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The impact of inadequate nutrition on children's health

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ABSTRACT

The increase in childhood obesity in developed countries, such as the US, results from the combination of inadequate diets and low level of physical activity, exacerbated by socioeconomic and environmental factors. Studies show a continuous growth in obesity rates, impacting children's physical and mental health and highlighting the urgent need for effective nutritional interventions and public policies. Nutrition education and access to healthy foods are essential to reverse this trend.

Keywords: Childhood Obesity, Nutritional Intervention.

INTRODUCTION

The alarming increase in childhood obesity rates in developed countries, such as the United States, reflects a serious public health crisis that requires immediate attention. Children's diets, which are far from the recommended nutritional guidelines, have contributed significantly to the increase in overweight and obesity, as well as to the emergence of chronic non-communicable diseases in early stages of life. Recent studies and statistics, such as data from the 2017-2018 National Health and Nutrition Examination Survey (NHANES), show that 16.1% of U.S. children aged 2 to 19 are overweight, and obesity rates have been growing steadily over the past three decades. In addition, 13.4% of children aged two to five years and 20.3% of children aged six to 11 years are considered obese, evidencing a worrying trend that has lasting impacts on public and individual health.

DEVELOPMENT

The main cause of this problem is related to the increase in the consumption of high-calorie and nutrient-poor foods, such as those rich in fat, salt, and sugar, as well as high-calorie drinks. This inadequate diet, combined with biological, social, and environmental factors, creates a favorable scenario for the development of overweight and obesity from childhood. The excessive consumption of calories without proper compensation in physical activities and healthy habits is a predominant reality in industrialized societies, exacerbated by eating habits promoted by sectors of the food industry.

The consequences of childhood obesity go far beyond being overweight. Studies indicate that obese children are at increased risk for the development of several chronic diseases, such as type 2 diabetes, high blood pressure, metabolic syndrome, and even certain types of cancer. These conditions, traditionally associated with adulthood, have emerged at an increasingly early age among children and adolescents, which represents a significant challenge for health systems. In addition to the physical impacts, childhood obesity is also associated with delays in cognitive and social development, respiratory disorders, and mental health disorders, creating additional barriers to the full development of these children.

Another aspect that aggravates this situation is the socioeconomic disparity, especially among low-income communities. Studies show that children belonging to these communities are more likely to have problems related to obesity and inadequate nutrition. The lack of access to healthy food and the prevalence of environments that favor the consumption of foods of low nutritional quality make children in these areas more vulnerable. Thus, improving the diet of children in these communities requires interventions that involve not only dietary guidelines, but also public policies that expand access to healthy foods and promote environments that are more favorable to the adoption of appropriate eating habits.

In addition, the eating practices that parents adopt for their children exert a crucial influence on the formation of eating habits. Restrictive strategies, such as limiting the amount of foods high in sugar and fat, have the potential to reduce the intake of these items that are harmful to children's health. In addition, doctors, nutritionists, and other health professionals play a key role in guiding families about the importance of a balanced diet and advocating for public health policies that promote improvements in dietary patterns.

A study has shed light on the impact of ultra-processed foods (UPF) consumption on children's health. This study, which used a microsimulation model, was developed to project the effect of reducing UPF consumption on the diet of children and adolescents in the USA. The survey incorporated data from more than 5,800 young people aged 7 to 18 years collected from the National Health and Nutrition Examination Survey (2011-2016). The model showed that reducing the consumption of these foods could cause a significant drop in the participants' body mass index (BMI). The median reduction in BMI was estimated at −2.09 kg/m², with a considerable decrease in overweight and obesity rates among young people. This finding highlights the importance of targeting nutritional interventions to vulnerable populations, where the beneficial effects may be most pronounced.

CONCLUSION

Given this reality, there is an urgent need to identify and address the factors that influence children's food intake. Multidisciplinary efforts are essential, ranging from public health policies to nutrition education, to reverse this trend of childhood obesity. Investment in educational and awareness programs, coupled with improvements in access to nutritious food, can be a viable way to ensure that children develop healthy eating habits, promoting optimal physical and cognitive health from childhood. Only with these coordinated actions will it be possible to stop the advance of childhood obesity and ensure a healthier future for the next generations.

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