

Ultra-processed food intake relationship versus quality of life in university population

Relação consumo de alimentos ultraprocessados versus qualidade de vida em população universitária

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Abstract

Objective: To evaluate the impact of ultra-processed foods and their prevalence on the public health of university students from the Fundación de Estudios Superior Comfanorte (FESC) where the consumption of (junk) food and its consequences have become an important health problem. global public health due to its deteriorating health consequences and increasing prevalence. Although its adverse health consequences are very common in all age groups, children and adolescents are at greater risk. It can lead to obesity and act as a risk factor for different noncommunicable diseases (NCDs) such as heart disease, cardiovascular disease, cancer, hypertension, diabetes, etc. **Method:** It was located in a quantitative methodology with a cross-sectional descriptive multicenter study approach, as it was the characterization of the population of 480 students-teachers and administrators at a specific moment in time. **Results:** In multivariable analysis, the highest consumption of ultra-processed foods was associated with a 37% high probability of total overweight/obesity, due to health awareness, without ignoring the absence in its promotion and maintenance in health with its EPS, and his sedentary lifestyle. **Conclusions:** Within the evaluated population, the university students of the FESC, who visit and give little importance to the issue of their health since they do not take as a priority a nutritional control with a nutrition specialist and that being overweight in students is something very forceful and notorious since being such young people full of great health and good physical strength they even have heart problems due to having bad eating habits.

Keywords: Fast Food, Obesity, Public Health.

Resumo

Objetivo: Avaliar o impacto dos alimentos ultraprocessados e sua prevalência na saúde pública de universitários da Fundação de Estudos Superiores Comfanorte (FESC), onde o consumo de alimentos (junk) e suas consequências se tornou um importante problema de saúde pública. saúde em todo o mundo devido à deterioração de suas consequências para a saúde e sua crescente prevalência. Embora suas consequências adversas à saúde sejam muito comuns em todas as faixas etárias, crianças e adolescentes correm maior risco. Pode levar à obesidade e atuar como fator de risco para diversas doenças não transmissíveis (DCNT), como doenças cardíacas e cardiovasculares, câncer, hipertensão, diabetes, etc. **Método:** Localizou-se em uma metodologia quantitativa com abordagem descritiva transversal, por se tratar da caracterização da população de

480 alunos-professores e administrativos em um momento específico no tempo. Resultados: Na análise multivariada, o maior consumo de alimentos ultraprocessados associou-se a 37% de alta probabilidade de sobrepeso/obesidade total, devido à conscientização da saúde, sem desconsiderar a ausência em sua promoção e manutenção da saúde com seu EPS, e sua estilo de vida sedentário. Conclusões: Dentro da população avaliada, os universitários da FESC, que visitam e dão pouca importância à questão de sua saúde, pois não priorizam o controle nutricional com nutricionista e que o excesso de peso nos alunos é algo muito contundentes e notórios por serem tão jovens cheios de boa saúde e boa força física têm até problemas cardíacos por terem maus hábitos alimentares.

Identification of the research project

The previous article originates from the research project: Consumption of ultra-processed foods; prevalence of overweight/obesity in the university population and health outcomes.

Introduction/Contextualization

"We are what we eat" Ludwig Feuerbach

The ideal of food is a complex advent with a multifactorial principle. After the Industrial Revolution, employees had little time to eat, appearing a new service, the restaurant service, which had to adapt to their economy and time, giving rise to the appearance of fast food franchises. In addition to this we add the appearance of ready-made foods in supermarkets, which are fresh products to which preservatives, additives and a long list of chemical additives have been added.

Since our genesis, hominids obtained energy from fruits, vegetables, and nuts and roots. The move to an erect posture made it possible to use more efficient feeding practices such as hunting and scavenging (Arroyo, 2008). In the Paleolithic period, the current human gene was developed, adding fish and various vegetables to the diet, with a balanced intake of unsaturated fats and low cholesterol.

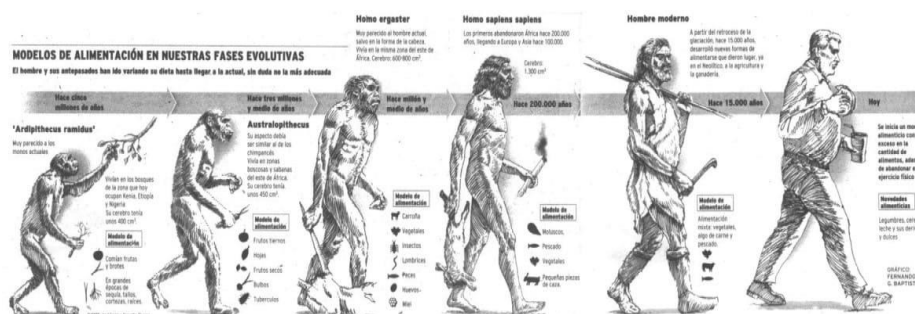


Figure 1: Evolution of human nutrition throughout history

According to Arroyo (2008), the most drastic changes in our diet occurred after the Industrial Revolution, with the introduction of livestock and agriculture, leading to an increase in energy consumption, added to lower energy expenditure due to the appearance of the cities. In that sense, junk foods are defined as foods that are readily available, generally inexpensive, and have less nutritional value. These foods contain more calories, more salt, are higher in saturated fat, and contain less iron, calcium, and dietary fiber. Common junk food includes fast food, carbonated drinks, chips, desserts, chocolates, etc. (Mandoura, 2017).

Globally, junk food is a popular thing and consumption is constantly increasing. Traditional foods have almost been replaced by foods that can be found ready-to-eat, canned, and preserved for a long time (Mukhopadhyay, et al 2020). Consumption of such foods has peaked in developed countries; however, there is an increasing trend in the developing countries of the world (Kearney, 2010). In South Asian countries, there is a clear upward trend in junk food consumption (Tabassum, et al 2012). Despite established evidence of the negative impacts of junk food on the human body, junk food consumption is popular among young people. Said consumption can lead to a high prevalence of obesity, diabetes mellitus, hypertension and coronary disease (Payab, 2015).

Citing Monteiro et al (2019), ultra-processed foods are formulations of ingredients, mostly for exclusive industrial use, that result from a series of industrial processes ("hence ultra-processed"). Ultra-processed foods include carbonated soft drinks; sweet or savory packaged snacks; chocolate and sweets (sweets); frozen; mass produced packaged bread and rolls; margarine and other spreads; biscuits (cookies), cakes, cakes and cake mixes; breakfast cereals"; ready-made pies and pasta dishes and pizza; poultry and fish nuggets and sticks, sausages, hamburgers, hot dogs and other reconstituted meat products; powdered and packaged "instant" soups, noodles and desserts and many other products (Monteiro et al 2019). These types of food products have become dominant in the food system, as Reardon points out, Timmer (2012) are easily found everywhere, often with attractive claims and marketing strategies. aggressive marketing, and are placed on prominent shelves at various food retailers.

In that sense, the increase in junk food consumption among all age groups and more common among young adults is an emerging public health challenge with a global prevalence of around 70%. Citing Mohiuddin (2019) rapidly changing dietary practices and an increasing sedentary lifestyle predispose to obesity-related non-communicable diseases such as insulin resistance diabetes, neurodegeneration and psychological changes, stroke, headache / migraine precipitation, metabolic syndrome, adult-onset diabetes, non-insulin-dependent diabetes, coronary artery disease, polycystic ovarian syndrome, nonalcoholic fatty liver disease, cancers and autoimmune disorders, and site-specific neoplasms, both in children as in adults.

As Aguilar & Chacon (2015) points out, the new lifestyle has achieved some changes in our lifestyle and to it in the habits of food intake, because we are facing quite particular phenomena: hurried life, the list of consumption of fast food has increased, because a type of food with little nutritional cost and its excessive consumption has created health problems such as hypertension, heart problems, obesity and among others.

Thus, according to Pagliai et al (2021), more and more epidemiological evidence shows an association between the consumption of ultra-processed foods and an increased risk of obesity. For this reason, ultra-processed foods are convenient and appetizing and replace meals based on fresh or minimally processed foods. These foods have higher energy density, more free sugar and unhealthy fats, and less dietary fiber, protein, micronutrients, and health-protecting bioactive compounds than non-ultra-processed foods, and their consumption is consistently associated with deteriorating nutritional quality of the diet. diet (Louzada, et al. 2017).

Beyond traditional studies of relative risk associated with etiologic factors, epidemiologic studies can also guide public health and health promotion and maintenance policies by providing estimates of population attributable fractions, which answer questions about the importance relative risk factors to the burden of diseases and conditions (Hall, et al. 2019). The estimation of the attributable fractions of the population has been used to inform managers and decision makers to assist in the formulation

of public policies. For example, the World Health Organization (WHO) provides information on the burden of disease attributable to the main modifiable risk factors through the Global Burden of Disease Study, and the Pan American Health Organization supports a working group studying Estimates of deaths attributable to sodium consumption in the Americas. Despite their relevance, these studies are scarce, particularly in low- and middle-income countries.

In this regard, Zaldivar (2018) bases on the personal panorama of nutritional habits and verify that, like the majority of the population, the diet was based on ultra-processed products such as white bread, pastries, snacks, sugary cereals, cookies, sausages and processed meats. In short, it has been an excuse to start learning how to change a habit so essential for the development of good health.

According to these reasons, the students, teachers and university administrators of the FESC presumably have a high rate of fast food consumption, this is generated by their low economic capacity, bad eating habits and absence in sports practices, bringing as Consequently, the increase in morbidity of the student population, and a low level of health, which increases the public health budget, leading to the deterioration of the quality of life of the university community.

Therefore, the availability of representative surveys to the university population of the FESC provides information on the acquisition of food at home and the nutritional status of individuals, allows an unprecedented quantification of the fraction of increase in the prevalence of obesity attributable to the increase of the consumption of ultra-processed foods in university life. In this regard, the Independent Variable Frequent consumption of fast food and Deterioration of Health dependent variable were evaluated.

Theoretical Approach

In recent decades, it has been possible to verify how the food company has ventured into our homes to facilitate our work at mealtime, solving and facilitating culinary methods with the preparation of their products. For these reasons, globalization, age, sex, economic situation and level, place of residence, fashion, education and religion are, among others, variables that mark our diet. It is true that a person from Colombia will not eat the same as one from Spain or the US, since they are, of course, totally different diets due to various conditioning factors. However, there is a pattern guaranteed by studies carried out around the world that allows us to affirm that diets are increasingly based on ultra-processed foods, which makes them of worse quality, even influencing the development of deadly diseases.

Table 1

Evolution of the definitions of the term ultra-processed foods (2010-2019)

YEAR	REFERENCE	DEFINITION
2009	Monteiro CA (2009) Nutrition and health. The problem is not the food, nor the nutrients, but the processing. Public Health Nutr 2009; 12:729–31	These are made up of Group 2 substances (Group 2 is made up of substances extracted from whole foods) to which are added relatively small or no amounts of minimally processed foods (Group 1), plus salt and other preservatives, and often also cosmetic additives.
2010	Juul F, Martinez-Steele E, Parekh N, Monteiro CA, Juul F, Martinez-Steele E, Parekh N, Monteiro CA, Chang VW. (2012) Consumption of ultra-processed foods and excess	This group is defined as a process that blends ingredients from Group 2 (processed culinary or food industry ingredients) and food products from Group I (unprocessed or minimally processed foods) to create durable, affordable, convenient, and appetizing ready-to-eat products. eat or ready to eat. -heat food products that can be eaten as appetizers or desserts or to replace homemade dishes.

	weight among US adults. <i>Br J Nutr.</i> 120	
2012	Monteiro CA, Levy RB, Claro RM, Castro IR, Cannon G.(2012) A new classification of foods based on the scope and purpose of their processing. <i>Cad Saude Publica</i> ; 26:2039–49.	These are formulated mostly or entirely from ingredients and typically do not contain whole foods. The purpose is to design durable, convenient, high-tasting or ultra-appetizing, and cost-effective products. They are generally not recognized as food versions. Most are designed to be consumed on their own or combined as snacks or drinks. Most of the ingredients used by manufacturers are not available in supermarkets or other outlets. Although some are derived directly from food, such as oils, fats, starches, and sugars, others are obtained through further processing of food components. Numerically, the vast majority of the ingredients in ultra-processed products are additives of various types including, but not limited to, binders, sweeteners, sensory enhancers, flavors, and colors.
2014	Moubarac JC, Parra DC, Cannon G, Monteiro CA.(2014) Food classification systems based on food processing: importance and implications for policies and actions: a systematic review and evaluation of the literature. <i>Rep. Curr Obes</i> ; 3:256–72.	Formulated mainly or totally from substances derived from food. They typically contain few or no whole foods. Durable, convenient, accessible, highly palatable, or very palatable, it is often habit-forming. They are not generally recognized as versions of food, although they can mimic the appearance, shape, and sensory qualities of food. Many ingredients are not available at retail outlets. Some ingredients derived directly from food, such as oils, fats, flours, starches and sugar. Others obtained by subsequent processing of food components. Numerically, most of the ingredients are preservatives; stabilizers, emulsifiers, solvents, binders, fillers; sweeteners, sensory enhancers, colors and flavors; processing aids and other additives. The dough can come from the addition of air or water. Micronutrients can “fortify” products. Most are designed to be eaten alone or combined as snacks. They move freshly prepared food-based dishes and meals. Processes include hydrogenation, hydrolysis; extract, mold, reshape; pre-processing by frying, baking.
2015	Costa Louzada ML, Martins AP, Canella DS, Baraldi LG, Levy RB, Claro RM, Moubarac JC, Cannon G, Monteiro CA. (2015) Ultra-processed foods and nutritional dietary profile in Brazil. <i>Rev Health Public</i> ; 49:38.	The third group (ultra-processed foods) is made up of industrial products that are made entirely or mostly from substances that have been extracted from food (oils, fats, sugar, starch, proteins), those that are derived from food constituents (hydrogenated fats, modified starches) or foods synthesized in a laboratory based on organic materials such as oil and carbon (colorings, flavorings, flavor enhancers and other additives used to give products attractive sensory properties).
2016	Martínez Steele E, Baraldi LG, Louzada ML, Moubarac Martinez Steele E, Baraldi LG, Louzada ML, Moubarac JC, Mozaffarian D, Monteiro CA. (2016). Ultra-processed foods and added sugars in the American diet: evidence from a nationally representative cross-sectional study. <i>BMJOpen</i> ; 6 (3): e009892.	Multi-ingredient formulations that, in addition to salt, sugar, oils, and fats, include food substances not used in culinary preparations, in particular, flavorings, colors, sweeteners, emulsifiers, and other additives used to mimic sensory qualities of unprocessed or minimally processed foods and their culinary preparations or to disguise undesirable qualities of the final product.
	Moubarac JC, Batal M, Louzada ML, Martinez Steele E, Monteiro CA. (2017). Consumption of ultra-processed foods	Industrial formulations typically with 5 or more and generally many ingredients. In addition to salt, sugar, oils, and fats, ultra-processed food ingredients include food substances not commonly used in culinary preparations, such as hydrolyzed proteins, modified starches, and hydrogenated or interesterified oils, and additives intended to mimic sensory

2017	predicts diet quality in Canada. <i>Appetite</i> ; 108: 512-20.	qualities of unprocessed or minimally processed foods and their culinary preparations or to disguise undesirable qualities of the final product, such as colourings, flavorings, non-sugar sweeteners, emulsifiers, humectants, sequestering and firming, bulking, defoaming, anti-caking and glazing agents.
2018	Julia C, Martinez L, Allès B, Touvier M, Hercberg C, Méjean C, Kesse-Guyot E. (2018) Contribution of ultra-processed foods in the diet of adults from the French NutriNet-Santé study. <i>public health nutrition</i> ; 21:27–37..	The fourth NOVA group is that of ultra-processed foods and beverages. These are industrial formulations typically with 5 or more and usually many ingredients. Such ingredients often include those also used in processed foods, such as sugar, oils, fats, salt, antioxidants, stabilizers, and preservatives. Ingredients found only in ultra-processed products include substances not commonly used in culinary preparations and additives intended to mimic the sensory qualities of Group 1 foods or culinary preparations made from these foods, or to disguise the undesirable sensory qualities of the food. Final product.
2019	Gibney, M. (2019) Ultra-processed foods: definitions and policy issues. doi:10.1093/cdn/nzy077	It is inferred that as a consequence of the ultra-processing of food, which includes the compositional contribution of food ingredients, the processing methods and the subsequent retail sale of the final products, the consumer faces cheap foods with high fat content, Mass-produced primarily by global multinationals, sugar and salt are engineered for long shelf life, near-addictive, and heavily advertised.

Healthy food

A healthy diet is one that is varied, provides energy and all the essential nutrients that each person needs to stay healthy, allowing a better quality of life at all ages; preventing diseases, such as malnutrition, obesity, hypertension and some types of cancer (Monteiro, 2012).

Nutritious food

All those foods that favor the development of a healthy life, due to their low amount of solid fat, low content of simple carbohydrates, high amount of soluble and insoluble fiber and high amount of micronutrients. The consumption of these foods is beneficial for humans due to their excellent nutritional qualities (Fernández & Sánchez, 2010).

Processed foods

That food product made from a natural food that has been subjected to an appropriate technological process for its conservation and subsequent consumption (Monteiro, 2012).

Ultra-processed food products

Combination of pre-processed group 2 ingredients, usually with little or no group one food, to create durable, accessible, convenient, and good-tasting products that are ready or nearly ready to eat or drink and can be consumed as snacks or desserts, or to replace dishes or made at home or in restaurant kitchens. Specific processes include: baking, battering, frying, deep-frying, curing, smoking, pickling, canning, use of preservatives and cosmetic additives, addition of synthetic vitamins and minerals, and sophisticated types of packaging (Monteiro, 2012). .

Human feeding

They are all those actions oriented to the supply, distribution, preparation and consumption of food (Torun, et al, 1994).

School feeding

It consists of a diverse and comprehensive set of uses of food with a view to obtaining educational results, which is increasingly interchangeable with the expression “food for education”. This should be a nutritious meal as part of breakfast, snack or lunch, to reduce hunger during the school day and provide the necessary nutrients to complement eating outside of school (Fernández & Sánchez, 2010).

Methods

Data source and sampling

Prevalence or cross-sectional studies describe the health of a population, therefore it is carried out to examine the presence or absence of a disease and simultaneously the presence or absence of an exposure is investigated, at the same moment in time, thus the research Consumption of ultra-processed foods; prevalence of overweight/obesity in university students determines the context of public health. For this reason, it was carried out from a Positivist paradigm, with a quantitative methodology, and a cross-sectional descriptive approach.

In this regard, citing Ruiz (2006) the cross-sectional design receives this name because it is a research procedure without continuity in the time axis. It is usually called a prevalence study, since with this design it is possible to estimate the prevalence of the disease. Likewise, the study is descriptive, where all the epidemiological information on health characteristics, the use of health resources or satisfaction with a particular medical problem is collected, as well as knowing the prevalence of a condition of interest such as a chronic disease to detect the prevalence of cases in these diseases, therefore its frequency can be estimated and examine the trend of the disease in the population.

Continuing in the same order of ideas, for Sabina (2016) population is statistically understood as "an aggregate of individual units, whether made up of people or things that are found in a certain theme". Within this framework, for the purposes of this scientific manuscript, the totality or universe of the population is made up of students, professors, and administrators of the Universidad Fundación de Estudios Superior Comfanorte de Norte de Santander-Colombia, who present the characteristics in the following table 1:

Table 1
Characteristics of the study population

	Unidades Informantes			
University population FESC	Administrative	Teachers	Students	Total
Sub total	25	70	385	480
Total	480			

Source: SION (2022)

Results

Study characteristics

Carrying out a characterization of the population that accompanied the investigation, it can be described in Table 2.

Table 2 Characterization of the population

Genere
•M: 34.4% F: 65.6%
Age
•18 a 29 años 60,4%, 30 a 49 años 28,1%, 50 a 59 años 7.3 %, 60-64 años 4,2%
Civil status
•65,6% single, 31,3% married, 3,1% divorced
Link with the university
•Students 69,8%, Teachers 26%, Administrative 4,2%
Socioeconomic
•Estrato 2 un 32.3%, Estrato 3 un 30.2% estrato 1 un 21,9 % Estrato 4 13.5% Estrato 4 2.1%
Weight
•45k-60k 43,7% 61k-80k 36,4% 81k-90k 12,5% 91k-110k 7.2%
Height
•145cm-160cm 38,5% 161cm-175 44,8 176cm-190 14,5% 190cm-200 1%

According to the above, any inference from a sample refers only to the defined population from which it has been correctly selected. We can call this the target population is the FESC academic where the high weight is women, likewise the prevalence of population age is between 18-29 years, leading to their marital status of singles the majority, and the link is mostly students, and the sum of stratum in 2 and 3 and an average height between 161 and 175cm.

Identification of the research question

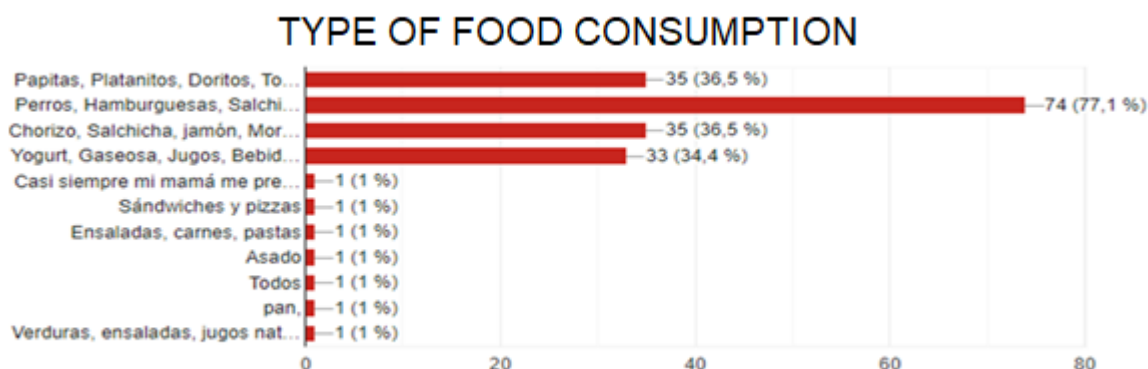
The main objective of this study was to provide an overview of the current consumption practices of ultra-processed food, therefore, the availability of ultra-processed foods in a university or municipal context is usually related to the different types of food vendors and their location in the territory, as well as social, economic and demographic factors.

In that order, the opinion of junk food is considered, culinary preparations represented the majority of the energy consumed. However, it was possible to observe a greater contribution from ultra-processed foods, especially sugary drinks and ready meals, as the frequency of consumption outside the home increased. Compared with the consumption of food exclusively at home, eating away from home increased the consumption of ultra-processed foods by 0.41 percentage points within and among individuals being somewhat satisfied, this may be because the places they have visited have not prepared the food well or because they have a good eating habit, and 0.39 percentage points satisfied.

In this way, people consume ultra-processed food, 0.80 percentage points of those surveyed agreed to consume this type of food, this is normal since they feel happy when consuming this type of food, and it is related to the habit and way of life. of the person and their family. On the other hand, 0.20 percentage points do not consume this type of food, which may be related to a healthy eating style. Regarding dietary intake, participants were instructed to record all food and beverages, reporting the type of preparation, the amount of food, the time of the meal, the day of the week, and the place where they ate (in home or away from home). They also answered a question about the habit of sweetening drinks with sugar or sweetener. The interviewers reviewed the records presented, investigating the consumption of foods commonly outside the home, evaluated through the frequency of days in which

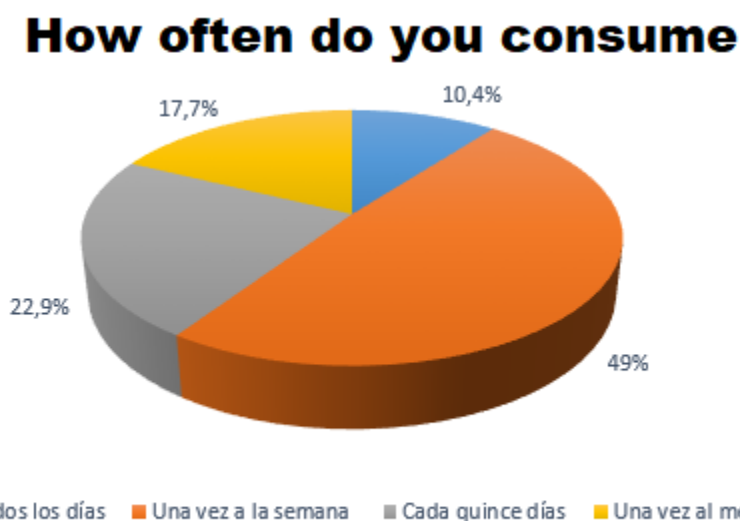
each individual reported eating some food outside the home. For this, graphs 1 and 2 consolidate consumption.

Graph 1.



Own elaboration 2022

Graph 2.



Own elaboration 2022

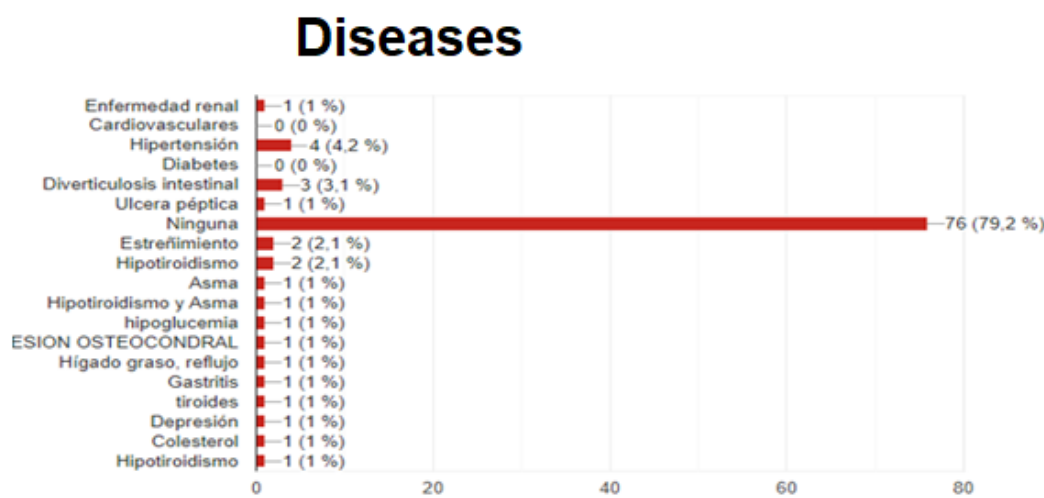
Likewise, people consume this food due to lack of time, 0.53 percentage points affirm that they do not have enough time to prepare their food and resort to this type of food, although it is worth noting 0.36 percentage points accept that they consume it due to addiction and another 0.11 percentage points for saving money. Consequently, 279 people go to a restaurant, this may be due to hygiene or the service provided by this type of business, and 201 people go to a fast food business, which largely offers its cheapest products. In addition, most of the investigated actors prefer water as an accompanying drink since it helps control body weight, is free of calories and sugars and does not have chemical additives of any kind, which is good for health (Diario Z, 2020).

In this sense, their prevention and maintenance of health was consulted, where it can be said that community health is the collective well-being of the members of the community. In addition to living

in the same University or region, these populations usually share health characteristics, ethnic groups and socioeconomic conditions, 0.15 percentage points of those surveyed are in control with their health provider institution, in that order resolution 3280 of 2018 of The Ministry of Health divides the ages into the life cycle as they are; early childhood, childhood, adolescence, adulthood and old age and where the referenced population is an average of 18 to 59 years of age where young people are the average is 18 to 28 years, adulthood from 29 to 60 years, these are in programs where risk factors are evaluated, which are hypertension, diabetes, mental and nutritional health, generating a commitment to their health, in addition, 0.85 percentage points say that they do not attend these programs.

According to the above, the issue of having medical check-ups even twice a year, it was determined that 0.55 percentage points make medical visits every 6 months and 0.28 percentage points three times a year, this may be related to the recommendation that is given, to have a medical check-up every 4 months, but there are other people who go every two months is 0.9 percentage points and others who attend once a month and have a percentage of 0.7 percentage points which It may be related to a disease that requires monitoring and constant visits to the doctor.

Graph 3.



Own elaboration 2022

For this reason, the issue related to the consumption of ultra-processed foods and their relation to overweight or other consequences that the consumption of these foods brings, an analysis of the diseases of the respondents was carried out, where we found that 0.79 percentage points of the 480 people do not have any disease and the remaining one has one of the diseases mentioned as; Cholesterol, Gastritis, Depression, Asthma, Diabetes among others.

It should also be considered that physical activity according to the protocols of the World Health Organization (WHO) the evidence was reviewed to evaluate the associations between physical activity and sedentary behavior since according to the consumption of ultra-processed food, what of which 0.59 percentage points perform sports and 0.41 percentage points do not perform any, the evidence reaffirms that all adults should perform physical activity regularly and that some physical activity is better than none. The guidelines for adults include strong recommendations based on moderate-certainty overall evidence for weekly volumes of aerobic and muscle-strengthening physical activity.

Discussion

This study aimed to evaluate the availability of ultra-processed foods, according to different types of food retailers and sociodemographic factors in the Fundación de Estudios Superior Comfanorte (FESC) academic population. To assess these issues, an ultra-processed food availability assessment was developed. In the FESC studied, high scores for the availability of ultra-processed foods were presented. This study improved the understanding of the sociodemographic factors related to the availability of consumption of ultra-processed foods, their maintenance and prevention in health, and their physical activity, and found that the student population with a higher concentration of people of low and medium income, in the consumption of ultra-processed food.

In this regard, as Gibney (2019) points out, it is inferred that as a consequence of the ultra-processing of food, which includes the compositional contribution of food ingredients, the processing methods and the subsequent retail sale of the final products, the consumer faces to cheap foods high in fat, sugar, and salt, which are mass-produced primarily by global multinationals, are designed for long shelf life, are near-addictive, and heavily advertised.

Likewise, an alternative or complementary strategy to improve the diet is to target processed foods for reformulation. This is supported by WHO and FAO, and represents a driving policy in many countries. To the best of our knowledge, this study made a systematic review of the available epidemiological evidence on the academic population between the consumption of ultra-processed food and health outcomes. We identified a positive association between fast food consumption and the risk of all-cause mortality, overall cardiovascular disease, coronary heart disease, cerebrovascular disease, hypertension, metabolic syndrome, overweight and obesity, irritable bowel syndrome, gestational obesity, in the young adult and older adult.

Conclusions

This study indicated a positive association between the consumption of ultra-processed food (CUP) and the risk of various health outcomes. Our results encouraged a decrease in CUP consumption and an increase in the proportion of unprocessed or minimally processed foods, such as fruits and vegetables. Taking into account diet-related risk factors, we provide information on the occurrence and prevention of noncommunicable diseases (NCDs). Large-scale designed prospective studies are needed to confirm our findings and better understand the relative effects of various aspects on CUPs.

Through the data obtained throughout the investigation, a solution was given to each of the objectives to publicize the little healthy eating that a part of the FESC university population has, who visit and give little importance to the subject. of their health since they do not take food control with a nutrition specialist as a priority and it is that being overweight in students is something very forceful and notorious since being such young people full of good health and good physical strength they even present heart problems for have bad eating habits.

In the FESC, the same individual and different individuals had higher consumption of ultra-processed foods when eating out compared to when eating at home. Therefore, it is necessary to implement public policies that discourage the consumption of ultra-processed foods outside the home and that provide affordable and accessible less processed food options.

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