



The Perils of Childhood Obesity

If there is an overweight child in your family, you're not alone. The third National Health and Nutrition Examination Survey (NHANES III) conducted from 1988 to 1994, shows that 20% of children in the United States between the ages of 6 and 17, are overweight. In the last 30 years, that number has doubled. It appears children are just trying to keep up with their parents. The same study found that over one-third of adults are overweight as well.

Lifetime nutrition habits are formed during childhood. The Dietary Guidelines for Americans (designed for children over two years of age) stress overall dietary changes to reduce the risk of diet-related diseases. The American Heart Association, American Academy of Pediatrics, and United States Department of Agriculture recommend that children, over the age of two, eat a diet that includes a wide variety of foods. When children are offered a balanced diet over time, they will develop good eating habits.

Dietary research of children under two years of age does not indicate that a low-fat diet is healthy. Too little fat may be dangerous. Not enough fat in the diet may retard growth and development. Young children may not be able to eat enough calories and nutrients for growth. Total calories from fat should not be less than 30%.

Fat is a concentrated source of energy (nine calories per gram of food), that provides more than twice as many calories as carbohydrates and protein. Besides energy, fats are used for energy storage, organ insulation, and for transporting the fat-soluble vitamins A, D, E, and K. Fats also add flavor and texture to foods, giving us a feeling of fullness after eating.



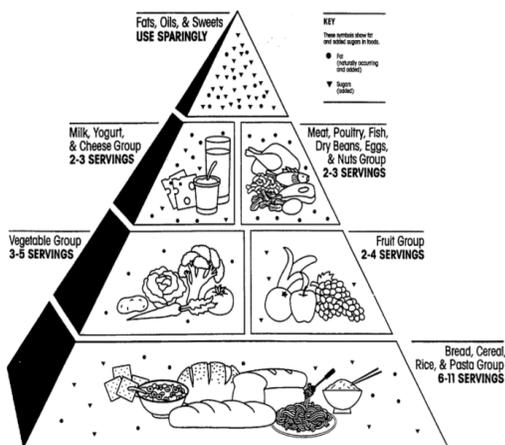
How much is enough?

Children are very good at knowing how many calories they need in a day. Let them decide how much to eat, but offer healthy choices. The average four to six year old child needs about 1800 calories per day, or approximately 41 calories per pound of body weight. Fat, as 30% of the total diet, is 60 grams. This is helpful when reading food labels. But it should not be viewed as a strict diet prescription.

Children are not little adults. In the first two years of life, children need a fairly high fat diet for optimal brain development. Breast milk, which is a very high-fat food, is the optimal choice for a developing infant. After the age of two, a child should join the family in eating a wide variety of foods in moderation.

FOOD GUIDE PYRAMID

A Guide to Daily Food Choices



Source: U.S. DEPARTMENT OF AGRICULTURE and the U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES.

The Food Guide Pyramid shows everyone how to make healthful food choices. The five major food groups of grains, vegetables, fruits, milk and meat share in providing the nutrients and energy children need. No one food group is more important than another.

Health Risks

There are health risks for obese children. High blood pressure and blood cholesterol, as well as social and psychological stresses, are well documented health risks. But the greatest risk may be children who remain overweight into adulthood. Obese children who become obese adults are at a greater risk for developing heart disease, diabetes, high blood pressure, high cholesterol, gallbladder disease, arthritis, and certain cancers. Obese adults also face psychological and social stress.

Weight Gain Causes

Weight gain in children may be caused by many factors. Poor dietary habits, heredity, family lifestyle, socioeconomic status, and a child's ethnicity, all play a role. Obesity is highest among Hispanic, African-American and American Indian children, especially girls.

Researchers conclude that genetic tendencies, combined with habits that promote weight gain, make it more likely that a child will be overweight.

Eating huge amounts of food isn't the only way to put on excess weight. An extra 200 calories per day could cause a child to gain almost one-half pound a week. That's just two homemade chocolate chip cookies per day.

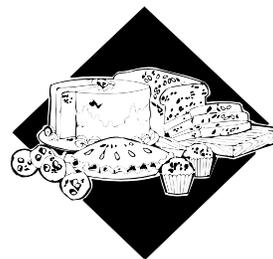
Over consumption of high-calorie soft drinks and fruit beverages may be adding to the problem. Soft drink consumption in school-age children has more than doubled in the past two decades, averaging almost 65 gallons of soft drinks per year. Fast food may also play a part in the growing number of overweight children.

During infancy and adolescence, fat normally increases faster than muscle. So overeating and lack of activity may lead to excessive weight gain. Some overweight children do not need to lose weight as much as they need to gain weight at a slower rate.

Even with the emphasis on eating five or more fruits and vegetables per day, fruit consumption declines as children get older. Only seven out of ten children under age five consumed some fruit or fruit juice per day. This number dropped to less than five out of ten for teenagers. With vegetables, three-fourths of all children, regardless of age, report eating at least one serving per day. White potatoes, followed by tomato products were the most popular.

Although diet is a factor in weight control, lack of physical activity may play a greater role in childhood obesity. In 1996, the Surgeon General reported that nearly half the young people ages 12 to 21 were not vigorously active. The American College of Sports Medicine found that only one-third of schools now offer physical education classes, with the class period constantly being shortened. Many children find team sports too competitive or costly to join. Recess time also presents similar concerns. There needs to be a safe environment conducive to active play, options for bad weather days, and more after school programs that promote physical activity.

Researchers with the American Heart Association conclude that the lack of physical education classes in our schools and habitual television viewing



and video-game playing are largely responsible for the increasing sedentary lifestyle of children. On average, children

watch 26 hours of television a week. These hours don't include time spent playing video and computer games.

The effects of food advertising and media messages directed at children may have a big impact on food choices. Eating meals in front of the television may lead to wanting to eat anytime children watch television. There appears to be a greater risk of becoming overweight, the more time children spend in front of the television. The American Academy of Pediatrics recommends a two-hour limit on television viewing every day for children.

Healthy Solutions

Childhood obesity is complex. Parents, care givers, educators, health professionals, school lunch, government, industry, and media, all need to be involved in addressing the issue.

Making good food choices doesn't mean you have to give up your favorite foods or spend a lot of time planning meals. It does mean you have to learn how to make trade-offs in your daily diet. Parents should set a good example of sensible food choices and getting daily exercise.

If your child is overweight, there are some ways to help your child.

♥**Establish good eating habits.** Good eating habits allow your child to develop normally while keeping their weight under control. The Food Guide Pyramid provides guidelines for eating an assortment of food which include fruits, vegetables, grains, skim milk, and fish, lean meat, poultry or beans. Choose foods that are lower in fat and

added sugars and sodium. Using this plan, your child will get all the nutrients they need for normal growth and development.

♥**Help your child grow into their current body weight.** It is not healthy for growing children to lose weight. So keep your child's weight steady until they grow to the proper height for that weight. Then your child's weight can increase to keep pace with normal growth.

♥**Make exercise a regular and enjoyable part of your child's life.** There are many activities that give children the exercise they need to burn extra calories they eat, and to tone their muscles. Your child needs to run, jump, skip, hop, and move around.



Support your school's physical education class. Join an organized sports team such as soccer, softball, or basketball. Many local parks and recreation departments offer classes with low fees. Participate in aerobic dance, karate, gymnastics, tennis or swimming classes. Outdoor activities are encouraged through boy scouts, girl scouts, and 4-H clubs.

Encourage active play by having balls, bats, roller skates, jump ropes, hula hoops, frisbees, paddle balls, bicycles, and roller blades available at home.

Something as simple as visiting a nearby park or walking the family pet encourages enjoyable activity. Make fitness a family affair. Remember, shared recreational activities should be fun and not too competitive early in life.

Social Discrimination

Overweight children may get the impression they are being punished by being overweight. As a parent, you should reassure your child that their bodies are not bad. Love your child unconditionally. An unconditional love will foster strong children who will be prepared to meet the challenges of life. Overweight children have the same potential for developing friends, academic achievement, and professional success as other children.

Our society does value thinness. Humans come in a wide range of shapes. There is no ideal body. Adults can teach children that diversity in body size and shape is natural and normal. And once again, the best way to teach is to model. Promote size-acceptance in schools.

Attitude....It's Everything!

Take a positive approach in reinforcing good eating habits and developing patterns of exercise. Try to talk about good food choices. Be familiar with your child's eating habits away from home. Together you can plan the snacks and meals your child eats at home so you can balance their daily nutrient and calorie intake.

If your child understands the importance of trading off high fat, low nutrient foods with fresh fruits and vegetables or whole grain pastas or cereals, you will empower them to start making conscious decisions about their meals and snacks. Set a good example at the table and with exercise. Children are more likely to be interested in nutrition and be physically active if their parents set the standard.

REFERENCES

- Harnack, L, Stang, L, and Stroy, M. *Soft drink consumption among US children and adolescents: Nutritional consequences*, JADA, 99:436-441.
- Ikeda, J. **If My Child is Overweight, What Should I Do About It?** University of California, 1998.
- National Center for Health Statistics. **Health, United States 1998 with Socioeconomic Status and Health Chart Book**. Hyattsville, MD, 1998.
- Public Health Service. **Healthy People 2000: National Health Promotion and Disease Prevention Objectives**. US Department of Health and Human Services, 1990.
- Schlicker S. *The weight and fitness status of United States children*. Nutr Rev. 52:11-17, 1999.
- Troiano R, & Flegal, K. *Overweight children and adolescents: Description, epidemiology, and demographics*. Pediatrics, 101(3):497-504, March 1998.
- Troiano R. *Overweight prevalence and trends for children and adolescents. The NHANES Surveys, 1963-1991*. Arch Pediatr Adolesc Med. 149:1085-1091, 1995.
- USDA. **Dietary Guidelines for Americans**, US Department of Health & Human Services, Home & Garden Bulletin #232, 2000.
- USDA. **The Food Guide Pyramid**, Home & Garden Bulletin #252, 1992.
- Whitaker, R. *Predicting obesity in young adulthood from childhood and parental obesity*. N Engl J Med. 337:869-73, 1997.

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