

REVIEW

Brazil's national programs targeting childhood obesity prevention

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In Brazil, overweight and obesity are increasing in all age and income groups. Currently, 7.3% of children under 5 years of age, 30% of children aged 5–9 and 20% of preadolescents aged 10–19 are overweight. In the primary health-care (PHC) environment, activities are carried out to monitor eating habits and nutrition, as well as to prevent unhealthy habits and promote healthy eating behaviors consistent with the dietary guidelines for Brazilian children. Comprehensive care is being provided to overweight individuals. The Brazilian Breastfeeding and Complementary Feeding Strategy was launched in 2009 to support health teams to counsel families about healthy feeding, focused on child health and obesity prevention. Within the school environment, the School Health Program offers activities that are developed by PHC teams together with education professionals to focus on assessing health conditions, prevention and health promotion. To improve the nutritional profile of processed foods, terms of cooperation have been signed with the food industry to reduce fat and sodium content. Food industry advertising and marketing to infants and young children are now regulated by the Brazilian Regulation for the Marketing of Foods to Infants and Young Children.

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INTRODUCTION

In Brazil, overweight and obesity are increasing in all age and income groups. Currently, 7.3% of children <5 years of age,¹ 30% of children aged 5–9 and 20% of preadolescents aged 10–19 are overweight.²

In 2011, the health ministry launched the 'Strategic Action Plan to Tackle Non-Communicable Diseases in Brazil'.³ The plan includes the goal of decreasing obesity in children aged 5–9 by 7.1% per year, the target is to return the prevalence of obesity by 2022 to the one observed in 1998 (8.0%).

Brazil implemented a National Food and Nutrition Policy in 1999.⁴ Its purpose is to improve the well being of the population through the promotion of appropriate and healthy eating habits, monitoring of food and nutrition, as well as primary and secondary prevention of food- and nutrition-related health problems. This policy is the legal basis for the development of food- and nutrition-related activities as a human right in Brazil and guides an inter-sectorial approach to protect this right through sound programs and initiatives.

This article presents the most important Brazilian childhood obesity prevention initiatives considering a life-course approach.

PRIMARY HEALTH CARE

Brazil has a national health system—the Unified Health System—which is universal, public and free of charge. The system serves ~70% of the Brazilian population, comprising over 140 million inhabitants. Most obesity control and prevention actions occur in the PHC environment, which is organized primarily according to the Family Health Strategy (FHS) by teams comprised of: a family medical doctor, a nurse, a nurse's assistant and community health agents (who serve families in their homes and strengthen ties with PHC units). To improve the effectiveness of the FHS's actions,

a proposal was made in 2008 to create Family Health Support Nuclei—a multi-professional team that supports the FHS.⁵

PHC units are responsible for a set of individual and collective health actions that include health promotion and protection; prevention of health problems; diagnosis; treatment; rehabilitation and health maintenance. The FHS is expanding within the country and is present in 94.8% ($n=5279$) of municipalities covering 52.8% of the population. It is comprised of ~30 000 teams and 300 000 community health agents.

The PHC teams' obesity prevention actions are based on the Food and Nutritional Surveillance and the Prevention and Health Promotion actions, which consider the National Dietary Guidelines. Consistent with the life-course approach to obesity prevention, actions begin during pregnancy with monitoring of fetal intrauterine growth and gestational weight gain. To strengthen these actions, the Comprehensive Care Network for Women and Children under 2 years of age was launched with a focus on the 'first 1000 days' (the prenatal period and the first 2 years of life). Goals have been set regarding medical doctor visits and examinations during the prenatal and postnatal care periods, as well as the best moment to promote healthy eating including breastfeeding, complementary feeding and the monitoring of the health status of pregnant women and children.

The teams are directed to perform a diagnosis of the population's health and nutritional status that will enable them to plan actions to be undertaken. To consolidate the Food and Nutrition Surveillance information of the population served by the PHC teams, the Government implemented the Food and Nutrition Surveillance System, which is an electronic system fed by the teams that enables the monitoring of the individuals' nutritional status across the life course.

The PHC teams conduct health promotion actions based on the Dietary Guidelines⁶ and the 'Ten Steps to Healthy Feeding' that

are recommended for various age groups. Some studies conducted in Brazil assessed the impact of dietary counseling during the first year of life based on the recommendations of the ten steps for children and showed that it is possible to double the prevalence of children who are exclusively breastfed until 6 months of age and reduce the consumption of high-fat foods by 40% and of sugary foods by 50% by the end of the first year of life.^{7,8}

A comprehensive strategy was launched to train professionals in the Food Guide and Ten Steps for children under 2 years of age.⁹ The 'Brazilian Breastfeeding and Complementary Feeding Strategy,' launched in 2009 to support actions to promote, protect and support healthy breastfeeding and complementary feeding in PHC units and to contribute to the improvement of childhood eating practices with the constitution of healthier eating habits early in life, thereby improving nutritional status and preventing overweight consistent with a life-course approach.

SCHOOL ENVIRONMENT

In 2006, the Brazilian Health and Education Ministries published the Interministerial Ordinance 1010/2006,¹⁰ which instituted guidelines to promote healthy eating in schools and whose priorities include: dietary and nutritional education; encouragement of the creation of school gardens; promotion of the establishment of good food handling practices at schools; the provision of food services in the school environment; restriction of the sale and advertising of foods and preparations with high levels of saturated fat, trans fat, white sugar and salt in the school environment; incentivizing fruit and vegetable consumption; and Food and Nutrition Surveillance in schools.

Brazil has a school meal program for public schools with more than 50 million beneficiaries. The program's rules currently prohibit the purchase of sodas and other sugary drinks, limit the purchase of processed foods and require that 30% of the program's resources be used to buy food directly from family farmers.¹¹

Another important action targeting children is the School Health Program (SHP)¹²—a joint action by the Health and Education Ministries aiming to provide comprehensive care (prevention, promotion and care) to advance the health of children, adolescents and youth in public schools. The SHP is delivered in public schools and PHC units as a partnership between Family Health Teams and education professionals.

The SHP represents a window of opportunity to expand obesity prevention actions among children. Currently 44.83% of municipalities ($n=2495$) in 53 848 schools, 11 946 778 students and 14 439 PHC teams participate in the SHP.

In 2012, an annual SHP mobilization week was established with the aim of initiating the program's activities to be developed during the school year. In 2012, the week took place in March with the theme of 'Obesity Prevention at School'. In this first year, activities were carried out in 1938 cities and had the participation of 22 096 schools, 10 240 Family Health Teams and 9 651 985 students.

In 2012, the Brazilian Ministry of Health signed an agreement with the federation of private schools with the aim of improving the quality of food provided to students in these establishments. The agreement is voluntary and foresees a change in the food items sold in school cafeterias, providing healthier options and providing communication and information about healthy lifestyles and quality of life. This initiative recognizes and rewards school cafeterias that offer healthy foods.

REGULATION

The government instituted the Brazilian Regulation for the Marketing of Food to Infants and Young Children in 2006, which

regulates food industry advertising and marketing practices to infants and young children, including the marketing of baby bottles, nipples and pacifiers in order to avoid aggressive and unethical approaches, which promote the acquisition of these products.¹³

In another action to regulate advertising, a resolution by the Brazilian Health Surveillance Agency, was published in 2010 and it deals with offers, advertising, publicizing, provision of information and other practices related to foods with high levels of sugar, saturated fat, trans fat and sodium, and drinks with low nutritional value.¹⁴ The resolution aims to disseminate consumer alerts that are visible, legible, noticeable and contextualized through printed materials, television, the internet, samples and other promotional materials. This resolution is currently suspended and efforts are being made to ensure the proper regulation of unhealthy food marketing in the country.

The National Food and Nutrition Policy foresees taking action to ensure the nutritional quality of processed foods available for consumption. These measures collectively benefit the entire population. Discussions about improving the nutritional profiles of foods began with the 'Trans Fat Free Americas Task Force' organized by the Pan-American Health Organization/World Health Organization. Considering the Brazilian population's high sodium consumption level, the Brazilian health ministry has been signing terms of cooperation with the productive sector (food industries) since 2011 to negotiate a gradual reduction of sodium content in processed foods.

CONCLUSION AND RECOMMENDATIONS

Various efforts have been proposed to reverse Brazil's increasing childhood obesity rate but the success of this work depends on integrated actions between the government and society, with the aim of ensuring spaces and laws that protect health and promote healthy lifestyles across the life-course in order to protect future generations against the onset of obesity and its consequences.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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