

## Childhood obesity: A great global challenge

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**The Problem.** Childhood obesity is a disease and a risk factor for many health problems later in life, such as type II diabetes and nonalcoholic fatty liver disease. The basic causes of overweight and obesity are the consumption of an imbalanced diet, unhealthy eating, insufficient physical activity, and, more generally, an unhealthy lifestyle. A child may simply not eat well because the surrounding environment encourages eating “empty calorie” foods, such as junk foods, soda, and fatty foods, which will predispose the child to overweight and obesity.

According to the World Health Organization reports, childhood obesity is presently a serious global public health challenge—an epidemic. The epidemic has been growing rapidly, particularly in Africa, the Middle East, and the Pacific Islands. Over the last forty years, the number of obese school-aged children and adolescents has risen from 11 million to 124 million—a 10-fold increase—with another 216 million children estimated to be overweight. There is a growing trend towards childhood overweight and obesity worldwide. The available statistics show that over 38 million children younger than 5 years old are also suffering from overweight or obesity [1].

**Action to solve the problem.** Prevention and treatment of childhood obesity remain daunting challenges at the individual, family, and community levels. They have basically three components: a healthy, balanced diet; regular physical activity; and a healthy lifestyle. The child should be helped to acquire a long-lasting sustainable healthy lifestyle.

At the clinical level, ideally, attempts should be made to have a multi-specialty team consisting of a nutrition consultant/registered dietitian, an exercise specialist, and an experienced mental health professional. Certainly, the family, peers, and the school play

extremely important roles in providing an appropriate environment encouraging a healthy lifestyle. The family can have a vital role in modifying the lifestyle of the child. In fact, the family, if guided by the specialist, can potentially assume the main responsibility for modifying lifestyle and changing the eating and food behavior of the child, guaranteeing the sustainability of behavioral changes.

An effective approach would be using a low-glycemic diet (LGD), which forms the basis of the Optimal Weight for Life (OWL) program [2]. The LGD is based on foods that are digested slowly (fruits, fruit juices, vegetables, some pulses, and minimally processed grains), as well as appropriate sources of protein and fat (such as nuts, olive oil, etc.). It can help blood sugar and hormone levels stay steady for many hours after eating, which in turn will help the child stay full longer after eating. A LGD can lower the risk of diabetes, fatty liver, and cardiovascular diseases, as well as controlling appetite.

As regards physical activity in the case of a child who is inactive, it is important to encourage and help him to start daily physical activity gradually, aiming for at least 60 minutes of moderate physical activity daily in the form of, for example, running, bicycling, or playing football, depending on the age and interests of the child. The screen time (TV, video games, etc.) should be limited to two hours a day.

At the population level, both the Political Declaration of the United Nations General Assembly on the Prevention and Control of Non-communicable Diseases and the World Health Organization Global Strategy on Diet, Physical Activity, and Health consider population-based prevention as vital for controlling noncommunicable diseases, which are on the rise in a large number of developed and developing countries, with emphasis on childhood obesity.

From a public health point of view, observations show that a more realistic approach is to make attempts to reverse the obesity epidemic, which is presently the focus of the WHO recommendations and the main objective of the UN Decade of Action on Nutrition [3]. The Sustainable Development Goals, too, includes targets to reduce under-5-year-old child overweight and obesity by the year 2025 [4].

The population-based prevention has three basic components: appropriate government childhood obesity prevention policies and interventions (leadership, Health in All Policies, etc.); population-wide policies and initiatives; and community-based interventions (in early childcare settings, schools, etc.)

In conclusion, based on a review of reviews on the interventions to control, prevent, and treat childhood obesity, at least in schools [5], the following recommendations are made: (1) implement multicomponent interventions; (2) obtain the support of the relevant stakeholders and policymakers and planners; (3) take into consideration gender differences; and (4) apply psychological theories to understand the mechanisms of behavior change. Timely nutrition counseling and family/parent/caregiver participation will increase the chances of success.

### References

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