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EATING HABITS: a study with teenagers from a public school in the backlands

from Alagoas

FOOD HABITS: a study with adolescents from a Public School in Sertão of Alagoas

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SUMMARY:

Adolescence is a complex phase marked by the transition between childhood and adulthood. It is observed that at this stage, adolescents need to consume large amounts of food due to their peak physical and cognitive development. Therefore, it is necessary to raise awareness about healthy eating for a better guality of life. In this context, this study aimed to understand the factors that influence the eating habits of adolescents, as well as to investigate their eating practices. To implement this research, some methodological procedures were used, in order to achieve the proposed objective. That said, a qualitative and quantitative research was adopted. The aim was to understand the eating habits adopted by adolescents and the associated factors. It was concluded that family influence was associated with healthy eating habits of adolescents, on the other hand, when they eat meals without the presence of family, adolescents tend to eat unhealthy foods. Ease of access was a determining factor in the choice of food by adolescents, most of which are unhealthy and poorly nutritious foods. The media and friends were also shown to be important factors in food choice. Furthermore, the research demonstrated that the consumption of fried and ultra-processed foods is widely included in the participants' diet. This research contributes to verifying the need to implement healthy eating measures with the aim of improving the intake of healthy foods, and thus reducing the consumption of foods that are harmful to the health of adolescents.

Keywords:Eating habits; Adolescence; Eating practices.

ABSTRACT:

Adolescence is a complex phase marked by the transition between childhood and adulthood. At this stage, teenagers need to consume large quantities of food due to the top of their

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physical and cognitive development. It is therefore necessary to raise awareness about healthy eating for a better quality of life. In this context, the aim of this study was to find out about the factors that influence adolescents' eating habits, as well as to investigate their eating practices. A number of methodological procedures were used to instrument this research, with a view to achieving the proposed objective. That said, a qualitative and quantitative study was adopted. The aim was to understand the eating habits adopted by adolescents and the associated factors. It was concluded that family influence was associated with adolescents' healthy eating habits; on the other hand, when they eat their meals without family presence, teenagers tend to eat unhealthy foods. Ease of access was a determining factor in adolescents' choice of food, most of which is unhealthy and not very nutritious, and the media and friends were also important factors in food choice. In addition, the research showed that the consumption of fried and ultraprocessed foods is widely included in the participants' diets. This research contributes to verifying the need to implement healthy eating measures with the aim of improving the intake of foods that are beneficial to health, and thus reducing the consumption of foods that are harmful to adolescents' health.

Keywords: Eating habits; Adolescence; Eating practices.(3 to 5 keywords)

1 INTRODUCTION

Adolescence is a complex phase marked by the transition between childhood and adulthood. It is a time characterized by impulses of physical, mental, sexual and social development, in addition, it is a crucial period for the development of complex issues that require greater cognitive capacity to deal with (Negru-Subtirica*et al.,* 2016).

It is observed that at this stage, the adolescent needs to consume large quantities of food due to the peak of their physical and cognitive development. It is at this time that the eating habits and customs that will be carried into adulthood are built (Silva, 2019). In addition, adolescents begin to have greater autonomy in making decisions regarding the purchase and consumption of food, being exposed to different environments outside of their homes and in the school environment. In view of this, it is important that the school offers nutritious and quality food to students, considering the length of stay and number of meals eaten (Sá*et al.*,2024).

In this sense, it is important to emphasize that adequate eating patterns during adolescence become crucial in the future of these individuals (Melo et al., 2020). Since eating behaviors are still developing, it is of utmost importance



It is important that these adolescents adopt healthy eating habits and behaviors (Tayyem et al., 2014). Therefore, it is necessary to raise awareness about healthy eating for a better quality of life.

Food is a basic human need. It is through food that we obtain energy to regulate the body's vital functions, contributing to the organism's development. Among the various influences that individuals receive, food is certainly an important element, since, from birth to adulthood, human beings are influenced by the environment in which they live. There are personal and social factors of great relevance to the development of habits, among them, eating habits.

The evidence found in the study by Oliveira and Frutuoso (2021) indicates that the replacement of natural foods with processed products integrated into a more sedentary lifestyle is associated with factors responsible for the high prevalence of excess weight among adolescents. In addition, the increase in the consumption of ultraprocessed foods worldwide has already been identified as a risk factor for numerous chronic non-communicable diseases (Lane*et al.*,2021). This situation suggests the need to implement varied strategies and interventions to promote healthier diets among adolescents (Hargreaves et al., 2022).

In this context, the present study aimed to understand the factors that influence the eating habits of adolescents, as well as to investigate their eating practices.

2 THEORETICAL FRAMEWORK

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2.1 FACTORS INFLUENCE EATING HABITS

The development of adolescents' food preferences involves a range of factors and interactions between individuals, which may be interpersonal or environmental, such as peer influences, school experiences and family participation in adolescents' diets (Yuen*et al.*, 2019).

Studies conducted by Larson et al. (2016) indicate that family meals can be important allies in promoting healthy eating habits at breakfast. In addition, family support and guidance are crucial to cultivating



healthy eating habits since parents who choose healthy foods more easily promote adequate meals for their children (Al-Shookri et al., 2011; Rhoades et al., 2011).

Regarding the food consumption of adolescents when they are with friends, it is noted that there is a greater intake of fatty and unhealthy foods when they are in their presence compared to the consumption of these foods when they are in the presence of their parents Wang & Fielding-Singh (2018).

In recent decades, it has been noted that dietary patterns have been changing as the consumption of natural foods has decreased, making room for the large-scale production of ultra-processed foods known for their ease of preparation and consumption, as well as low cost and storage (Pinto and Costa 2021). These factors may be associated with the high intake of these foods by adolescents, in addition, the increase in the consumption of ultra-processed foods is related to the occurrence of Chronic Non-Communicable Diseases (NCDs) (Saúde, 2019).

Regarding adolescents' diets, it is clear that social media can have a great influence on the diets of these individuals, since they show items to attract users' attention through advertising campaigns that suggest modernism and diversity in relation to diet (Bittar, 2020). In this context, studies indicate that the marketing of ultra-processed foods to children and adolescents is widely recognized as a major cause of the obesity crisis and one of the biggest factors in the rapid growth in the consumption of these products in markets around the world (WHO, 2010).

3 MATERIAL AND METHOD

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To implement this research, some methodological procedures were used, with a view to achieving the proposed objective. That said, a qualitative and quantitative research was adopted.

With regard to quantitative research, its main characteristic is the use of quantification, whether in the methods of collecting information or in its processing,



being carried out through statistical techniques ranging from the simplest, such as percentage or average, to the most complex, such as correlation coefficient, regression analysis, among others (Pereira, 2019). This research is quantitative in nature because statistical analyses are used to qualify the information obtained from the data collected.

Regarding qualitative research, for Minayo (2001), qualitative research is concerned with aspects of reality that cannot be quantified, such as beliefs, values and attitudes, focusing on the explanation of processes and phenomena related to social dynamics. This study is qualitative in nature, as the information obtained through the data will come from the participants' narratives.

The study was conducted with 60 adolescents aged 12 to 15 years, students enrolled in the 7th and 8th grades of an elementary school in the city of Carneiros, located in the interior of the state of Alagoas. As a tool for this research, a semi-structured online questionnaire was used through Google Forms, which was directed to the adolescents through their contact networks. The questionnaire consisted of 10 questions, 7 of which were multiple choice and three were essay questions addressing the eating habits and practices of the research participants.

Regarding the description of the answers, some were described according to the order in which the answers were received on the form. Furthermore, the aim was to preserve the identity of the participants by naming the subjects by the letter R for the answer (R1, R4, R31...). The answers were chosen based on the observations of those that best and most clearly responded to the proposed questionnaire.

4 RESULTS AND DISCUSSION

From the data obtained in this research with school adolescents between 12 and 15 years old, it was observed that (36.7%) were male while (63.3%) were female, standing out as the majority. Regarding the diet carried out on a daily basis, the participants claimed to have between 3 and 4 meals a day, as shown in Table 1.

Table 1-Number of daily meals and description of eating habits.

(Continued)

R4:*"*In the morning I don't usually eat anything, at lunch I eat beans, rice, meat and salad, and at night I eat something savory. It depends, but I usually eat 3 times a day."

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R13: "Rice, beans, meat, couscous. 3 meals."

Source: Survey data, 2023.

Table 1-Number of daily meals and description of eating habits.

(Conclusion)

R54: "My diet is usually rice, beans, etc. There are 3 meals a day."

R22: *"Healthy I have 4 meals a day-the-day".*

R26: *"My diet is good, 4 meals."*

R30: "Simple rice with beans and meat, I have 3 meals and 1 afternoon snack."

R31: "Couscous, rice and beans and bread. 3 meals a day."

R32:"My diet is normal food like rice, pasta, etc. I have 3 meals a day."

R11: "3 meals, breakfast, lunch, and dinner."

R41: "I have 4 meals a day, my daily diet-the-day is healthy".

Source: Survey data, 2023.

According to Table 1, it can be seen that the respondents mentioned the number of meals in addition to describing which foods they consumed. Rice and beans were the items most mentioned by the students in the survey. Jorge*et al.*(2014), emphasize that the consumption of rice and beans should be encouraged, as their combination is of high nutritional value and accessible to all social classes. It is observed that adolescents have three main meals during the day, which are breakfast, lunch and dinner.

Table 2 shows the students' responses about whether they consider their diet to be healthy, explaining the reasons why they believe it to be adequate or not.

Table 2-Number of daily meals and description of eating habits.

(Continued)

R1: "Not really because from time to time I eat a lot of sweets at home."

R2: "Not really, because I eat a lot of fried food and drink soft drinks."

R9: *"I consider it more or less healthy, because sometimes I consume a lot of sugar in drinks and other foods."*

R21: "Yes. I consider it healthy, because I don't always eat salty foods or other things that are not healthy."

R13: "No, because I eat a lot of junk food."

R17: "Yes, because I like to eat vegetables and fruits."

Source: Survey Data, 2023.

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Table 2-Number of daily meals and description of eating habits.

(Conclusion)

R13: "No, because I practically only eat junk food."
R15: "No, I eat a lot of nonsense."
R18: <i>"Yes, I always try to prepare vegan recipes.that I see on the internet and consume fruits and vegetables wi</i> very often".
R31: <i>"No, my diet is unbalanced and I eat a lot of junk food."</i>

Source: Survey Data, 2023.

From the reports of the subjects participating in the research observed in Table 2, it is noted that the majority of adolescents do not consider their diet to be healthy because eat a lot of "junk food" or eat too much sweets and fried food. On the other hand, a minority of students stated that they have a healthy diet because they have the habit of eating fruits and vegetables. Below, Table 3 shows the results regarding the difference in the diet of adolescents in their homes.

Table 3-Is your diet different at home? Why?

R4: <i>"Yes, because my mother puts healthy foods for me to eat."</i>
R11:""At home, there are more complete and healthy meals"
R12: <i>"Yes, because my family likes to eat healthy things."</i>
R20: <i>"Yes, because my mother makes healthier food."</i>
R25: "It's different because there are more healthy foods than at school."
R45: <i>"Yes, my diet is very healthy at home."</i>
R53: <i>"Yes, because at school I only eat snacks and junk food, at home it's normal food."</i>
DEC. Was at home I usually and more "healthy" associally because it describe usually have fried foods sweets ats"

R59: "Yes, at home I usually eat more "healthy", especially because it doesn't usually have fried foods, sweets etc." **R60:** "Yes, because everyone in my house eats healthier things."

R24: *"Yes, at school I eat junk food, at home I eat "healthier" because my mother doesn't let me eat it. so much nonsense".*

Source: Survey data, 2023.

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Regarding the differences in food at home, students claim that there is a difference in meals eaten at home because the family tends to eat healthier foods and therefore have more complete meals.avoiding eating "junk food" like fried foods and sweets. These positive results in relation to main meals can be

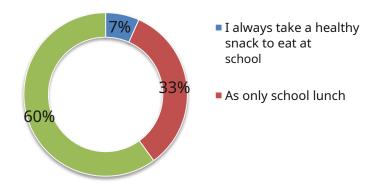




explained by the fact that around 68% of Brazilian students between 13 and 17 years old have the habit of having lunch or dinner with their parents or guardians (IBGE, 2021).

It is observed that the family plays a fundamental role in the formation of individuals' habits, especially in terms of eating, as evidenced in this research. In this sense, the participation of family members is essential when it comes to choosing the foods consumed, as they are responsible for providing the food through preparation or authorizing its purchase.

School is an environment where students spend a good part of their day, and consequently they eat their meals there. The data shown in Graph 1 reveal the eating habits of students at school.



Graph 1-What is your diet like at school?

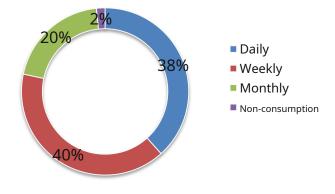
Source: Survey data, 2023.

The data shows that (60%) of teenagers have a diet based on sweets, savory snacks and salty snacks at school, (33%) only consume the snack provided by the school, while (7%) reported always taking a healthy snack to eat at school..Although the school offers a lunch menu prepared by a nutritionist in accordance with the standards of the National School Feeding Program (PNAE), the vast majority of adolescents still choose foods that are not very nutritious. On the other hand, some participants only eat school lunches, which proves the importance of school lunches for this group. Graph 2 identifies the frequency of consumption of fried foods and ultra-processed foods by adolescents.



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Graph 2-How often do you consume ultra-processed foods?

Source: Survey Data, 2023.

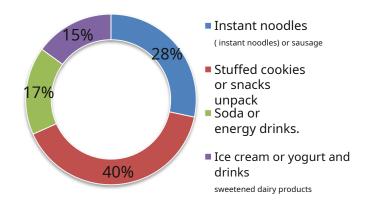
As shown in Chart 2, the consumption of ultra-processed foods is (40%) among those who consume them weekly, followed by (38%) who consume them daily, 20% monthly and only (2%) who claim not to consume them. The weekly and daily consumption rates are high, making it clear that unhealthy foods are widely included in the diet of adolescents.

According to the Food Guide for the Brazilian Population (2014), high consumption of processed foods is associated with cardiovascular diseases and diabetes. It is pointed out that adolescents who inadequately consume foods with high caloric density are twice as likely to develop overweight or obesity compared to those who consume nutritionally adequate foods (Barbalho*et al.*,2020).

Graph 3 shows the percentage of consumption of ultra-processed foods. (40%) of participants consume stuffed cookies or packaged snacks, (28%) instant noodles or sausages, (17%) soft drinks or energy drinks, while (15%) reported eating ice cream and yogurt or sugary dairy drinks.



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Graph 3-Which ultra-processed foods below do you consume most frequently?

Source: Survey Data, 2023.

Based on the data shown in Graph 3, it is possible to observe that there is a greater preference among teenagers for foods such as stuffed biscuits and packaged snacks, in addition to instant noodles (ramen) and sausage.

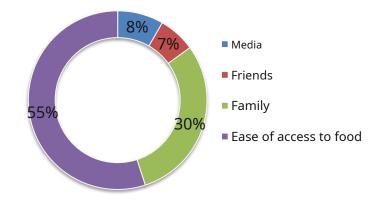
According to Chantal*et al.*, (2018), ultra-processed foods originate from a series of sequential industrial processes and reformulations applied to them, these products have a high density of sugars, saturated fats, trans fats and sodium. These characteristics explain the high attractiveness and palatability that certainly influence dependence, contributing to the reduction of more nutritious meals.

Regarding the question about what influences food choices in the survey, (55%) considered ease of access to food as the main factor, while (30%) said family was the influence, (8%) said the media and only (7%) said friends. Graph 4 shows the data regarding the influence on food choices by adolescents.

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Graph 4-What influences your food choices?



Source: Survey Data, 2023.

According to the data obtained, ease of access was shown to be significant in relation to what leads adolescents to choose certain foods. This may be associated with the fact that ultra-processed foods are often more readily available in everyday life than healthier foods.

As already mentioned in this research, the influence of the family's food culture is a determining factor in adolescents' food choices, creating specific habits and preferences. In the study by Martins et*al.*(2019), the results showed that eating meals with parents is associated with greater consumption of healthy foods and less consumption of unhealthy foods, suggesting that this practice reflects in the improvement of the quality of diet of Brazilian adolescents.

Eating habits influenced by the media were also identified in this research. This behavior is established because the industry cultivates, through various types of media, massive marketing campaigns for various food brands (Oliveira Dp,*et al.,* 2020). Furthermore, adolescents are active users of social media, which exerts great influence on their relationships, identity, emotional regulation, learning processes and their well-being (Shankleman; Hammond; Jones, 2021).

Social interaction with friends represented a small percentage in the survey, however, also proved to be an influencing factor for some participants. It can be seen that the

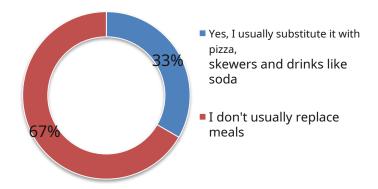
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The influence of the circle of friends on eating is a crucial factor when teenagers eat in the presence of friends (Yuen*et al.*, 2019). The authors Wang & Fielding-Singh (2018) pointed out in their studies that adolescents tend to make different food choices when they are with their parents and when in the presence of friends, with the latter situation being the most likely to choose unhealthy foods.

Regarding replacing main meals with snacks, (66.7%) of the participants claimed not to replace them, while (33.3%) responded that they replace them. Graph 5 shows the data regarding the replacement of main meals with snacks.

Graph 5-Based on your regular eating habits, do you often replace meals like lunch and dinner with snacks/or ready-made meals?



Source: Survey Data, 2023.

These results may suggest again that there is an association in performing the three meals a day with the family or not. It is often found that family members emphasize the importance of healthy eating and having regular meals as a preventive measure against diseases, in addition to encouraging adolescents to choose home-made foods instead of buying items from street vendors (Banna*et al.,* 2016).

Regarding the recognition that a poor diet can cause diseases and pose health risks, the survey participants (98.3%) recognized that a poor diet and one poor in nutrients can cause harm to health, while only

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(1.7%) reported not knowing. Despite being aware of the risk of eating unhealthy foods, adolescents are not worried about the future consequences of an inadequate diet (Leme; Philippi; Toassa, 2013).

FINAL CONSIDERATIONS

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With the aim of understanding the factors that influence the eating habits of adolescents, as well as investigating the eating practices of elementary school students in a public school, the study found that students eat three main meals a day, with beans and rice being part of their diet. However, they reported frequent consumption of unhealthy and ultra-processed foods.

Family influence has been shown to be associated with healthy eating habits among adolescents, as the family's eating culture is essential for promoting healthy eating behavior. On the other hand, when they eat meals without the presence of their family, adolescents tend to eat unhealthy foods.

Ease of access was a determining factor in the adolescents' food choices, most of which were unhealthy and poorly nutritious. The media and friends were also important factors in food choices. In addition, the research showed that fried and ultra-processed foods were widely consumed in the participants' diets. Despite knowing the risks that a poor diet can pose to their health, the adolescents did not show concern about future complications.

This research contributes to verifying the need to implement healthy eating measures with the aim of improving the intake of healthy foods, and thus reducing the consumption of foods that are harmful to the health of adolescents.

Since this is a study that assesses the food consumption of adolescents, it is necessary to consider that not all classes were included in this research. Therefore, the main limitations of the research are that only three elementary school classes and only one school were considered for analysis. Another limitation was that not all participants in the selected classes had a cell phone to answer the questionnaire.



Based on the understanding that this investigation into adolescent eating habits does not end with this research, it is suggested that larger samples be used in future studies and that memory biases be considered, mainly because it involves adolescents and because the questionnaire requires concentration and collaboration.

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