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(REVIEW ARTICLE)



# Food, nutritional and leisure education at school

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#### **Abstract**

Many people in adult life are unaware of healthy eating habits and practices of activities in the context of leisure, the lack of this knowledge has as consequences the high rates of chronic-degenerative diseases, emotional and behavioral problems that affect the Brazilian population. The school is a privileged space for food, nutrition, and leisure education, and plays a fundamental role in the formation of values, habits, and lifestyles, serving as a basis for the development of multiple skills in children, including cognitive ones. This work aims to analyze the issue of food, nutrition, and leisure education at school. This is a literature review. As a result, the school is an important space for children to develop knowledge that will be the basis for their lives, among the possible learnings are the understanding of a healthy and nutritional diet and the development of habits that include the practice of leisure activities, such as sport, generating implications for the development and growth of children and for their future routine.

Keywords: Food; Nutrition; Leisure; School

#### 1. Introduction

Sport has been proving, within the principles applied by education through sport, a powerful and privileged way to develop the potential of children and young people. It could educate to promote the development of personal, social, cognitive, and productive skills. In other words, promoting human development. Sport and leisure act as instruments for the integral formation of the individual and, consequently, enable the development of social coexistence, the construction of values, the improvement of health and the improvement of critical awareness (Figueira, 2008).

The role of health promotion grows in its importance as a fundamental strategy for facing the problems of the health-disease-care process and its determination. The direction, in this case, is to strengthen the promotional and preventive character, contemplating the diagnosis and early detection of chronic degenerative diseases and increasing the complexity of the first level of care, elements that are still considered as challenges for the health system (Buss, 1999).

According to the author, there are multiple concepts of health promotion, among which the author highlights two large groups; in the first, health promotion "consists of activities aimed centrally at the transformation of individuals' behavior, focusing on their lifestyles and locating them within the families and, at most, in the environment of the 'cultures' of the community in which they live". find" (p.179). This conception, according to the author, tends to focus on educational components.

A second, more modern conception of health promotion is characterized by "the realization that health is the product of a broad spectrum of factors related to quality of life, including an adequate standard of food and nutrition, housing and sanitation, good working conditions and income, education opportunities throughout the lives of individuals and communities".

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The effectiveness of nutritional education for schoolchildren could be conceived not limited to a simple verification of knowledge but evolving through the incorporation of the evaluation of practices and effective health indicators during the educational process (process evaluation), and converging to replanning for improvement (result evaluation product), synergized by complementarity between quantitative and qualitative variables. The degree of information, by itself, enhances greater self-care of health and, in this context, focus has been placed on "health literacy" and "nutrition literacy", which assess the degree of mastery and understanding of lay people on concepts and minimal interrelationships of health and nutrition, a domain that is considered a form of empowerment (Fourez, 1997) as it provides instruments to achieve health. Nevertheless, an evaluation restricted to the measurement of knowledge usually implies exclusion. A global assessment, concerned with learning, presupposes acceptance, with a view to transformation.

For the writing of this article, we had some classic and contemporary authors as a basis for the developed reflections. This is a literature review in which we seek to work on main ideas related to food, nutrition, and leisure education at school.

Next, we will divide the text into two parts, the first will discuss "Food is the necessary basis for a good physical, psychic and social development of children" and the second part will deal with the topic "Education for leisure at school: a food and nutrition education project". Finally, we present the conclusions of this article.

### 2. Food is the necessary basis for a good physical, physical and social development of children

Good nutrition is the first line of defense against numerous childhood illnesses that can scar children for life. Good nutrition and good health are directly linked throughout life, but the connection is even more vital during childhood. During this period children can acquire good habits during the meal in terms of variety, taste, etc.

Eating practices are built from temporal, health and illness, care, affective, economic and socialization ritual dimensions, intertwined in a network (Rotenberg, 2004). The first two years of a child's life are characterized by accelerated growth and great psychomotor and neurological development. Therefore, nutritional deficiencies in early childhood can compromise the growth pattern, cause school delay and favor, in the future, the emergence of chronic diseases (WHO, 2006)

The effects of malnutrition in early childhood (0-8 years) can be devastating and long-lasting. They can impede intellectual and cognitive development, school achievement and reproductive health, thereby undermining future productivity at work.

Human malnutrition is a condition that affects populations of all nations, whether underdeveloped or technologically advanced. Child malnutrition is internationally recognized as a major public health problem and its devastating effects on health and survival are well established. While globally the projection of the prevalence of underweight children is declining in developing countries, paradoxically, in Africa the projection is increasing. Although a general improvement in the global situation can be envisaged, the goal of 50% reduction in the prevalence of underweight among children up to five years of age by 2015, established by the United Nations, will possibly not be achieved globally, not even in developed regions (Onis, 2004).

In Brazil, as in many other regions of the world, the comparative reading of the three cross-sectional studies carried out in the 1970s, 1980s and 1990s, at a national and micro-regional level Study of Family Expenditures (ENDEF), 1974/1975; National Survey of Family Expenditures on Health and Nutrition (PNSN), 1989; National Survey of Demography and Health (PNDS) 1995-1996), characterizes a period of nutritional transition, and it can be inferred a decline in the prevalence of malnutrition in children under five years of age and, therefore, on the other hand, the increase in the prevalence of overweight/obesity in adults. It must be considered, however, that the characteristics of the decline in the prevalence of malnutrition in Brazil are asymmetric in terms of urban and rural areas and regional distribution (Batista-Filho, 2003).

In promoting healthy eating, two aspects must be highlighted: changing long-term eating behavior is a goal with high failure rates, and eating habits in adulthood are related to those learned in childhood. These two aspects indicate that interventions to promote healthy eating behaviors should focus more on the first years of childhood, so that they remain throughout life.

The availability and access to food at home, eating practices and food preparation influence the child's food consumption. From a psychological, socioeconomic, and cultural point of view, the child population is influenced by the

environment where they live, which, in most cases, is constituted by the family environment. Thus, their attitudes are often a reflection of that environment. And when the environment is unfavorable, it can provide conditions that lead to the development of eating disorders that, once installed, can remain throughout life (Oliveira et al 2003).

From the age of two, the child undergoes several and constant transformations. And food exerts a great influence on this process, playing a fundamental role in muscle development, bone growth and weight maintenance.

The most notable changes happen until puberty, which usually arrives around age 12 in boys and after age 10 in girls. Until reaching this age, children of both sexes gain, on average, three kilos per year. The height increases from six to eight centimeters annually. The pace of growth slows down as the child approaches puberty, a phase in which growth resumes speed.

#### 3. Education for leisure at school: a food and nutritional education project

Given the data presented above on the importance of food and nutrition education in the environment where the child lives, education for leisure can be essential to enhance a school project that seeks to teach children about food and nutrition.

The education for leisure that we are referring to is based on studies by Marcellino (1987) and constitutes a way to build values for the democratization of leisure, among which we highlight the diversification of leisure content (artistic, manual, intellectual, touristic, physical-sports and social), here we also mention the virtual contents as proposed by Schwart, these contents being developed from the different disciplines in the school.

Working with leisure content at school is a way to expand students' knowledge on the subject and enhance other learning such as food and nutrition. Activities that involve learning how to prepare food, separating them by categories – carbohydrate, protein, fat, understanding that the balance between these categories is a great combination for healthy eating are some possible lessons learned at school that can involve different disciplines.

Physical Education at school has as specificity the physical-sports content of leisure that related to food and nutrition education can compose an effective school project for the development of diverse knowledge on these themes. Even so, it is essential that the different disciplines organize themselves and add actions together with Physical Education so that a larger project of the school becomes real and effective in the educational process. Students can have access, for example, from sport, which is the most appropriate food for athletes and non-athletes, for people who regularly practice physical activities in the context of leisure, among them, which foods are most appropriate for children, adults, and the elderly. When should you have food supplementation etc. These are examples that can have consequences in school Physical Education classes and that other disciplines such as science or biology can delve deeper into the explanation of the property of food and its characteristics.

Another aspect that influences children's lives, as mentioned above, is the parents' eating habits. Thus, this school project can also include the participation of parents or guardians, creating a family environment for the child where they can learn about food, nutrition, and leisure.

During the time that one of the authors worked in Basic Education schools in the interior of São Paulo, she was able to witness two situations about food that could be leveraged for learning about food and nutrition based on the leisure content that is the act of cooking itself. In one of the schools, the class was in the first year of Technical High School and the elective course was about making pizzas. The students learned how to make pizzas and even created different types of pizzas, an element that encourages creativity and adds to the production of knowledge. The intention of the course was to show students that making pizzas can be a good undertaking in the context of contemporary societies. Furthermore, the experience could have gone further by discussing with the students which ingredients could make pizza a healthier food, for example.

Another experience was participation in a children's day party at school where children from 2nd to 5th grades had the possibility to try different types of foods that escape their routine and are not considered as healthy as sweets and soda, for example , however, in the context of the party is a way of reminding children and young people that they have a balanced diet routine in everyday life that should be followed to maintain their health and physical development and that the party is a different day From routine, with "permission" to eat not so healthy things. In general, it is essential for people to go through these experiences to find out what is healthy and what is not so good for health if consumed daily. The habit, routine is fundamental in food and nutritional education and therefore should be learned.

Having one day or another of this routine is also a form of education so that the person is aware of how to feed and develop this knowledge as a way of themselves put the limits of what they will or will not eat in their routine.

A third experience will take place with children of public school in Curitiba/PR in December 2023 in a holiday camp project in which the authors will be involved. In this project, a partnership of the Federal University of Paraná with a Municipal School of Curitiba/PR, among the various activities that children will develop from the context of leisure, will learn how to make a healthy sandwich in which the need to eat vegetables will be emphasized Daily, and that a sandwich with these ingredients can be tasty and healthy.

For leisure studies cooking is part of the manual content of leisure and that can easily add to the social content of leisure, because when cooking and sharing what is produced in the company of someone there is a degree of interaction among people who It is enhanced from the result of the food. In this process there are exchanges of meanings among the subjects, socialization, and mobilization of the social content of leisure.

Thus, we seek to present here how education for leisure, from physical education classes, sports and other school subjects can be an important process for learning about food and nutrition in the lives of children and young people and as a Larger school project can be welcome in a social context where chronic-degenerative health problems, obesity, emotional issues tend to increase with the short time that people have to cook, leisure and dedication the family. Learning since childhood can make people get better and enjoy the time available for the development of healthy habits in life.

#### 4. Conclusion

Although the family is an important determinant in the formation of eating habits, it cannot be mentioned that other factors, such as school, social network, socioeconomic and cultural conditions, are potentially modifiable and influence the process of building the eating habits of child and, consequently, of the adult individual. It is important that parents and school assume the role of learning about food and nutrition, regarding the purchase, the preparation of food, lectures, courses, and control of the quality of food ingested, since food preferences Children are influenced by the choices and eating habits of parents, and the information and knowledge built at school.

Therefore, it is essential that the school and the different subjects add actions for a project of food, nutritional and leisure education in school, to teach children and young people how to obtain healthier life habits in a social context that Food ready and easy to prepare is widely marketed and focused on advertising. Going beyond these not -so -beneficial health influences can be a purpose for schools and families who want to have healthier children and adults, less susceptible to disease due to eating habits.

Other studies are welcome, here we seek to reflect on the theme of food, nutritional and leisure education at school, given the Brazilian social context and some more located experiences in the interior of São Paulo (southeast of Brazil) and a Future experience to be held in Curitiba/PR (southern Brazil). Other studies that bring data and school experiences from other regions and countries are welcome to expand the reflections proposed here.

#### Compliance with ethical standards

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Disclosure of conflict of interest

All authors developed the work, there is no conflict of interest.

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