



Teenagers Eating Habits Data Analysis

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ABSTRACT: It is common to see newly emerging fast food restaurants in today's world. Although some have said that balanced diet is now a trend among teenagers which obviously seems irrelevant and contradicts the authors' observation. In order to find an answer to this question, the authors conducted a survey asking teenagers about their eating habits.

KEYWORDS: Data analysis, Eating habits, Mental health, Physical health, Teenagers' eating habits

INTRODUCTION

Many people are concerned about the health of teenagers nowadays. Some said that most teenagers have bad eating habits. This may be the result of the development of today's food technology and also the lifestyle of those teenagers. So, the researchers' aim is to study the eating habits of those people in the study group which include many students in Bangkok, Thailand. It is known that some health problems are associated with poor eating habits. Are those teenagers going to face serious health issues in the future?

Therefore, the authors took this chance to conduct a survey asking about what their eating habits are like e.g. Do they have a balanced diet? Do they normally consume 5 food groups recommended by health authorities?

The main point of this study is to illustrate all the inappropriate eating habits most teenagers have and the health issues that may be the results of their poor eating habits. Since it is widely acknowledged and observed that in today's world, fast-food and high calories food seem to be the youngsters' most favorite types of food.

It is concerning that some people have poor eating habits just because they do not have enough time to consume proper food. All it is left for them is fast-food which is faster and easier for them to eat.

However, this survey can help those people to understand more about their eating habits and what they should adjust or change in order to have a balanced diet.

HYPOTHESIS

Most people in the study group may often eat processed food and other non-healthy dishes. There is also a likely chance that they will eat meals late at night too. Since, most teenagers who filled in the survey are those who live in the City of Bangkok which is also associated with a busy lifestyle and high studying rate.

DATA RECEIVED FROM THE SURVEY

The data extracted from the survey which includes hundreds of people asked and filled in the survey, can be concluded that, many people did prefer snacks over a real proper morning dish, with 27.4% admitting that they prefer to eat so. This is due to the fact that time may be the contributing factor that leads to many people choosing snacks or sandwiches over real proper morning dishes. It is a concern regarding how important breakfast is, many teenagers still choose to skip.

Normally, a perfect breakfast should contain carbs which will be used as an energy reserve for the body to use throughout the day, Protein for our body to recover from exercise or injury. But when some people refuse to eat breakfast or eat snacks instead, they may lack those important nutrients.

Moreover, 29.8% did say that they would choose strong flavored food which may often include salt, sugar and spice. They also admitted that they consume a non-balanced diet, eating too much strong-flavoured food. Sugar is a significant contributing factor to Diabetes Mellitus type 2. Salt can be dangerous if eaten too much, it can lead to renal/kidney failure in the future. Spices such as chili are also dangerous, it is worth noting that chili is a natural acid which can help increase the pH



in our stomach if eaten too much. The rise in the pH in the stomach can be a factor resulting in gastric ulcer. Even though it is known that gastric ulcer is the result of bacterial infection, the infection of *Helicobacter pylori*, the rise in the pH in the stomach will help increase the pain and symptoms.

35.4% said that they often ate dishes that contain 5 main groups of nutrients. In addition, some people still looked after their health, as we can see from the 35.4% that often had 5 main groups of nutrients in their meals. Having 5 main groups of nutrients can strengthen our body. As we need all of the 5 main groups, lacking one is likely going to cause a huge problem. For example, if a kid is having insufficient amounts of protein, their growth is likely going to be affected.

The proportion of people who had meals late at night was at 29.8%. Time may be the contributing factor once again. People who have a fixed timetable may experience a lack of eating time. Furthermore, Thai teenagers often had special classes after school which can be the cause that resulted in youngsters having meals late at night. Due to that, it may be the primary reason that Thai teenagers have meals late at night.

The corollary of having meals late at night is that the acid will reflux up to the esophagus which is called GERD (gastroesophageal reflux disease). Heartburn, which is the symptom of acid reflux, will affect teenagers' health.

In terms of fast food, the percentage of those who rarely had fast food was 33.3%. Maybe it was just because some teenagers really looked after their health and eating habits. Fast food is considered to be the solution for Thai teenagers who have limited time.

23.8% said that they always had snacks close by their sides in case they were hungry. However 23.8% reported that they often had snacks, they might have less concern about their health. Due to the fact that, there may be numerous assignments or tests in the upcoming future. The corollary of that is, some student have been struggling and the solution in this scenario is snack which statistically is the best way to destress for Thai teenagers

The figure for those who often had soft drinks was at 34.5%. This is a concerning number despite the fact that many people had already known that soft drinks contain nothing but sugar. However, the data may seem less disturbing knowing that now, there are so many types of healthy soft drinks available in the market which contain sweeteners such as aspartame instead of sugar and can still maintain the normal-full favourness.

The figure for the people who admitted that the amount of food they consume surely did not meet the amount needed each day is also interesting, 31 in 100 people confessed that. Due to, most people know much enough for them, resulting in them is taking an efficient

27.4% had meals on time. This small figure may be the result of so many people can't having a fixed timetable. 40.5% often had sweets/treats or desserts as an option to normal dishes.

They were likely to consume too many desserts which could further be the cause of Diabetes Mellitus type 2. On the other hand, sugar also has a wide range of advantages. Not only Glucose is the body's main source of energy but it also has an impact in terms of emotion. To recapitulate, Thai teenagers should consume sugar appropriately.

33.3% often had alcohol. Alcohol might be the factor that has an impact on the drinker's mental health. Some may drink alcohol to relieve stress, although some might just enjoy drinking it. The most noticeable effect which is caused by drinking too much is chronic diseases such as liver disease.

66.7% are said to have eaten at fast food restaurants too often. Due to, either unfinished work or new assignment which is given by teachers, teenagers can not manage their schedule which can be the primary reason that impact their decision

23.8% reported that they often had snacks throughout the day and alongside them in case they were hungry. The result of bad eating habits is the digestive system will work inefficiently.

THE RESULTS FROM EATING FOOD THAT LACKS SOME NUTRIENTS

PHYSICAL HEALTH SIDE EFFECTS

It's known that our body (digestive system) converts food particles that we eat into small monomers such as lipid acid or amino acids called nutrients which can be absorbed to the blood vessel. If we don't take enough food or nutrients, which are known to be essential to the body, we cannot synthesise it on our own.

Energy provided from food also plays important roles in our body. It's a source that helps us to be able to do activities. Like nutrients, Our body can't synthesise it on our own.



Energy from 1 gram of lipid contains 9 Kilocalories, Protein and Carbohydrate contain 4 Kilocalories per 1 gram of them. It can have a huge impact on a kid's health, with deficiency in some nutrients can result in kids being outgrown by their classmates.

It can also have an effect on a kid's immune system. If our bodies don't get enough nutrients, vitamins and minerals, our bodies will be weakened since most of our body functions need energy and nutrients from food we intake.

Women who are pregnant also should take enough nutrients otherwise it can have negative side effects on their kids.

MENTAL HEALTH

There are a wide range of mental health issues that are created by poor eating habits. There is a correlation between unhealthy diets and mental health.

Sometimes we have a desire to select food we just want to eat and don't mention effects physical health but we're delighted and this point mental health improved. It is known that there is an effect on mental health if we are physically strong. Therefore, if they are physically healthy, there is a high chance that they will also be mentally healthy too. In terms of mental health patients who are struggling from depression, a healthy diet is intensively crucial. The corollary of having a healthy diet is, it will boost brain development. Furthermore, in terms of emotion, a healthy diet will decrease risk of bad mood such as depression.

FACTORS THAT HAVE AN INFLUENCE ON PEOPLE'S EATING HABITS

ENVIRONMENTAL FACTORS

It is thought that our habitat in the past also influenced our ancestors' eating habits and indirectly influenced us too.

The ancestors that lived in this area, wet land, their food was from agricultural sections such as rice and other crops. Because they were the types of food that could easily be found in these areas. It is because of "food availability".

For example, Eskimo people e.g. the Inuit and Yuit, often eat meat as their main dishes since vegetables and crops are scarce. It is also known that, in the particular area, close to the northern pole, crops are really hard to grow.

SOCIAL FACTOR, ALLOWANCE AND PRICE

In some situations, fast food is cheaper than real proper food. This might be the case when we are considering that most people in the study group are still pretty young, most are teenagers. Their allowance is indeed limited. So, fast food is an alternative if they want to cut their spending.

Although it can also be seen that people with high income often eat more beef and meat when compared to those with lower income.

Social influences on food intake refer to the impact that one or more persons have on the eating behaviour of others, either direct (buying food) or indirect (learn from peer's behaviour), either conscious (transfer of beliefs) or subconscious. Even when eating alone, food choice is influenced by social factors because attitudes and habits develop through the interaction with others. However, quantifying the social influences on food intake is difficult because the influences that people have on the eating behaviour of others are not limited to one type and people are not necessarily aware of the social influences that are exerted on their eating behaviour.

Social support can have a beneficial effect on food choices and healthful dietary change. Social support from within the household and from co-workers was positively associated with improvements in fruit and vegetable consumption⁴⁶ and with the preparation stage of improving eating habits, respectively⁴⁷. Social support may enhance health promotion through fostering a sense of group belonging and helping people to be more competent and self-efficacious

PREFERENCE

Preference is the key in helping people decide what to eat and influence their eating habits. Food preferences are the evaluative attitudes that people express toward foods. Food preferences include the qualitative evaluation of foods, and also how much people like and dislike them.

There are statistics that show that people usually prefer their local food, food from their hometown or childhood food so this might be the major effect on food selection.



DIFFERENCES IN CULTURE/KNOWLEDGE

People who have different cultures tend to have different lifestyles and therefore, different food. Some people in some particular areas might avoid certain types of food due to their beliefs that those types of food are bad or against their religious rules. For example, some religions have rules prohibiting the sales of alcohol. So, some might have never tried alcohol because of those religious rules. Although some of them may just have the fear of facing the outcome of being unconscious for a while or at least, they just know that it is bad for their health.

Studies indicate that the level of education can influence dietary behaviour during adulthood. In contrast, nutrition knowledge and good dietary habits are not strongly correlated. This is because knowledge about health does not lead to direct action when individuals are unsure how to apply their knowledge. Furthermore, information disseminated on nutrition comes from a variety of sources and is viewed as conflicting or is mistrusted, which discourages motivation to change. Thus, it is important to convey accurate and consistent messages through various media, on food packages and of course via health professionals.

TECHNOLOGICAL ADVANCEMENTS

In the past, processed food was unknown to human society. But now, it is becoming one of the essentials. Though it has been seen as a non-healthy and not-a-wise choice of eating, it is unavoidable for people who have busy lifestyles. Technology also plays a huge role in making more choices of dishes for us. Nowadays people can access food recipes, food stores and various types of food items or discover food that we have never seen before by technology such as phone, television and internet.

In the past, it was almost an impossible task to eat food imported from other countries. It often took months or years to deliver a cargo to another country. Food in the past would not have been able to last that long. Compared to today's delivery time, it is possible to buy a product from another country in the region to have it delivered by your house in the next morning or so. So the point is, technology has helped us to have an increased number of choices to eat.

ADVERTISEMENT

It is fair to say that advertisement has played a significant role in helping people decide what to choose. Advertisements from big companies often featured some big name actors or influencers who have been popular among teenagers. As those teenagers are heavily influenced by their idols, there is a high chance that they will buy the products from those companies even if the quality of the products may not necessarily meet the price. Sports players also made a huge effect on advertising because sports are worldwide and accessible and many sports players are famous. Nowadays players are as famous as actors or singers, some are more famous so some of their eating habits can affect teenager's eating habits.

DISCUSSION

After all, it can be inferred that some teenagers still care less about their health, irrelevant to the fact that people nowadays consider more about their health. Fast-food was the most serious problem, with two-third of them admitting that they often eat fast food. One of the most found problems is sweets and desserts, around 40.5% said that they often had desserts, treats and sweets. If these two factors can be reduced, overall teenagers' health will surely be improved.

CONCLUSION

In this study, we examined the consuming behaviors of teenagers. After examining these teenagers, our statistical analysis has shown that the proportion of high-school students who normally maintain a balanced diet throughout the week is at 29.8 percent.

It is concerning that some teenagers have poor eating habits just because they do not have enough time to consume proper food. All that is left for them is fast-food which is faster and easier for them to eat. Furthermore, 23.8 percent of teenagers always eat snacks. This is perhaps because many teenagers have to finish their assignments during the night time.

More than half of Thai teenagers never had alcohol. Due to the fact that there is a wide range of healthy soft drinks available in the market, 34.5 percent of teenagers often have soft drinks.

However, this survey can help those people to understand more about their eating habits and what they should adjust or change in order to have a balanced diet. Furthermore, it also encourages them to realize the importance of good quality meals.



Table 1. Analysis of consuming simple meals, such as sandwiches, breads instead of having breakfast

	Frequency					Total	Result
	Never	Rarely	Sometimes	Often	Always		
Consume simple meals instead of having breakfast							
Percentage	15.5	27.4	20.2	20.2	16.7	100	Rarely

Overall, high-school students rarely consume simple meals, such as sandwiches and breads (27.4 percent)

Table 2. Analysis of consuming spicy meals

	Frequency					Total	Result
	Never	Rarely	Sometimes	Often	Always		
Consume spicy meals							
Percentage	4.8	17.9	29.8	19	28.6	100	Sometimes

Overall, high-school students sometimes consume spicy meals (29.8 percent)

Table 3. Analysis of consuming all of 5 major food groups

	Frequency					Total	Result
	Never	Rarely	Sometimes	Often	Always		
Consume all of 5 major food groups							
Percentage	7.1	16.7	34.5	20.2	21.4	100	Sometimes

Overall, high-school students sometimes consume all of 5 major food groups (34.5 percent)

Table 4. Analysis of consuming late-night meals

	Frequency					Total	Result
	Never	Rarely	Sometimes	Often	Always		
Consume late-night meals							
Percentage	20.2	29.8	16.7	15.5	17.9	100	Rarely

Overall, high-school students rarely consume late-night meals (29.8 percent)



Table 5. Analysis of consuming fast food

	Frequency					Total	Result
	Never	Rarely	Sometimes	Often	Always		
Consume fast food							
Percentage	9.5	33.3	33.3	17.9	6	100	Sometimes

Overall, high-school students rarely or sometimes consume fast food (33.3 percent)

Table 6. Analysis of consuming snacks

	Frequency					Total	Result
	Never	Rarely	Sometimes	Often	Always		
Consume snacks							
Percentage	19	16.7	19	21.4	23.8	100	Always

Overall, high-school students always consume snacks (23.8 percent)

Table 7. Analysis of consuming sugary drinks

	Frequency					Total	Result
	Never	Rarely	Sometimes	Often	Always		
Consume sugary drinks							
Percentage	15.5	20.2	34.5	13.1	16.7	100	Sometimes

Overall, high-school students sometimes consume sugary drinks (34.5 percent)

Table 8. Analysis of consuming adequate meals

	Frequency					Total	Result
	Never	Rarely	Sometimes	Often	Always		
Consume adequate meals							
Percentage	4.8	11.9	31	27.4	25	100	Sometimes

Overall, high-school students sometimes consume adequate meals (31 percent)



Table 9. Analysis of consuming meals punctually

	Frequency					Total	Result
	Never	Rarely	Sometimes	Often	Always		
Consume meals punctually							
Percentage	13.1	25	27.4	23.8	10.7	100	Sometimes

Overall, high-school students sometimes consume meals punctually (27.4 percent)

Table 10. Analysis of consuming desserts instead of main meals

	Frequency					Total	Result
	Never	Rarely	Sometimes	Often	Always		
Consume desserts instead of main meals							
Percentage	40.5	33.3	15.5	7.1	3.6	100	Never

Overall, high-school students never consume desserts instead of main meals (40.5 percent)

Table 11. Analysis of drinking alcohols

	Frequency					Total	Result
	Never	Rarely	Sometimes	Often	Always		
Drinking Alcohols							
Percentage	66.7	17.9	6	4.8	4.8	100	Never

Overall, high-school students never drink alcohols (66.7 percent)

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