

International Journal of Human Sciences Research

CURRENT EATING HABITS OF STUDENTS AGED 18 TO 25 YEARS BELONGING TO UPIIG, DUE TO THE NEW ONLINE EDUCATIONAL MODALITY

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Instituto Politécnico Nacional

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Abstract: Through studies by health institutions, it was possible to show that young university students are indifferent to their eating habits, characterized by omitting the main meals of the day such as breakfast and dinner, not drinking water during the day, insufficient consumption of fruits and vegetables in their diet. A survey was carried out with 100 UPIIG students to obtain statistical data that indicate a variation in their eating habits with respect to the change from the face-to-face school modality to the online modality. The results obtained in the survey about how they would evaluate their current eating habits, it was obtained that 42.6% of those surveyed rate their habits as regular, 40.7% as good, 15.7% as bad and only 0.9% as excellent. 90.7% of those surveyed answered that there was a change in their diet due to the new modality of online classes. According to the research, it is evident that there is a change in the eating habits of UPIIG students due to the online modality, since more than 50% of the respondents say they have gained weight.
Keywords: Habits, Nutrition, Students, Online

INTRODUCTION

Eating habits are a set of activities acquired by an individual. These activities include the selection, preparation, and consumption of food and are mainly influenced by social, economic, cultural, and psychological factors of a specific population or region (Barzola & Bazantes, 2018).

On the other hand, the Food and Agriculture Organization of the United Nations in 2003 defined food habits as a set of customs that condition the way in which individuals or groups select, prepare and consume food, influenced by the availability of food, the level of education and access to it.

Youth is a complex stage where nutrition is neglected, with biological, psychological,

and social transformations causing behavioral changes. Additionally, the recent change to virtual classes has revolutionized the eating habits of young people, who, although they need to eat well to strengthen their bodies and maintain good academic performance, often neglect this aspect.

The World Health Organization (WHO) asserts that university students neglect their diet and omit main meals of the day for various reasons. It also highlights the low consumption of fruits and vegetables per day (Callisaya & Seleme, 2016, p. 13). Therefore, young people who are indifferent to their eating habits are more prone to different diseases, directly impacting their academic performance. It is thus essential to examine and strengthen their knowledge about nutrition.

In Mexico, the combined prevalence of overweight and obesity for people over 20 years old was 71.2% in 2012 according to the National Health and Nutrition Survey (Ensanut) in 2016 the figure rose to 72.5% (National Institute of Public Health, 2016).

To identify the patterns of eating habits adopted by university students, this research is based on studies conducted by the World Health Organization (WHO), the Institute of Health and Development Research (INSAD), Food and Nutrition Security (SAN), and the Human Right to Adequate Food (DHAA) (Callisaya & Seleme, 2016, p. 14).

Studies by the World Health Organization (WHO) in reports titled "Current Knowledge on Nutrition," "The Participatory Profile of Vulnerability to Food Insecurity," and "Ministry of Health and Sports" have shown that dietary patterns closest to the traditional Mediterranean diet, characterized by the consumption of two liters of water per day, fruits and vegetables, nuts, legumes, fish, olive oil, and a low intake of animal fats, help reduce the risk of cardiovascular disease and therefore contribute to the academic

performance of university students (Callisaya & Seleme, 2016, p. 16).

Currently, students at the Unidad Profesional Interdisciplinaria de Ingeniería Campus Guanajuato face the new virtual class modality due to SARS-COV 2. As a result, there has been a neglect of their diet due to attending online classes.

A critical stage in acquiring good eating habits occurs in childhood but also during university life. Now, with the current virtual class modality, there has been a significant disruption in the eating habits of UPIIG students.

Students have class periods of between 5 to 6 continuous hours, in addition to the tasks of each subject, which increase the hours dedicated to their completion. For example, completing a UPIIG virtual platform task for a mathematics subject with 25 exercises can take approximately 9 hours (considering the preparation of procedures). Additionally, there are projects, extracurricular courses, and daily activities.

Under these circumstances, students lose interest in their diet, increasing the consumption of processed, unhealthy foods, or delaying their meal times, which could lead to health problems in the short and long term.

METHODOLOGY

This research aims to investigate the eating habits adopted by young people at the Unidad Profesional de Ingeniería Campus Guanajuato (UPIIG) in response to the virtual class modality. To do this, tools such as surveys and interviews will be used to collect data.

A survey was conducted with 100 UPIIG students to obtain statistical data indicating a variation in their eating habits concerning the change from face-to-face to online school modality. The complete survey can be viewed at the following link:

<https://forms.gle/xQzTiK6xoiVmEQDM9>

Once this information is obtained, the results will be compared among the workgroup to reach a conclusion and provide a viewpoint directed at any reader of this research.

Additionally, an interview was conducted with a nutritionist to find out what negative aspects can be contracted with poor eating habits and how they can be corrected.

RESULTS

The results obtained from the survey conducted with 100 students from UPIIG are shown below, which can be visualized through graphs for better understanding. Students were asked to evaluate their current eating habits, and the results are shown in *Figure 1*, where it can be seen that 42.6% of the respondents rate their habits as regular, 40.7% as good, 15.7% as bad, and only 0.9% as excellent.

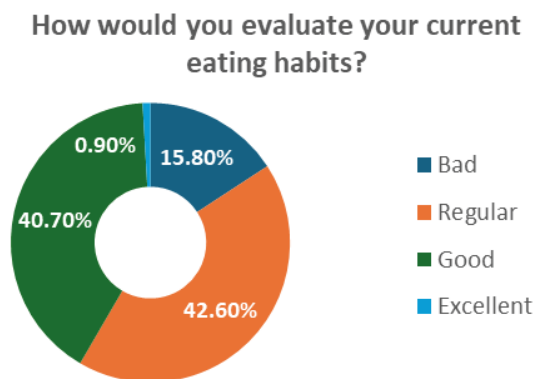


Figure 1. Current Eating Habits.

90.7% of the respondents answered that there was a change in their diet due to the new online class modality (see *Figure 2*), derived from the SARS-COV 2 virus, which highlights a very significant change in their eating habits.

Changing daily routines and working hours cause social isolation, decreased activity, restless sleep, and difficulties maintaining a healthy lifestyle with eating habits. At such times, individuals are not expected to behave as they did before, and new rules may be discovered, including those that shape their food choices (Yaman & Hocaoglu, 2023).

Do you think your diet has changed due to the new distance learning modality?

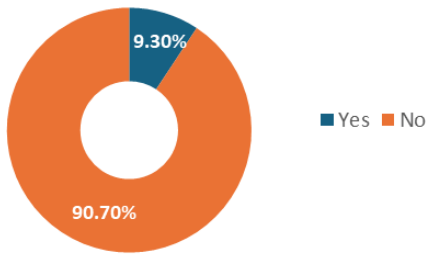


Figure 2. New Educational Modality Diet.

Regarding junk food consumption, a little more than half of the respondents (53.7%) answered that their consumption increased occasionally (Sisu et al., 2020). 18.5% of the students responded that they do not consume this type of food, in contrast to 6.5% who admitted to consuming it daily. In this regard, a change induced by the virtual modality is observed (Sisu et al., 2020).

Did your consumption of junk food increase with the online modality?

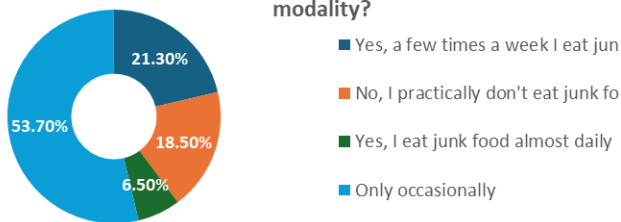


Figure 3. Junk Food Consumption.

Students were asked how they measure their food consumption, with the options being: portions, menus, not measuring their food consumption, or other. More than half of the surveyed people responded that they do not measure their food consumption, which can lead to the abuse of some food that over time may cause some condition derived from excess.

How do you measure your food intake?

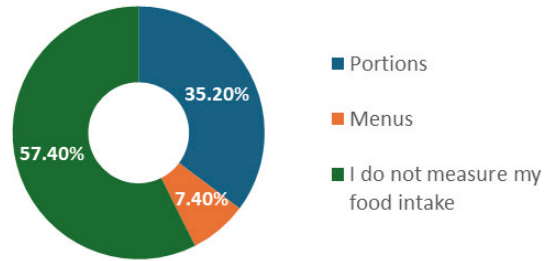


Figure 4. Food Consumption Measurement.

Regarding soda consumption, varied responses were obtained, which show that students do not have a very marked tendency regarding their consumption. In fact, 30.6% of the surveyed people responded that they do not consume this type of drink, 23.1% consume it more than three times a week, 19.4% less than three times a week, 22.2% less than three times a week, and only 6.5% daily (see Figure 5).

How often do you drink soda?

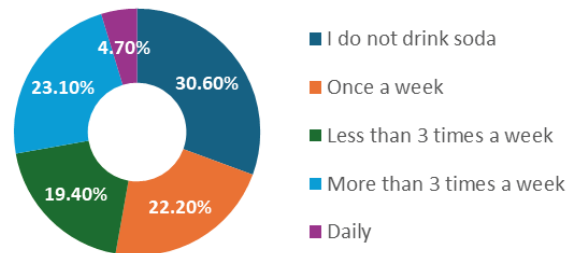


Figure 5. Soda Consumption.

25% of the respondents admitted to consuming more than 1.6 liters of water daily, knowing that according to the health department, the recommended consumption is 2 to 3 liters, although needs may vary according to age, sex, diet, and type of physical activity (Secretaría de Salud, 2017).

How much water do you consume per day (assuming a glass of water contains approximately 200ml)?

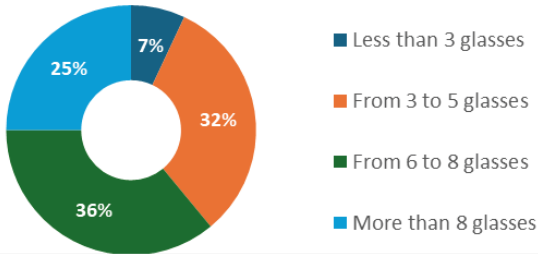


Figure 6. Water Consumption.

Another question was the frequency with which students exercise, 30.6% answered that they do not exercise, and only 8.3% do it daily. The remaining percentages exercise less frequently, for example: once a week (16.7%), less than three times a week (18.5%), or more than three times a week (25.9%).

How often do you exercise?

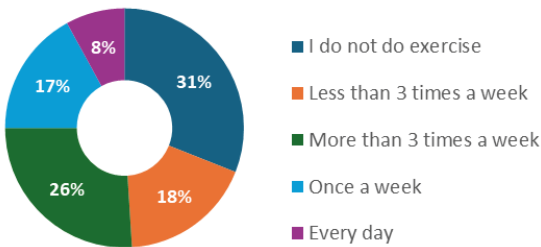


Figure 7. Exercise Frequency.

51.9% of the surveyed students responded that due to the online class modality, their body weight increased. This, together with the previously obtained data regarding water consumption and the lack of measurement in food portions, is somewhat predictable, but it is worth mentioning that not only these aspects can cause weight gain.

How do you think the online modality has affected your body weight?

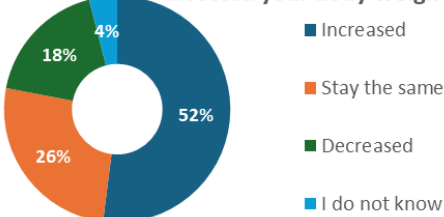


Figure 8. Body Weight.

Meal schedules for students also changed due to the online class modality, according to the results obtained in the survey. 84.13% of the respondents answered that their meal times were not the same as before the current educational modality (see Figure 9).

Are your meal times the same as before the online modality?

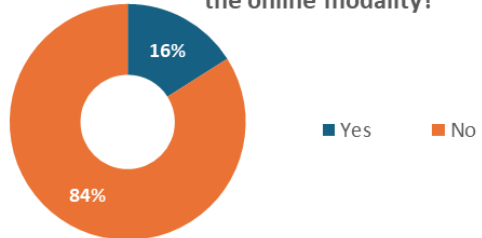


Figure 9. Meal Schedules.

We inquired about the number of hours dedicated per week to school activities. The results obtained are visualized in Figure 10. It stands out that only 13% of the respondents allocate less than 10 hours a week, and the rest between 20 and 40 hours a week to school activities.

How many hours do you dedicate to school per week?

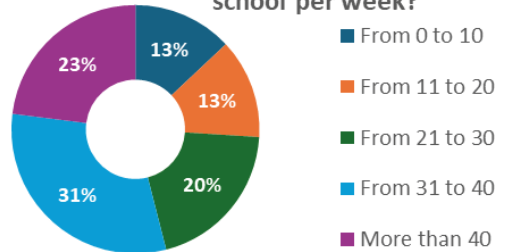


Figure 10. Hours Spent on School Activities.

It is known that there are several reasons why a person may have an unhealthy diet. In the survey, some of these were mentioned (see Figure 11), to observe which ones stand out the most among university students belonging to UPIIG. Among the reasons that obtained the highest percentage were: sedentary lifestyle (59.3%), stress, depression, and anxiety (56.5%), and disordered eating: schedule, type of food (52.85%).

The danger and perceived stress created by a visible or invisible enemy encountered unexpectedly, as well as being unprepared, can lead to different emotions, thoughts, and behaviors (Brüne & Wilson, 2020).

Emotional eating is defined as a tendency to overeat as a coping mechanism to regulate and reduce negative emotions, such as depression, anxiety, and stress (Ganley, 1989).

Numerous psychological and physiological hypotheses have been proposed to explain the relationship between stress and emotional eating. Emotional eaters have been shown to think that eating is the apparent solution to their negative feelings caused by stress (Michels et al., 2012).

Positive relationships have been reported between maladaptive coping strategies (e.g., suppressing emotions, relying on emotion-focused coping, avoiding stress by distracting) and emotional eating (Lu et al., 2016). As a result, stress affects the food choices and eating behaviors of individuals.

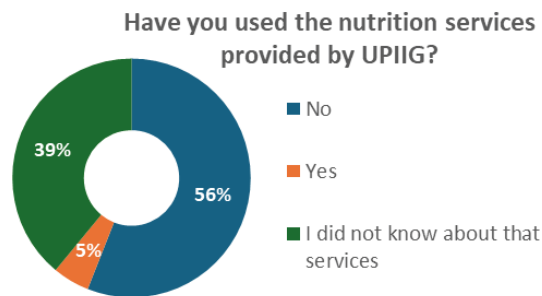


Figure 12. Nutrition Services Chart.

CONCLUSIONS

According to the research, it is evident that there is a change in the eating habits of UPIIG students due to the online modality, as more than 50% of the respondents say they have gained weight. Regarding the interview with nutritionist Karina Portillo, nutrition is one of the factors that affect academic performance since leading a healthy life is key to obtaining academic benefits. This answers the hypothesis posed, concluding that nutrition does influence academic performance.

It is observed that lack of time is one of the main factors that prevent healthy eating while students are in the process of professional training due to the course load and the time they dedicate to it. This limitation conditions the quality of their diet.

It is noteworthy that only 10% of students are aware of the nutritional services provided by the institution, raising another question for this project: Is there effective dissemination to make these types of school supports known to UPIIG students?

The results are conclusive: the virtual modality implemented during the pandemic and for UPIIG students increased students' body weight, altered meal schedules, and increased sedentary behavior, causing physical and emotional health repercussions for the students.

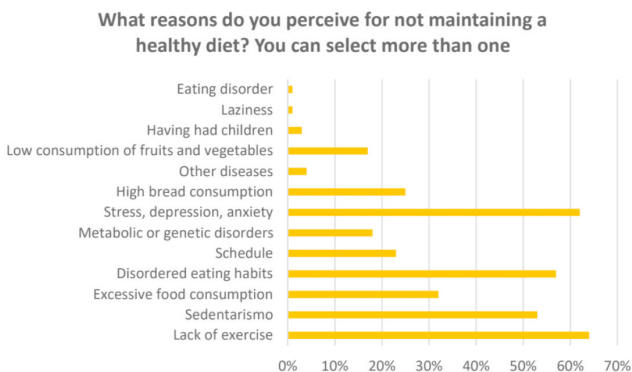


Figure 11. Reasons for an Unhealthy Diet.

Finally, students were asked if they had used the nutrition services provided by the Academic Unit. 55.6% responded that they were not aware of this service, and only 5.6% said they had used it.

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