

# Treating

By Janet E. Mohrman, MS, RD, LDN

## Childhood Obesity



According to [www.actionforhealthykids.org](http://www.actionforhealthykids.org), 19 million children between the ages of six and 19 are overweight. In the last 20 years, the incidence doubled for children and tripled for adolescents. About 80 percent of overweight children will be obese as adults. Of those who are overweight, many also have medical complications such as high blood pressure. Obese adults and children can develop co-morbid conditions, such as high blood pressure, Type 2 diabetes and heart disease.

### Treatment Methods for Childhood Obesity

Lifestyle changes, such as healthy eating, exercise, and behavior modification are the accepted methods for weight-loss.

The general dietary recommendations for children are:

- No more than 30 percent (and no less than 20 percent) of total energy from fat
- Less than 10 percent of energy from saturated fat
- Less than 300 mg of cholesterol per day

The average daily energy intake for children ranges from 1,200 kcal for toddlers to 3,000 kcal for male teenagers; the total daily fat intake of 40 to 100 gr. (13 to 33 gr. of saturated fat) translates into approximately 30 percent and 10 percent of energy from total fat and saturated fat, respectively. General guidelines state that the child's diet include a wide variety of foods, provide adequate energy

for growth and development and achieve and maintain a desirable body weight.

### Dietary Modifications

Soluble fiber is known to have a mild to moderate cholesterol lowering effect in adults with high cholesterol. Sources of soluble fiber are fruits, dry beans and peas, oat bran and vegetables such as broccoli and carrots. Studies using soluble fiber to lower cholesterol in children are limited, according to the American Dietetic Association (ADA). Very high fiber diets may limit the energy density (calories) and the absorption of vitamins and minerals—all necessary for growing children. The recommended daily amount of fiber, for children over the age of two, is the number five plus the child's age. For example, a child of 11 plus five should eat approximately 16 grams of fiber each day.

### Herbal Products for Weight Control in Children

Herbal products are a popular form of weight control. However, the DSHEA Act (Dietary Supplement and Health Education Act) of 1994, states that dietary supplements, including herbals, are not classified to prevent or treat disease.

Herbal companies follow good manufacturing practices (GMP) that outline the quality of an herbal product, but does not assure the *safety* of the ingredients. GMP regulates good sanitation during processing, purity (no unnecessary ingredients) and standardization (identical amounts of active ingredients per batch). Also, on the dietary supplement label you may find "USP-Verified," which assures that the product meets GMP standards. The term "natural" does not imply safe or harmless. For example, ephedra or ma huang, which was used as an appetite suppressant or as an energy booster, has side effects such as headaches, insomnia, high blood pressure, which could lead to seizures or strokes and a fatal heart valve disease. The Food and Drug Administration (FDA) banned the sale of ephedra as of April 2004.

Germander, which has been used for weight-loss, can cause liver death. Bitter orange, which is increasing in popularity since the ban on ephedra, may cause increased heart rate and blood pressure or trigger migraine headaches. The use of herbal products, especially with children, is generally not recommended due to limited long-term studies on most herbal supplements and not knowing the effect of these products on the growth and development of a child.

### **Fad Diets and Weight-Loss in Children**

All foods fit. However, fad diets are another way many try to lose weight. Most quick weight-loss diets eliminate or almost eliminate entire food groups, such as the ever-popular high protein, low carbohydrate diet. Carbohydrates such as whole grains, fruits, and vegetables, contain most of the fiber that we need to avoid constipation. In addition, carbohydrates are the main source of energy for the body, which children need for growth. So, if any diet severely limits or eliminates a food group, no one, especially children should follow it for any reason.

### **Calcium and Weight-Loss in Children**

The recent study on calcium and weight-loss shows promise. According to [www.naturaldatabase.com](http://www.naturaldatabase.com), adults and children with low calcium intake are more likely to gain weight, or be overweight or obese compared to people with a high calcium intake. Several studies show that increasing calcium intake of 900-1000 mg per day (about three to four servings) from dairy products seems to be associated with an 18-20 pound weight-loss.

### **Pharmacotherapy and Weight-Loss in Children**

In some cases, medications are prescribed for weight-loss, but always in addition to healthier eating and physical activity. According to the June 2005 issue of the *Journal of the American Dietetic Association*, all of the currently available drugs for treating obesity result in a five to 10 percent weight-loss. With this weight-loss, while there is an improvement in the blood pressure in children with high blood pressure, improved blood sugar control in children with Type 2 Diabetes, etc., these medications, as with medications in general, are not without side effects. Common side effects include:

- **Dry mouth**
- **Constipation**
- **Nausea**
- **Difficulty sleeping**
- **Diarrhea**

In addition, cost of the medication is a concern. Since

most medical insurance plans will not cover the cost of obesity treatment medications, the out of pocket expense may be \$100-\$150 per month.

### **Behavior Modification**

In addition to healthier eating and increased physical activity, also changing habits in regards to food is necessary to ensure better health. Many struggle with emotional eating, which is eating in response to anger, loneliness, sadness, boredom, etc. The process of learning how to eat when hungry and not to an emotional cue can be relearned.

### **Psychological Effects**

According to *Circulation 2005*, published by the American Heart Association, the relationship of psychological problems and obesity in youth has not been widely studied. However, studies of adults who had been diagnosed with depression in their youth had a greater body mass index (BMI) than adults without the diagnosis of depression in their youth. Other studies have confirmed this association. Conversely, one other study has shown that depression scores are the highest in children with the greatest increase in BMI. For BMI calculations please refer to [www.cdc.gov/growthcharts](http://www.cdc.gov/growthcharts).

*Circulation 2005* also reports that overweight children have fewer friends, and have more isolated relationships. Overweight children are often teased about their weight, which leads to emotional suffering.

### **Conclusion**

First and foremost, the overweight child should have a physical exam by his or her physician, especially when family members are obese, have diabetes and/or heart disease. Second, ask for a referral to a Registered Dietitian who can provide nutrition advice in regards to childhood obesity. In addition, a healthier lifestyle should involve all family members, as diabetes, heart disease, etc, tends to run in families. Find out what your child's school can do to help. Lastly, investigate the resources below, and others that you can find, to support a healthier life.

**To view additional childhood obesity resources, please visit the "Childhood Obesity" section on the OAC Web site at [www.obesityaction.org](http://www.obesityaction.org).**

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### ***About the Author:***

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# ABOUT THE OBESITY ACTION COALITION (OAC)

The Obesity Action Coalition (OAC) is a National non-profit organization dedicated to giving a voice to individuals affected by obesity and helping them along their journey toward better health. Our core focuses are to elevate the conversation of weight and its impact on health, improve access to obesity care, provide science-based education on obesity and its treatments, and fight to eliminate weight bias and discrimination.



VIBRANT COMMUNITY



NATIONAL AWARENESS CAMPAIGNS



ANNUAL CONVENTION



ADVOCACY



PUBLIC EDUCATION

## LEARN, CONNECT, ENGAGE

The OAC knows that the journey with weight can be challenging but we also know that great things happen when we learn, connect and engage. That is why the OAC Community exists. Our Community is designed to provide quality education, ongoing support programs, an opportunity to connect, and a place to take action on important issues.

### Through the OAC Community, you can get access to:

- Weight & Health Education • Community Blogs
  - Community Discussion Forum
  - Ongoing Support • Meaningful Connections
- AND MUCH MORE**



**JOIN TODAY: GO TO [OBESITYACTION.ORG/JOIN](http://OBESITYACTION.ORG/JOIN)**

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