

# Childhood Obesity

## Introduction

Childhood Obesity is a serious medical condition that affects children and adolescents. It is a condition that occurs when a child is well above the normal weight for their age and height.

One third of children in the United States are overweight or obese and this number is continuing to rise. 18 percent of children age 2 to 19 years old (12.7 million) are obese as defined by their body mass index. *Remember, I discussed the body mass index (BMI) and its calculation in the last health column (Dec. 2016).* In the 1970's and 1980's approximately 5% of children were obese. By 2000, 13% were obese and in 2010 pediatric obesity was leveling off at 18% of the U.S. population.

Children, overall, have fewer weight related health and medical problems than adults. They are however, at high risk of becoming overweight adolescents and adults, which place them at high risk of developing chronic illnesses such as heart disease and diabetes later in life. They also may develop elevated cholesterol, hypertension, early cardiovascular disease, bone problems such as osteoarthritis and a variety of skin conditions such as heat rash, fungal infections and acne. Psychologically, they are also prone to develop stress, depression and low self esteem.

## Causes

**Genetic factors:** Weight problems run in families but this is not an absolute correlation. The likelihood of having an obese child if one parent is obese is three times higher than otherwise. If both parents are obese, the likelihood is 10 times higher. However, not all children with a family history of obesity will be overweight. Children whose parents or siblings are overweight may be at increased genetic risk but there is also the component of shared family behaviors such as eating and physical activity habits.

**Lack of physical activity:** A child's total diet and activity level play an important role in determining its weight. In today's U.S. culture, many children spend a lot of time being inactive. The phrase "Play 60" in which a child is encouraged to play actively for 60 minutes a day, was unheard of two generations ago. Only 20% of children experience more than two episodes of vigorous play time per week. The average child spends approximately four hours a day watching television or playing some variation of an electronic media game. Having a TV in a pediatric bedroom is a strong predictor of pediatric obesity.

**Unhealthy eating patterns:** Obesity can occur from an imbalance in calories ingested versus calories expended. Basically, kids are eating more calories than they are burning off. Excessive consumption of takeout/fast food that is highly processed contributes. Watching TV while eating is associated with obesity in children and adults. In the U.S. there is a tendency to be served excessive portions of high fat content foods in restaurants.

**Medical condition:** A hormonal imbalance, such as thyroid, adrenal or gynecologic diseases can cause obesity in children. However, these causes are rare. There can be a psychological component to obesity

as some children overeat in an attempt to deal with emotionally stressful life circumstances. Often the resultant weight gain from overeating further aggravates their emotional distress.

## **Solutions**

Social and cultural changes will need to occur to effectively address the pediatric obesity epidemic and reverse trends that have emerged over the past twenty years.

--advocate breastfeeding during the first year of life. Breastfed children have a lower risk of infant, childhood and adolescent obesity.

--modify the school breakfast and lunch programs to include heart healthy food choices. Encourage salad bars and discourage sugar based drinks.

--guarantee safe neighborhood environments and parks so kids can play safely outside.

--limit TV/computer/social-network communication and video game use.

--encourage vigorous physical education for 60 minutes each day.

--eat out at restaurants less; eat smaller portions when you do eat out; do not "supersize" food options.

--encourage the development of family friendly activity infrastructure eg. bike lanes, parks, swimming pools, basketball and tennis courts, hiking trails, etc.

--avoid "empty carbohydrate" calories (high fructose corn syrup) and emphasize healthy fats such as olive oil instead of saturated fats (lard/butter).

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