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Chapter 8

Schools and nutrition as a key element in the prevention of obesity in schoolchildren

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Abstract

Food is one of the key elements for the prevention of illnesses. In Mexico alone, the wrong choice of food and food insecurity is what has led to leading the list of childhood obesity worldwide. According to data from ENSANUT. 2024. The prevalence of overweight and obesity was 36.5 – 40. The prevalence of overweight and obesity was 36.5 – 40.4% in school children and adolescents. Behind these figures there are several social, cultural and even environmental factors that lead us to a single decision, in school environments these influence in an exorbitant way because it is the main element in the development of the person, this chapter will cover the relationship and importance of the school environment with focus on nutritional aspects evaluating common practices, statistics, food programs, the knowledge provided about healthy eating, and merely the influence on the judgment of the person to establish conviction on a particular dietary regime.

Keywords:

Education; Nutrition; Health; Food; Social behavior.

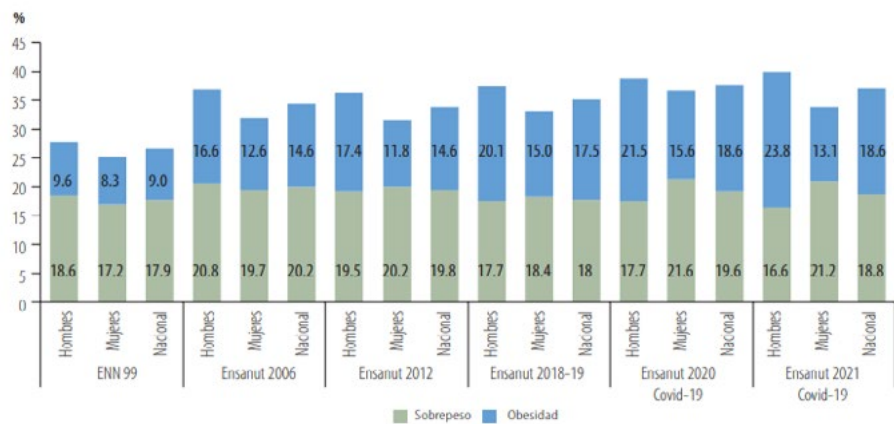
Introduction

During the first stages of life, a sufficient, varied and safe diet plays a significant role, establishing itself as a basis for decision making, in relation to the aspects of selection, beliefs and a series of behaviors that will have an impact in the medium or long term on their health. Adequate nutrition will provide children with multiple health benefits, such as the reduction in the risk of presenting various pathologies, thus improving their quality of life, one of them being the improvement in academic performance. The study presented by González-Hinojosa et al. (2022), revealed that knowledge about healthy eating habits improved by 14% which favors the health of the population, allowing them to lead a better quality of life, the school environment stands out as an area where knowledge is acquired regarding multiple branches, being the social ties that affect the criteria of each individual, especially during recess which is where food trends are usually developed, Therefore, it is important to analyze the components that are provided to schoolchildren to educate them about food and health issues, analyzing the food and social behaviors that are often performed within these spaces so that in this way they not only succeed with food issues in the classroom and at the same time implement it as part of their daily lives, motivating those around them to make appropriate decisions to improve their quality of life.

Statistics

The National Health and Nutrition Survey of 2021, in boys and girls from 5 to 11 years old, the national prevalence of overweight was 18.8 %, in males 16.6 % and in females 21.2 %. The prevalence of obesity was found to be 18.6 % of school children, 23.8 % in males and 13.1 % in females, these two prevalences when compared with the previous ENSANUT there is no difference in the prevalence of national obesity, and a slight decrease in national overweight. However, according to sex, especially in school-age males, an increase in the prevalence of obesity was found.

Figure 1. Comparison of the national prevalence of overweight and obesity in the population aged 5 to 11 years, from ENN-1999 and ENSANUT 2006, 2012, 2018-19, 2020 and 2021, by sex.



Fuente: Ensanut 2021 sobre Covid-19, México

Source: ENSANUT 2021 sobre COVID-19, México.

Parents and food promotion

Parents are key in the development of their children’s eating behavior being the main decision makers at home, so the habits that students follow at school will be influenced by the decisions made by their parents at home, it is important to take into account the participation of parents when educating about food as this will directly influence the development of the student.

Influence of schools in childhood

Schools are the main source of knowledge for students, providing the necessary tools for the future, what is learned in these areas will not only have an impact on a person’s life, it will also have an impact on the lives of those around them, thus creating habits, regarding food, what they are used to consume during breaks, the availability of food, preferences and information provided, will be the basis that the student will take into account when making a decision regarding their diet.

In research conducted by De Lira-García et al. (2018), analyze food preferences during school recess they divided it into 3 stages the first stage consisted of the characteristics of the school environment and to know the food offered within the

school, then they conducted interviews with students about their favorite foods and those consumed at school during that day, likewise the sensory characteristics by which they decided to choose certain foods, during the last stage they gave them the indication to draw their favorite food, when they finished their drawing, each child was called to explain the reason for the choice of that specific food. The favorite foods of the participating elementary school children were: salty snacks, cookies, pizza, tacos and spaghetti; and the least preferred foods were: lentils, vegetables, tuna, meatballs and fish.

According to Shamah-Levy et al. (2024), the gaps between the school and adolescent population with overweight and obesity in rural and urban areas, regardless of their welfare conditions have been narrowing and it is expected that, in the future, the most vulnerable will be those who may have the greatest burden of obesity; in addition to reporting a strong association between the BMI of parents and the development of overweight and obesity in their children. The consumption of energy-dense foods, including sugar-sweetened beverages, where 65% of the Mexican population is far from reaching the limits recommended by the WHO to reduce consumption to <10% of total energy intake. It is here where we can see the influence of the school for the options it offered, the parents for the diet they decided to follow and their preferences in selecting the foods they would consume.

Eating behavior

The WHO defines eating behavior as the behaviors expressed in response to biological, psychological and sociocultural motivation linked to food intake, which gives certainty to this relationship that exists between the own criteria and social opinion, it is worth mentioning that this behavior is developed mainly by the subject and the environment that surrounds it, therefore, In the school environment where a child usually spends part of his day begins to develop habits and food trends that can be observed in their food intake during breaks, if they carry lunch box these behaviors will usually go according to what parents provide as food, or on the other hand if they usually consume food from the cafeteria their own criteria influenced by the options that are available will be what will be taken into account when selecting a particular food.

Although the dietary guidelines mention that foods of vegetable origin should be consumed in greater proportion than those of animal origin, in school cafeterias what a child usually has access to is “junk food” such as chips, cookies, candy, chocolates, soft drinks, etc., as a result of various factors such as economic aspects, preferences, availability, etc., offering students limited options that do not meet the requirements of NOM-043, This is a consequence of different factors

such as economic aspects, preferences, availability, etc., offering students limited options that do not comply with the NOM-043, being one of the main reasons why the food they usually consume during this period of time does not contribute to a healthy diet.

Food programs in Mexico

The main purpose of school food programs is to ensure that children attending public schools enjoy the possibility of consuming nutritious and healthy food that favors their development. These programs are continually updated to provide new guidelines that benefit the population and combat the obesity that currently prevail in our country. The Official Gazette of the Federation, 2024 shows a list with the purpose of promoting the sale and consumption of natural foods and beverages, based on healthy preparations that do not contain excessive levels of sugar, fats and sodium, general guidelines were established on the distribution of junk products within educational institutions, it is also mentioned that the school authority that promotes the sale or dissemination of advertising of food and beverages not allowed for schools in contravention of the provisions will incur in the infractions provided and will be liable to the penalties previously established.

Conclusion

Ultimately, it would be attractive to remember that everything that surrounds a person and is part of their daily life will contribute to a number of decisions so it is important to highlight the relevance of schools in the development of students and how these are closely related to their food and therefore future eating behaviors that not only will practice these also will participate to their family, so it is important to encourage them correct selection of food instead of labeling them as good or bad.

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La escuela y la alimentación como elemento clave en la prevención de la obesidad escolar

Escolas e nutrição como um elemento-chave na prevenção da obesidade em crianças em idade escolar

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Resumen

La alimentación es uno de los elementos clave para la prevención de padecimientos, tan solo en México la selección errónea de los alimentos e inseguridad alimentaria es lo que ha llevado a encabezar la lista de obesidad infantil a nivel mundial. Según datos de ENSANUT. 2024. La prevalencia de sobrepeso y obesidad fue de 36.5–40.4% en escolares y adolescentes, detrás de estas cifras intervienen diversos factores sociales, culturales e incluso ambientales, los cuales nos conducen hacia una sola decisión, en ámbitos escolares estos influyen de manera exorbitante debido a que se sitúa como principal elemento en el desarrollo de la persona, el presente capítulo abarcara la relación e importancia del ámbito escolar con enfoque en aspectos nutricionales evaluando prácticas comunes, estadísticas, programas alimentarios, los conocimientos brindados acerca de una alimentación saludable además de la influencia en el juicio de la persona para establecer una decisión sobre un régimen alimenticio.

Palabras clave: Educación; Nutrición; Salud; Alimento; Comportamiento social.

Resumo

A alimentação é um dos principais elementos para a prevenção de doenças. Somente no México, a escolha errada de alimentos e a insegurança alimentar é o que levou o país a liderar a lista de obesidade infantil em todo o mundo. De acordo com dados da ENSANUT. 2024. A prevalência de sobrepeso e obesidade foi de 36,5 a 40. A prevalência de sobrepeso e obesidade foi de 36,5 a 40,4% em crianças e adolescentes em idade escolar. Por trás desses números existem diversos fatores sociais, culturais e até mesmo ambientais que nos levam a uma única decisão, em ambientes escolares esses influenciam de forma exorbitante por ser o principal elemento no desenvolvimento da

pessoa, esse capítulo abordará a relação e a importância do ambiente escolar com foco nos aspectos nutricionais avaliando práticas comuns, estatísticas, programas alimentares, o conhecimento fornecido sobre alimentação saudável, e meramente a influência no julgamento da pessoa para estabelecer convicção em um determinado regime alimentar.

Palavras-chave: Educação; Nutrição; Saúde; Alimentação; Comportamento social.