in order to achieve desirable outcomes within a social context (Cojocaru et al., 2014). Therefore, adopting a healthy lifestyle is a habitual practise that can diminish the likelihood of serious ailments or untimely demise. As per the World Health Organisation (WHO), 60% of the determinants impacting an individual's health and overall well-being are linked to their lifestyle. A significant number of individuals adopt unhealthy habits, resulting in the development of severe ailments such as obesity, hypertension, and cardiovascular disorders (Farhud, 2015). The correlation between lifestyle and dietary patterns necessitates significant consideration, as neglecting it can pose a threat to our well-being. Hence, it is crucial to uphold healthy dietary practises and adopt a more physically active way of life to safeguard our well-being.

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Factors influencing eating habits and lifestyle encompass any elements that can elucidate the disparities in an individual's dietary choices and way of life. Multiple studies indicate that our emotions have a crucial role in shaping our eating patterns and overall lifestyle. According to a study conducted by Di Renzo et al. (2020), the Covid-19 epidemic elicits both positive and negative recollections in individuals. Odriozola-González et al. (2020) utilised the Depression Anxiety Stress Scale (DASS-21) approach to determine that 28% of the Spanish university students and personnel in their sample encountered severe stress during the lockdown period. Cellini et al. (2020) reported that a greater proportion (50%) of young adults in Italy were found to experience severe to extreme stress during a time of lockdown. Stress induces individuals to engage in excessive eating, particularly of sweet "comfort foods," a phenomenon referred to as "food craving". These predominantly carbohydrate-rich foods can alleviate stress by stimulating the creation of serotonin, which positively affects mood. In addition to causing chronic inflammation, which has been proven to heighten the likelihood of experiencing more severe complications from COVID-19, the desire for carbohydrate-rich foods is directly related to the amount of sugar they contain. This is linked to an elevated risk of developing obesity and cardiovascular diseases (Wu et al., 2020). Therefore, this demonstrates that our emotions are a significant determinant of our dietary patterns and way of life.

In addition, environmental variables play a role in the development of poor eating habits among university students. The proliferation of shopping malls, convenience stores, vending machines, and fast-food restaurants has fostered an unfavourable atmosphere for young adults to develop unhealthy dietary patterns. University students generally exercise autonomy in their dietary choices, taking into consideration factors such as affordability and the accessibility of fast-food options. Their knowledge regarding nutritious food choices is insufficient, leading to a notable influence on their eating habits and the overall quality of their diet. According to the research conducted by Ganasegeran et al. (2012), a significant proportion of students, specifically 73.5%, consumed fried food at least twice a week.

Pollert et al. (2016) argues that any problem in the world may be analysed from two perspectives: the causes and the impacts. Causes are the underlying reasons for becoming involved in the problem. Conversely, the effect arises from the adjustment of habits, regardless of whether it is a short-term or long-term outcome. Obesity is the primary adverse outcome of bad dietary patterns and lifestyle choices. This is due to the fact that contemporary youth have a preference for and frequently partake in the consumption of processed foods that are rich in both fat and sugar. A study conducted by Greaney et al. (2009) unequivocally demonstrates that a mere 5.7% of college students from eight colleges in the United States adhere to the recommended daily intake of five or more servings of fruits and vegetables. In addition, they hardly engage in physical activity, opting instead to remain seated in front of a laptop to fulfil their academic obligations and engage in video gaming. Persistent consumption of food, coupled with a sedentary lifestyle and prolonged periods of inactivity, leads to substantial weight gain and ultimately results in obesity. Beslay et al. (2020) conducted a study which revealed that higher consumption of processed foods was associated with gain in body mass index (BMI) and higher risks of overweight and obesity. Moreover, it is well acknowledged that obesity escalates the likelihood of acquiring diverse ailments such as stroke, diabetes, coronary heart disease, hypertension, and cardiovascular mortality.

Furthermore, individuals who engage in poor eating habits and lifestyle often encounter psychological issues directed against themselves, which is a highly common side effect

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(Ganasegeran et al., 2012). Primarily, this can be attributed to obesity, which adversely affects both body image satisfaction and self-confidence. Obesity results in the loss of self-perception and a diminished acceptance of one's own body. For instance, teenagers who previously had anxieties about their physical appearance and body image now lack self-assurance. Due to their adverse perception of their own physical appearance, individuals will develop feelings of diminished self-worth, sadness, and worry. If these effects last, they can result in the development of eating disorders such as anorexia nervosa and bulimia nervosa. These diseases involve deliberate restriction of food intake due to a fear of weight increase. Da Luz et al. (2018) conducted a study involving 1383 individuals with existing eating disorders. The findings revealed that 87% of individuals with binge eating disorders and 33% of individuals with bulimia nervosa had experienced obesity at some stage in their lives. This study demonstrates a robust correlation between obesity and eating disorders, so substantiating the notion that both issues may exacerbate one another.

Methodology

Study Design

During the commencement stage, the project was clearly defined, and its feasibility was evaluated. The identification of key stakeholders and the establishment of basic goals and objectives were completed. The entire project commenced in December 2021 and concluded in August 2022. A quantitative cross-sectional study was carried out among pharmacy students at Universiti Teknologi MARA (UiTM) Cawangan Pulau Pinang Kampus Bertam. The study utilised an online survey questionnaire and lasted for four months, from March to June 2022. Respondents were selected based on their willingness to participate in this research. According to the Raosoft sample size calculator, the recommended sample size for this research is 158 with a 95% confidence level, 5% margin of error, 50% response distribution and the population size is 265. If a 10% non-response rate is added (17), the total respondents needed for this study is 184. The survey received a 100% response rate, indicating that all respondents contacted completed the survey.

Data Collection

The questionnaire was created by adapting questionnaires from a previous study conducted by Shayan-Moghadam et al. (2020) on eating habits and lifestyle. The questionnaire was administered to all participants using Google Forms. All respondents were requested to complete the survey through a questionnaire that was sent through WhatsApp with request letters for their responses (Othman et al., 2022). The questionnaire is segmented into section A, section B, and section C. Section A comprises the demographic data of all the respondents, whilst Section B encompasses the students' lifestyle practises. The final segment encompasses the dietary practises observed by pharmacy students. A quantitative cross-sectional study was done among pharmacy students at Universiti Teknologi MARA (UiTM) Cawangan Pulau Pinang Kampus Bertam. The study utilised an online survey questionnaire and lasted for four months, from March to June 2022. No significant obstacles were encountered during the data collection process.

Data Analysis

A descriptive analysis is employed to examine the entirety of the gathered data by elucidating the frequency and disparities between female and male pharmacy students, as inferred from the responses obtained from the questionnaires. Pearson's Chi-Square test is employed to assess

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the acquired data and ascertain the correlation between gender and other factors, including breakfast consumption, exposure to sunshine without sunblock, and daily physical activity involvement.

Ethical Aspect

Prior to collecting the data reported in this study, the survey and methods were approved by Universiti Teknologi MARA's (UiTM) Research Ethics Committee (REC) reference number BERC/05/2022 (UG/MR/60).

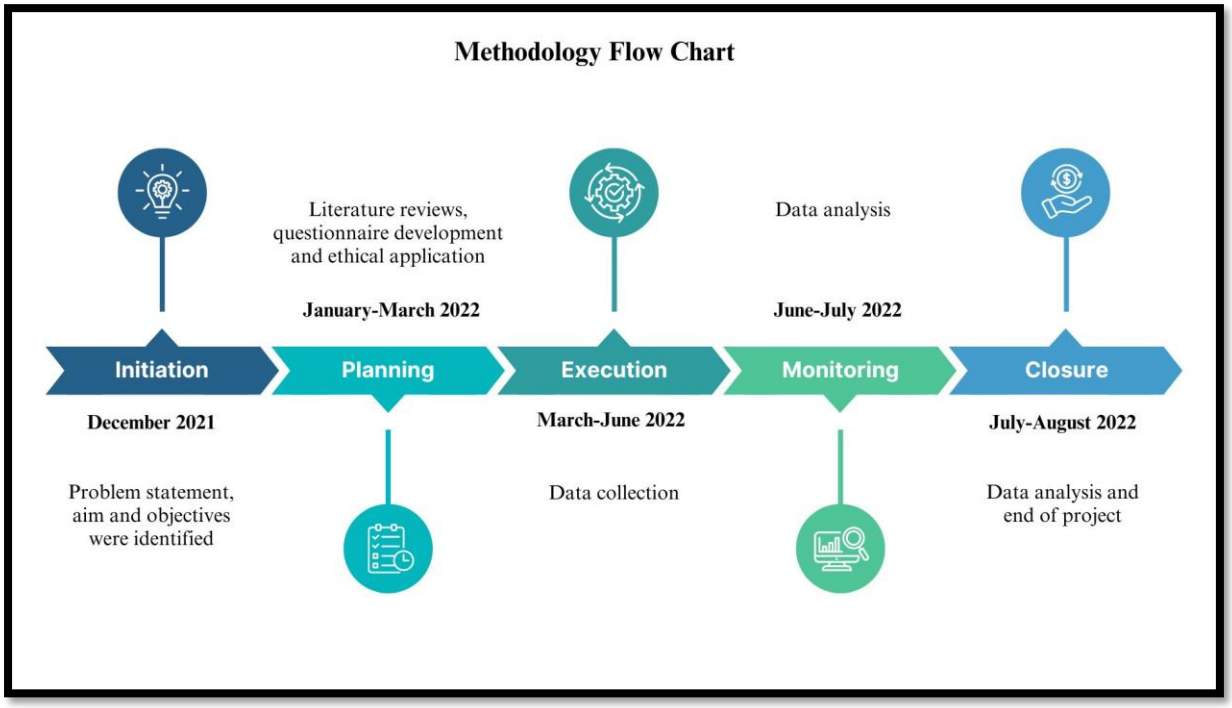

Figure 1: Flowchart Of The Research Methodology.

Results and Discussions

Socio-Demographic Data

An analysis was conducted on a dataset consisting of 184 responses obtained from pharmacy students enrolled at UiTM Cawangan Pulau Pinang (Bertam Campus). The responses to the lifestyle and dietary habits questionnaire were as follows: 122 female students (66.3%) and 62 male students (33.7%), as shown in Table 1. Twelve categories were derived from the gathered weight range data. The weight category in which the majority of female students fall falls within the range of 51 kg to 55 kg (21.3%), followed by 46 kg to 50 kg (19.7%). The lowest weight category, which was responded to by a single respondent, is between 86 kg and 90 kg (0.8%). Subsequently, the weight range of 56 kg to 60 kg comprises the plurality of male students (19.4%), followed by 71 kg to 75 kg (17.7%). Male students provide the lowest weight range of 86 kg to 90 kg (1.6%).

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Table 1: Socio-demographic Data of the Survey Respondents (n = 184)

Characteristics	Frequency (%)
Gender	
Male	62 (33.7)
Female	122 (66.3)
Weight (kg): female respondent	
< 40	2 (1.6)
40 - 45	11 (9.0)
46 - 50	24 (19.7)
51 - 55	26 (21.3)
56 - 60	18 (14.8)
61 - 65	12 (9.8)
66 - 70	12 (9.8)
71 - 75	11 (9.0)
76 - 80	4 (3.3)
81 - 85	0
86 - 90	1 (0.8)
> 90	1 (0.8)
Weight (kg): male respondent	
< 40	0
40 - 45	3 (4.8)
46 - 50	4 (6.5)
51 - 55	7 (11.3)
56 - 60	12 (19.4)
61 - 65	7 (11.3)
66 - 70	5 (8.1)
71 - 75	11 (17.7)
76 - 80	8 (12.9)
81 - 85	4 (6.5)
86 - 90	1 (1.6)
> 90	0

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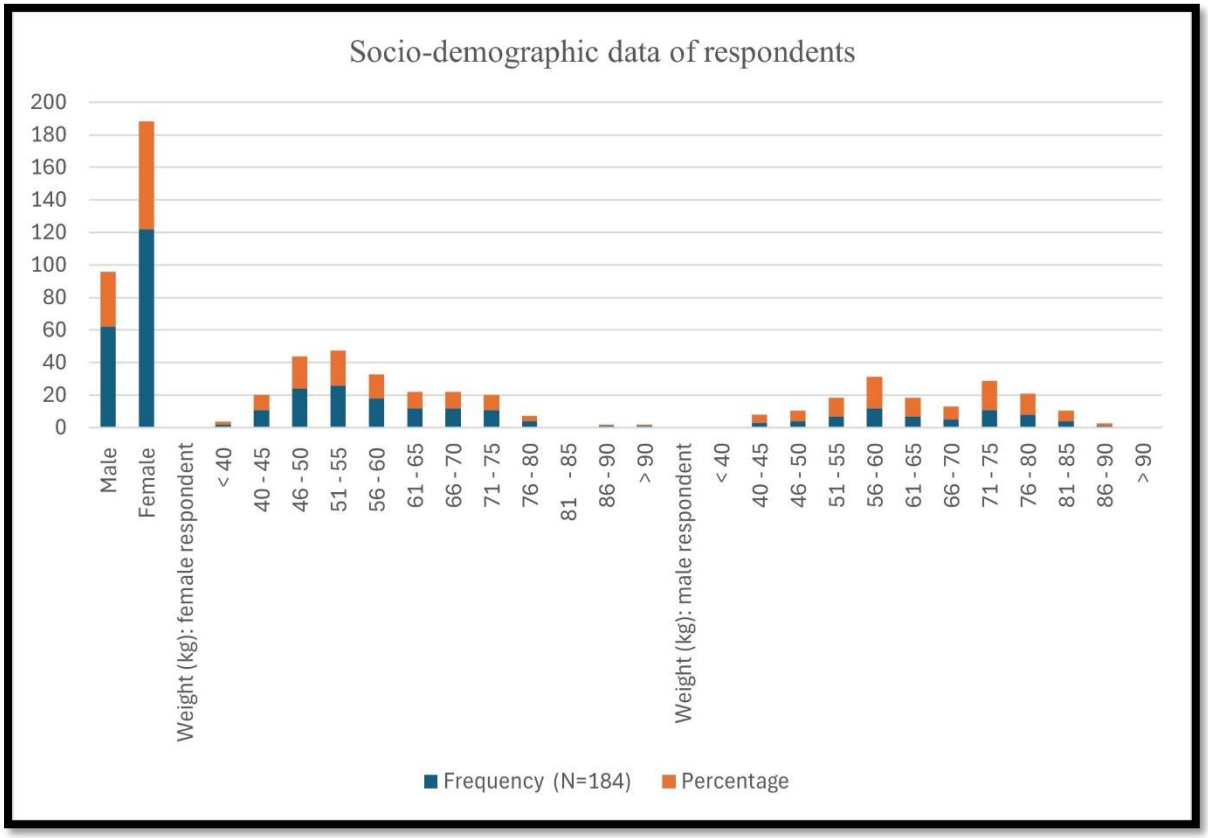

Figure 2: Socio-Demographic Data From 184 Respondents.

Breakfast Consumption

As shown in Table 2, 71 out of 122 female students (58.2%) reported consuming breakfast on a daily basis. This was followed by 51 respondents (41.8%) who stated that they did not consume breakfast daily. Similarly, the plurality of male students (36 out of 62) who responded "Yes" also consumed breakfast; this accounted for 58.1% of the total. Conversely, 26 out of 62 male students responded "No" to this question. The data suggests that a significant number of male and female students have breakfast on a daily basis. This finding contradicts the results of Ackuaku-Dogbe & Abaidoo (2014) study, which found that female students are more likely than male students to forego breakfast. This is due to the fact that the majority of women skip breakfast in an effort to lose weight (Hearst et al., 2016). Furthermore, our findings directly contradict the report by Mohammed (2020) which said that 80% of students skip breakfast. In contrast, our data reveals that more than 50% of respondents actually have breakfast daily. The data clearly demonstrates that there is no significant association between gender and having breakfast.

Table 2: Respondents' Breakfast Consumption (n = 184)

	Frequency (%)		*P*-value
	Yes	**No**	
Male	36 (58.1)	26 (41.9)	0.986
Female	71 (58.2)	51 (41.8)	
	107	77	

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Sleeping Duration

Male students slept for an anticipated duration of less than seven hours at a higher rate (87.1%; 54 out of 62 respondents) than their female counterparts (79.5%; 97 out of 122 respondents), as shown in Table 3. Additionally, it is noteworthy that female students obtained a significantly higher percentage (20.5%, or 25 out of 122 respondents) of the estimated sleep duration of 7 hours or more than male students, who obtained a mere 12.9% (8 out of 62 respondents). In majority, both male and female respondents sleep less than seven hours per day, according to our research. Becker et al. (2018) reported that 36% of multi-university students in the United States get less than 7 hours of sleep every night. According to Twenge et al. (2017), the utilisation of electronic devices and engagement with social media are correlated with an elevated likelihood of experiencing a shorter period of sleep among teenagers. In a separate study, it was documented that the participants were prone to experiencing difficulty initiating sleep, persistent daytime sleepiness, and fatigue when they sleep less than seven hours at night (Meyer et al., 2012). Our study also demonstrated that there is no statistically significant correlation between gender and duration of sleep.

Table 3: Respondents' Sleeping Duration (n = 184)

	Frequency (%)		
	7 hours or more	**Less than 7 hours**	***P*-value**
Male	8 (12.9)	54 (87.1)	0.205
Female	25 (20.5)	97 (79.5)	
	33	151	

Exposure To Sunlight Without Sunblock

As shown in Table 4, among the 122 female students surveyed, 36.1% (44 individuals) stated that their daily sun exposure without sunblock or sunscreen was for no more than 15 minutes. Subsequently, 31.1% of the respondents indicated that their daily sun exposure exceeded 2 hours. Following that, for 15 to 30 minutes daily, which accounts for 22 respondents (18.0%), and for the minority of female students, which comprises 18 individuals (14.8%), who were exposed to sunlight for 1 to 2 hours daily without using sunblock. Meanwhile most male students (53.2%) were exposed to sunlight for a duration exceeding 2 hours per day without utilising sunblock. This was followed by 14 out of 62 male students (22.6%) who were subjected for a duration of 1 to 2 hours per day. Following that, a mere seven male students (11.3%) were subjected to sunlight for less than 15 minutes per day, whereas 12.9% were exposed for 15 to 30 minutes daily.

Our analysis found that most female students had sun exposure of less than 15 minutes per day without protection, while most male students had sun exposure exceeding 2 hours per day without protection. Male students demonstrate higher levels of confidence than female students when exposed to sunlight without using any topical sun protection. It illustrates that gender is correlated with the degree of sun exposure in the absence of sunscreen or sunblock. As expected, female respondents demonstrate a greater dependence on sunscreen or sunblock when going outside compared to male participants. The topic concerns two research studies: one conducted by Basch et al. (2014), which revealed a higher occurrence of sunscreen usage among women in comparison to men; the other study by Tilwani et al. (2018) discovered that a larger percentage of female medical students used sunscreen compared to their male peers.

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Sunlight exposure is acknowledged as a crucial determinant of human health, namely in relation to the coordination of the body's circadian rhythms, hormone cycles, cellular energy generation, and vitamin D synthesis, among other factors. In order to receive advantageous solar exposure, it is necessary for the human skin to be exposed without the application of any topical protection. In a separate study, it was discovered that although the majority of participants demonstrated knowledge about the significance of sufficient sun exposure, their actions did not correspond with this awareness (Ismail et al., 2023).

Table 4: Respondents' Exposure to Sunlight without Sunblock (n = 184)

	Frequency (%)				
	<15 mins/day	**15-30 mins/day**	**1-2 hours/day**	**>2 hours/day**	***P*-value**
Male	7 (11.3)	8 (12.9)	14 (22.6)	33 (53.2)	0.001
Female	44 (36.1)	22 (18.0)	18 (14.8)	38 (31.1)	
	51	30	32	71	

Physical Activity Duration Per Day

Based on the data presented in Table 5, a significant proportion of female students (46.7% or 57 out of 122) prefer to remain indoors rather than engage in physical activities. This is closely followed by students who participate in physical activities for less than 30 minutes daily, comprising 38.5% or 47 students. The female students with the lowest percentage (18 students) are those who engage in physical activities for more than 30 minutes per day (14.8 percent). Subsequently, the proportion of male students engaging in physical activities for a duration exceeding 30 minutes daily is equivalent to that of the students who engage in physical activities for a shorter duration (37.1%, or 23 students). In contrast, a minority of male students (16 students) opt to remain indoors instead of engaging in physical activities (25.8%). It was clearly shown that male students have high tendency to do physical activity rather than female students ($p < 0.005$). This aligns with the findings presented by Mohamed Afif Asyraf et al. (2016), which indicated that 63% of male participants were physically active compared to female participants (37%). According to the findings reported by Pasek et al. (2020), individuals who participated in outdoor physical activity exhibited superior physical fitness in comparison to their peers. An investigation carried out by Jiang et al. (2021) revealed a noteworthy disparity between the sexes with regard to the correlation between engagement in physical activity and the happiness index.

Table 5: Respondents' Physical Activity Duration per Day (n = 184)

	Frequency (%)			
	<30 mins/day	**>30 mins/day**	**Never, I prefer to stay indoors**	***P*-value**
Male	23 (37.1)	23 (37.1)	16 (25.8)	0.001
Female	47 (38.5)	18 (14.8)	57 (46.7)	
	70	41	73	

Sweet Snacks Consumption

Based on the data in Table 6, the majority of female students, specifically 56 respondents (45.9%) out of a total of 122, reported consuming sweet snacks on a weekly basis. The second most common frequency of sweet snack consumption among female students was rarely, with 33 respondents (27.0%). Daily consumption was reported by 32 respondents (26.2%), while the lowest frequency of sweet snack consumption was never, with only 1 respondent (0.8%).

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Furthermore, specifically pertaining to male students, the majority of them, with 36 respondents (58.1%) out of a total of 62 male students, reported consuming sweet snacks on a weekly basis. The second most common frequency was "rarely," with 19 respondents (30.6%), while the lowest frequency was "daily," with 7 respondents (11.3%). The majority of both female and male students have sweet snacks on a weekly basis. Based on the table provided, it is evident that there is no correlation between gender and the consumption of sweet snacks. Both genders typically indulge in sugary treats on a weekly basis.

This pertains to the research conducted by Kirchoff et al. (2020), which found that male students consume unhealthy snacks, specifically sweet snacks, on a weekly basis. Additionally, it is connected to the study conducted by Kim et al. (2021), which revealed that female students exhibit a greater inclination towards consuming sweet snacks such as chocolates, candies, biscuits, and cookies.

Table 6: Respondents' Sweet Snacks Consumption (n = 184)

	Frequency (%)				
	Daily	**Weekly**	**Rarely**	**Never**	***P*-value**
Male	7 (11.3)	36 (58.1)	19 (30.6)	0 (0)	0.1
Female	32 (26.2)	56 (45.9)	33 (27.0)	1 (0.8)	
	39	92	52	1	

Non-Carbonated Sweet Drinks Consumption

According to Table 7, the majority of female students, specifically 53 respondents (43.4%) out of a total of 122, consume non-carbonated sweet drinks on a weekly basis. The second most common frequency of consumption is daily, with 41 respondents (33.6%). A smaller number of students reported consuming these drinks rarely, with 27 respondents (22.1%). The lowest frequency of consumption is never, with only 1 respondent (0.8%). Meanwhile, the majority of male students, specifically 36 out of 62 respondents (58.1%), reported consuming non-carbonated sweet drinks on a weekly basis. This was followed by 17 respondents (27.4%) who reported consuming these beverages daily, while the lowest number of respondents, 9 (14.5%), reported consuming them rarely.

Our study found that a significant number of both female and male students consume non-carbonated sugary drinks on a weekly basis. However, this finding contradicts the results of the study conducted by Bipasha et al. (2017) which indicate that male students had a higher likelihood of consuming non-carbonated sugary drinks compared to female students.

Table 7: Respondents' Non-carbonated Sweet Drinks Consumption (n = 184)

	Frequency (%)				
	Daily	**Weekly**	**Rarely**	**Never**	***P*-value**
Male	17 (27.4)	36 (58.1)	9 (14.5)	0 (0)	0.257
Female	41 (33.6)	53 (43.4)	27 (22.1)	1 (0.8)	
	58	89	36	1	

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Fast-Food Consumption

Based on the data in Table 8, the majority of female students, specifically 61.5% or 75 out of 122 students, consume fast food on a weekly basis. The second most common frequency of fast-food consumption among female students is rarely, accounting for 26.2% or 32 students. The lowest number of female students, at 12.3% or 15 students, consume fast food on a daily basis. The majority of male students, specifically 77.4% or 48 out of 62 students, eat fast food on a weekly basis. The second most common frequency of fast-food consumption among male students is "rarely," with 17.7% or 11 students. The male students who consume fast foods on a daily basis have the lowest percentage, which is 4.8% (3 students). Consequently, both female and male students exhibit a strong inclination to consume fast food on a weekly basis. The data presented indicates that there is no relationship among gender and the consumption of fast foods. Our findings contradict the results provided by Lee & Allen (2021), which indicate that young men were generally more prone than young women to participate in unhealthy eating behaviours. Similarly, the study conducted by Mattsson & Helmersson (2007) reported that male students tended to prioritise consuming unhealthy fatty foods for satiety, but female students had a broader perspective and compared it to healthier home-cooked meals. Furthermore, a significant number of young individuals engage in consuming fast food as a form of socialising, nevertheless, they are developing a dependency due to the presence of addictive components that enhance the appeal of these meals (Shatabdi Goon et al., 2014). Students generally appreciate this type of pre-made meal since it offers them convenience and cost savings, thanks to its quick accessibility and availability.

Table 8: Respondents' Fast-food Consumption (n = 184)

	Frequency (%)				
	Daily	**Weekly**	**Rarely**	**Never**	***P*-value**
Male	3 (4.8)	48 (77.4)	11 (17.7)	0 (0)	0.076
Female	15 (12.3)	75 (61.5)	32 (26.2)	0 (0)	
	18	123	43	0	

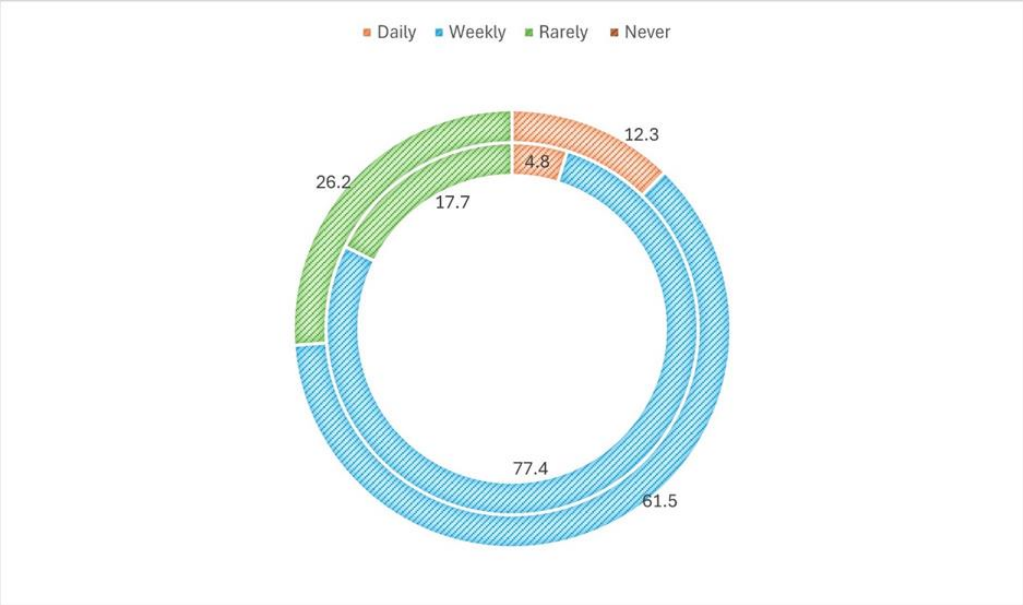

Figure 3: Respondent's Consumption Data On Fast-Food (%). The Most Outer Layer Represents Female Data, And The Inner Part Represents Male Data.

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Conclusion

In conclusion, this study has effectively achieved its objectives, providing insight into the lifestyle and dietary patterns of Diploma of Pharmacy students at Universiti Teknologi Mara (UiTM) Cawangan Pulau Pinang (Bertam Campus). Our research findings underscore the prevalence of unhealthy living and eating habits among these students, potentially influenced by the myriad challenges and stressors inherent in their academic pursuits. Emotions emerge as pivotal factors shaping the lifestyle choices and dietary behaviors of Pharmacy students at UiTM Bertam Campus, with the adoption of unhealthy practices posing significant risks to both their health and academic attainment.

Interestingly, our investigation reveals minimal discrepancies in lifestyle and dietary habits between male and female pharmacy students, suggesting that gender exerts little influence on these behaviors except in specific instances. Consequently, we advocate for proactive efforts among Pharmacy students at UiTM Bertam Campus to recalibrate their daily routines towards embracing healthier lifestyles and dietary practices. By doing so, they can bolster their focus on academic endeavors, potentially yielding exceptional academic performances in the long run.

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Conflict of Interest

The authors declare no conflict of interest.

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