

# Child Obesity

Public Health Crisis, Prevention as a Cure.

Overweight and obese children have arguably become the primary health problem in developed nations and, to some degree, in other parts of the world. The definitions of overweight and obesity in children differ between epidemiological studies, but most scientists agree that children who are overweight exceed 20% (25% for obese) of their ideal body weight, based on age, weight, height and frame. The body mass index (BMI) is typically used to derive and apply these percentages to health risks. However, experts now indicate that it is not an absolute measurement and there is margin for error when using BMI to calculate health risk depending on body-type (ectomorphic, mesomorphic or endomorphic) and bone structure and density. The formulas for body mass index also vary, but a BMI of 25 or more is generally considered overweight and 30 or more is considered obese.

You can calculate your BMI at <http://www.preventdisease.com/healthtools/articles/bmi.html>

As in adults, obesity in children causes hypertension, stroke, colon cancer, chronic inflammation, diabetes, increased blood clotting tendency, and other cardiovascular disease risk factors. In one study, childhood obesity increased the risk of death from heart disease in adulthood two-fold over several years.

Type 2 diabetes, once unrecognized in adolescence, now accounts for as many as half of all new diagnoses of diabetes in some populations. This condition is almost entirely attributable to the pediatric obesity epidemic, through heredity and lifestyle factors which affect individual risk. Psychosocial effects are also becoming more severe in children who are often outcaste for being overweight resulting in depression and suicidal tendencies

## ● Causes of Childhood Obesity

As in adults, a child's bodyweight is regulated by numerous physiological mechanisms that maintain balance between energy intake and energy expenditure. Any factor that raises calorie intake or decreases energy expenditure by even a small amount will cause obesity in the long-term. Genetic factors can also have a great effect on individual predisposition; however, rising prevalence rates among genetically stable populations indicate that environmental and lifestyle factors such as physical inactivity and diet must underlie the childhood obesity epidemic.

## ● The Problem

Preventing obesity in children ultimately involves eating less and being more physically active. Sounds simple? For several decades now, governments have invested billions of dollars into programs to increase physical activity among youth and the general public. Despite these government initiatives, and since the inception of such programs, children are more obese today than ever before. Between television, video games, internet, fast-food, sedentary lifestyle and convenience, it is clear that cultural factors have had incredible control and a negative impact on our health.

The limitation of current approaches to combat childhood obesity may also, in part, contribute to the problem. For example, school-based programs might not be particularly efficacious. Most dietary interventions focus on reduction of fat intake, even though dietary fat might not be an important cause of obesity. Very few pediatric studies have ever addressed the effect of dietary composition on bodyweight, physical activity, and behavioural modification techniques combined. With respect to physical activity, many studies have used conventional programmed exercise prescriptions, although increasing lifestyle activity or reducing sedentary behaviours might be better for long-term weight control. Physical education curriculums designed to create exercise environments that only mesh with sport or competition have isolated several groups of children who are uncomfortable, uncoordinated or lack the athletic ability to enjoy these events. Moreover, a plethora of school-based programs still emphasize non-locomotor and manipulative skills for physical education which are very poor indicators in maintaining long-term health. Motor skills such as speed, strength and power which are integrated with cardiovascular abilities have consistently shown to improve long-term health, yet an extremely large percentage of curriculums fail to properly address or incorporate these skills.

## ● Prevention as a Cure

Currently, more than 70% of children and youth are not active enough to lay a solid foundation for future health and wellness. It's time for prevention to reverse this growing trend. This public-health crisis demands increased funding for research into new dietary, physical activity, behavioural, socioeconomic and environmental approaches for the prevention of child obesity and improved reimbursement for effective school-based programs and curriculums. Children who grow into teenagers and then adults require more accountability for their own well-being through health conscious decisions which are motivated by proper practical and theoretical applications. Substantial political and financial contributions are imperative to invest in prevention more effectively to regulate revisions and mandate policies which affect the governing bodies of education, school boards, and ultimately the schools themselves. Any procrastination or failure to resolve these matters in the next decade will only lead to the further deterioration of human health and healthcare systems. Proper leadership and effective communication regarding these preventive measures may still reverse this trend and consequently promote a healthier aging population.

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