

## **CHILDHOOD OBESITY: PUBLIC HEALTH PROBLEM IN THE 21 CENTURY**

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**Editorial**

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According to the World Health Organization (WHO)<sup>(1)</sup>, childhood obesity is one of the most serious public health problems of the 21<sup>st</sup> century worldwide and it steadily affects low- and middle-income countries in urban settings. The prevalence of the disease has increased at an alarming rate, and, in 2010, the number of overweight children under the age of five was estimated to be over 42 million, with 35 million of these living in developing countries.

In Brazil, the increased obesity rate is worrisome. The *VIGITEL 2013*<sup>(2)</sup> shows data from a survey conducted with 45.4 thousand Brazilians living in the capitals and *Distrito Federal – DF* (Federal District) where 51% of this population was found to be overweight and 17% obese. In 2006, the figures were 43% and 11%.

Additionally, according to the *Pesquisa de Orçamento Familiar – POF* (Household Budget Survey) 2008-2009 conducted by the *IBGE* (The Brazilian Institute of Geography and Statistics), one in every three Brazilian children aged 5-9 is over the weight recommended by the WHO<sup>(1)</sup> and the Ministry of Health (MH).

As to teens aged 10-19, one in every five people is overweight. The problem is already affecting 1/5 of the child population, and it can lead to a future generation of obese people because obese children become obese teens and 80% of these also reach adult life with obesity. Thus, this generation of obese little people may be seen as people who may present hypertension, diabetes and increased kidney, cardiovascular and brain problems in the future. All these factors reinforce childhood obesity as a major public health problem since it results in individuals with poor health and high costs to the country's public health care system.

Brazil presents a double burden of nutrition-related diseases, with the occurrence of infirmities caused by a deficiency in specific micronutrients and an increasing prevalence of obesity among Brazilians<sup>(4)</sup>. The inappropriate nutrition and sedentariness stand out as the major causes of childhood obesity. An evaluation on the most consumed foods in Brazil showed that sodas, soft drinks, sweets and pastries are among the ten foods mostly consumed by teens, whereas fruits and vegetables do not appear among them. This dietary pattern reflects the increasing rates of overweight and obesity in this age group<sup>(5)</sup>.

This current issue of *RBPS* presents the results<sup>(6)</sup> about eating habits of obese teens of public and private schools of the city of Fortaleza, revealing that 56.3% do not eat breakfast, 70% do not eat with their families, 56.9% drank soda more than three times a week and more than 30% used to go to fast-food restaurants. Corroborating these findings, nearly 30% of the interviewees were considered sedentary or insufficiently active. These findings show evident risk factors for obesity among these adolescents and reflect the *VIGITEL (2013)*<sup>(2)</sup> data, which reveals that Fortaleza has 17.5% of its population diagnosed with obesity.

Childhood nutrition is also coordinated by the eating habits of the family managers. Therefore, Brazilian adults also consume sodas and soft drinks; however, green salad is among their ten most consumed foods<sup>(5)</sup>. Considering the influence of parental nutrition on children's choices, one can easily notice that the eating habits of these little Brazilians are supported by parents' inappropriate choices.

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Thus, any intervention to change the increasing incidence of childhood obesity should be developed along with the people responsible for the acquisition of foodstuff: parents or the head of household. Besides the acquisition, the environment where the meal takes place, television media, which reaches the “mass” of the population, and the school environment should also be considered determinants of eating habits and choices of little infants, being the right places for developing nutritional education and encouraging physical activity<sup>(9)</sup>.

Studies have shown an association between childhood obesity and its permanence in adolescence, as well as the development of comorbidities throughout life. Currently, cardiovascular diseases, diabetes and cancer account for 63% of deaths worldwide. Childhood overweight and obesity are probably the beginning of obesity in adult life and also the beginning of the development of noncommunicable diseases like diabetes and cardiovascular disease. Overweight and obesity are highly preventable chronic diseases, but the duration of obesity is a risk factor regardless of the BMI in adult life<sup>(7,8)</sup>. There is a 2.5 times greater risk of mortality for every two decades of an individual’s obesity<sup>(7)</sup>.

All the comorbidities associated with obesity can have consequences that extrapolate the individual’s body and reach collective health when the obese person treats his/her chronic diseases in the public health system, resulting in an extra cost for the disease treatment. Thus, considering the environmental factors, including nutrition and physical activity, and the role of enlightening parents and society about healthy food choices as well as all the emotional aspects involved in child nutrition, determinants of weight increase, there is an important need for public policies aimed at prevention of obesity in this age group in order to minimize the epidemiological consequences of chronic diseases caused by this condition.

However, it is irrational not to talk about the psychological harms to obese children and adolescents. It is impossible to dissociate body weight from body image. At age two, the child’s body image is already formed. However, at age seven, the child begins to notice the dimensions of the body and is concerned about the changes occurring in it. By this moment, influenced by the group he/she is inserted or would like to be inserted, the relation between the child and nutrition changes and turns into a form of insertion<sup>(9)</sup>.

Thus, concerned with these questions about childhood obesity, the *RBPS* regularly presents articles containing coherent investigations in order to establish nutrition as a guarantee for health and disease prevention at this stage of personality development. It also encourages the search for interventions to promote healthy food choices that must be

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reinforced and comprehended by all the people who think of a future with less obese individuals and an increased number of healthy children.

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