

---

# Childhood obesity

## The caregiver's role

by Bernadette Haschke

---

**C**hildren are getting fatter. Newspaper reports describe young children with weights in excess of 100 pounds. Recent surveys (U.S. Department of Health and Human Services, 2002) indicate that 10 percent of children ages 2 to 5 and 15 percent of children ages 6 to 19 are overweight.

Obesity is becoming a serious concern. Excessive weight impedes normal physical and psychological development of young children. Obesity is a detrimental cycle that gets progressively worse. Being overweight leads to inactivity, and inactivity contributes to obesity.

The cause is apparent: obesity begins when a child eats more calories than are used. However, other interrelated causes that begin in childhood have long-term consequences for a lifetime battle with obesity and health issues. For young children dealing with obesity is primarily a parental responsibility, but medical professionals, caregivers, and teachers play important roles.

### *Causes of childhood obesity*

**Limited physical activity.** Obesity is a behavioral issue for all age groups and a direct consequence of lifestyle, even for young children. Young children readily adopt the lifestyle of their parents.

Today's families are increasingly busy with many activities pulling members in different directions. Such busyness does not mean physical activity. Most often young children follow along, riding in a car seat as family members drive from dance lesson to grocery store. As a result, children have little time for play and self-selected activities.

In many neighborhoods, safety is a concern. Parents keep children inside so they can watch them at all times.

**Increased sedentary activity.** The nature of inside activities for children today is an important factor in obesity. The amount of time children spend with television, computers, and video games has

increased and is often the major childhood activity.

Such activities may or may not be harmful in themselves, depending on the nature of programs and games. The major concern is that these activities have replaced physically active play. Not only are young children burning few calories, but watching TV and playing video games often go hand in hand with snacking on high-calorie fat foods.

**Eating habits.** Snacking by both adults and children most often involves foods that are high in calorie, high in fat, and low in fiber. Children who snack shortly before meals are less likely to be hungry at mealtime. Families increasingly order delivery meals such as pizza or bring home prepared meals from a restaurant or grocery.

Because of busy schedules, families are increasingly choosing to eat meals away from home. They are likely to choose high-fat and high-calorie foods from fast-food restaurants.

All of these factors contribute to a lifestyle that increases the risk for childhood obesity.

### *The caregiver's role*

Caregivers have a unique opportunity to provide nutrition education on a continuing basis, not just a weekly nutrition unit once or twice during the year. Ongoing discussion of nutrition and daily activities with a food and nutrition emphasis are important for teaching basic concepts. Ideally nutrition is an ongoing part of the curriculum and used to teach other concepts.

Nutrition education during the early childhood years is especially important because it is during this period that lifetime eating habits are formed. The quality of nutrition for children ages 2 to 5 is especially important because it affects growth and development. It is easier to develop healthy eating habits during this time than it is to change eating habits in adulthood. Habits established during childhood will last a lifetime.



Small Spoon  
**Arrowhead Mills**  
100% Vermont  
Premium Butter  
NEW MILK BUTTER  
CREAMY

mesa +  
table



Caregivers need to provide healthy foods that meet the recommended dietary guidelines and to offer only those food options for children to select. Children do not automatically make healthy food decisions. Without nutrition education and guidance, they tend to choose foods high in sodium, salt, sugar, and fat or those foods familiar to them. The goal is that children learn to self-regulate the intake of food and to realize when they are full.

---

**The quality of nutrition for children ages 2 to 5 is especially important because it affects growth and development.**

---

Don't fall into the trap of encouraging, forcing, or bribing children to eat more than they actually need. They will not starve if they don't eat everything on their plates. The goal is to encourage children to make wise choices and assume responsibility for those choices.

The caregiver's responsibility is to teach children to recognize the link between nutrition and physical well-being. Children need knowledge of the nutrients in foods and their effect on physical growth and development—not just for now, but for their future health and well-being.

### *Learning nutrition concepts*

Piaget concluded that children ages 2 to 7 learn by actively participating in their environment, not by passively listening to instruction (Swadener, 1994). According to Piagetian theory, nutrition education for this age group involves interaction with food. Abstract concepts and stylized pictures have no place in nutrition education for young children. Because nutrition is an abstract concept for preschoolers, caregivers will use examples of real foods that are meaningful for children.

Research by Birch (1987) has found that early experience with food and eating is crucial to the food acceptance patterns children develop. Everyday experiences with food and eating affect food acceptance and intake.

Babies are born with a preference for sweets, but all other food preferences are acquired (Birch, 1994). The natural tendency for children is to reject anything that tastes new and unfamiliar. One study by Birch (1987) shows that the children 2 to 6 years old are initially reluctant to taste new or unfamiliar foods. However, the preference for a food increases with many exposures, regardless of one's age.

Other studies (Birch, 1990) indicate that young children must be exposed to a new food up to 15 times before they accept it. It is not surprising that the best time to introduce children to new foods is during the toddler period before they reach the negative 2-year-old stage in which the first response is usually "no."

### *Preparing and serving healthy foods*

Those who prepare and serve meals and snacks to young children need to examine how their practices may contribute to obesity. In a recent nutrition education workshop, a cook at a child care center said she didn't fry any foods that were served to the children. When participants were asked later to list the favorite foods served to children in their centers,

#### **Tips for parents**

- Avoid having prepared high-sugar or high-fat snacks in the home. Instead, have plenty of fresh fruits and vegetables to choose from.
- Provide foods high in fiber such as fruits, vegetables, and whole-grain breads and cereals.
- Know your child's food patterns and needs. Don't force a bottle or require that your child finish a meal. Instead serve small portions and leave the decision about being full to your child.
- Don't use food as reward or punishment for behavior.
- Avoid using dessert and candy as a reward for eating other foods.
- Provide whole milk until age 2. After that, use 2 percent or skim milk.
- Limit television and computer time.
- Provide opportunities for active, physical play.
- Participate with your child in activities such as walking, swimming, and sports.

From Morgan, R. "Evaluation and Treatment of Childhood Obesity," *American Family Physician*, Feb. 15, 1999.

this same individual volunteered “steak fingers.” When the workshop leader pointed out this was a fried food, she replied, “I didn’t fry the meat. I just warmed it in the oven.” She didn’t realize that the prepared steak fingers had been previously fried.

Serving a prepared food may be faster and easier, but it may also add calories to the meal. Serving prepared foods is increasing, despite their higher cost, because child care staff do not have the time, energy, or expertise to fully prepare foods themselves. Extra calories contribute to potential obesity, and serving unhealthy food leads to lifelong preferences and habits.

---

**The caregiver’s responsibility is to teach children to recognize the link between nutrition and physical well-being.**

---

Portion size is an important factor in obesity (Young, 2002). Americans now “super-size” everything and expect to be served mounds of food at every meal. Caregivers need to help children learn to regulate their food intake and recognize the sensation of feeling full. Serving recommended portion sizes to young children is essential.

Start with an appropriate amount and give seconds only if the child wants more. Many caregivers report that children are now requesting third, fourth, and fifth servings of specific foods. An appropriate rule is to provide only one additional serving of a specific food, unless the child has a diet restriction and cannot eat other foods that are served. When children request a second helping, don’t make them eat all other foods on their plates.

Encourage children to eat slowly, because the fullness sensation develops over time. Involving children in conversation about foods and eating preferences during snacks and mealtime helps to slow the intake rate and also provides an opportunity to discuss nutrition and foods on a daily basis. By allowing children time to acquire the fullness sensation, you may reduce requests for additional servings.

Serve meals and snacks at specific times and

remove food when mealtime is over. Some children are naturally slow eaters and may need a few extra minutes to finish the meal. Eating should not become a stand-off between caregiver and child. If a child chooses not to eat, then remove the food and ask the child to move on to the next activity. Explain that the child will have another chance to eat at the next snack or mealtime.

Eating is a social behavior that is strongly influenced by the culture and traditions of society. The eating behavior of other children can serve as a role model and a social pressure for influencing a child’s food preferences. Seating a child who refuses to eat corn with other children who love corn will likely increase the child’s willingness to eat corn.

Model what you teach. Don’t have coffee, a donut, or a can of soda in the room if you expect children to eat healthy foods at regular times.

### *Encouraging physical activity*

Many caregivers might be surprised to learn that experts recommend an increase in physical activity for preschool children. Most of us spend much of the day trying to calm children and lessen their activity.

However, young children need to develop and practice motor skills. By incorporating active play and activities in the daily routine, we encourage an active childhood and lay the foundation for an active and productive adulthood. Research (Gabbard, 1998) indicates that the “window of opportunity” for acquiring basic motor movements is from the prenatal period to age 5. The development period for fine motor skills extends from

#### **Health consequences for obese children**

- Risk factor for heart disease, high cholesterol, and high blood pressure
- Increased risk for Type II diabetes
- 70 percent chance of becoming an overweight adult if overweight as a teen
- Social discrimination
- Poor self-esteem

From “The Surgeon General’s Call to Action to Prevent and Decrease Overweight and Obesity—Fact Sheet,” [www.surgeongeneral.gov/topics/obesity/calltoaction/fact\\_consequences.html](http://www.surgeongeneral.gov/topics/obesity/calltoaction/fact_consequences.html).



infancy to around 9 years of age.

Childhood fitness and movement activity needs to be fun and appropriate for the age of the child. Remember that play is children's work and their way of exploring, learning, and exercising.

Children need early opportunities to climb, walk, run, kick, throw, and jump. They need to develop eye-hand coordination by participating in activities such as working puzzles, building blocks, and stringing beads. Development of eye-foot coordination depends on activities such as kicking large balls. Helping children acquire and practice these skills provides the foundation for physical abilities later in life.

What about children who are inactive and just sit on the playground? Consider a routine of rotating children through various areas such as swings, bikes, and sandbox to encourage more active participation. Encourage children to select or assign them to begin in a different area of the playground for the first few minutes each day before choosing their favorite play area. This encourages development of different types of motor play and helps children to develop proficiency and skills in many areas.

### ***Working with parents***

It's important to educate families about nutrition and preventing obesity. Here are suggestions for working with families and their children:

#### **What's an appropriate serving?**

Grain group	1 slice of bread ½ cup cooked rice
Fruit group	1 piece of fruit ¾ cup of juice
Meat group	2-3 oz. cooked meat, fish, or poultry cup of cooked dry beans or pasta or 1 egg
Vegetable group	½ cup chopped raw or cooked vegetables 1 cup of raw leafy vegetables
Milk group	1 cup milk or yogurt 2 oz. cheese

Recommended for children ages 4 to 6. Offer 2- to 3-year-olds less of all foods except milk.  
Source: U. S. Department of Agriculture, Center for Nutrition Policy, 1999.

- Encourage parents to be involved in all areas of their child's life. Children need to know that parents love and care for them regardless of their physical qualities. Part of parents' love and care is encouraging a healthy diet and activities suitable for preschool children.

Some parents may need help in learning what is appropriate for children at a certain age. You can provide information about your activities at the center and ways to follow up at home. Send home suggested activities for outside active play and for healthful snacks that children can help prepare.

---

## **Childhood fitness and movement activity needs to be fun and appropriate for the age of the child.**

---

Nutrition information that reinforces food and cooking topics covered in the child's classroom is especially helpful. For example, "Chef Combo" nutrition materials distributed by the National Dairy Council (1998) include leaflets that you can copy and send home with parents.

- Be sensitive to the cultural backgrounds of parents. In some cultures a large child is considered healthy. Obese parents may feel an overweight child is not a problem. Be sensitive to such issues and approach obesity from the standpoint of long-term health and well-being. Emphasize the child's inability to participate in all activities and its effect on self-concept.
- Recommend a healthy diet to parents. Help parents to see the importance of healthy eating. Suggest healthy snacks children can eat on the way home at the end of the day. Recommend apples, carrots, and graham crackers instead of chips, fast foods and other high-fat foods that may seem more convenient to a hurried parent trying to get home with hungry children.

- Encourage parents to examine their own levels of activity and eating patterns as well as their need to set a healthy example. It is hard to keep children from eating while watching TV if the parents are having snacks. Parents may be unaware of how many calories they consume as they watch television.

### ***Dealing with an obese child***

These suggestions are primarily directed at preventing obesity in young children. What can you do about an obese child in the classroom?

Talk with parents in an effort to express concern and provide information. Describe how obesity is hampering the child's participation in activities and how that behavior is different from that of other children in the classroom. Discuss strategies for cutting back food consumption and for encouraging the child to become more active. Although most obesity is not caused by health-related problems, you might suggest that the parents contact their physician or public health staff in dealing with the problem.

Obesity has become a serious concern in this country. Preventing it in early childhood is much easier than trying to undo unhealthy eating habits and activity patterns in adulthood.

### ***References***

- Birch, L., "Research Example 1: The Role of Experience in Children's Food Acceptance Patterns," *Supplement to the Journal of the American Dietetic Association*, Vol. 87, No. 9, 1987, pp. S36-S40.
- Birch, L.; L. McPhee; L. Steinberg; and S. Sullivan. "Conditioned Flavor Preferences in Young Children," *Physiology and Behavior*, Vol. 47, 1990.
- Birch, L. "How Kids Choose Foods," research presented at International Conference of Gastronomy, Monterrey, Calif., March 11, 1994.
- Chef Combo's Fantastic Adventures in Tasting and Nutrition*, National Dairy Council, Rosemont, Ill., 1998.
- Gabbard, C. "Windows of Opportunity for Early Brain and Motor Development," *Journal of Health, Physical Education, Recreation and Dance*, Vol. 69, No. 8, 1998, pp. 54-60.

Morgan, R., "Evaluation and Treatment of Childhood Obesity," *American Family Physician*, Feb. 15, 1999.

*The Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity—Fact Sheet.*  
www.surgeongeneral.gov/topics/obesity/call-toaction/fact\_consequences.html.

Swadener, S., "Nutrition Education for Preschool Age Children: A Review of the Research,"  
www.nal.usda.gov/fnic/usda/preschoolne.html.

U. S. Department of Agriculture, Center for Nutrition Policy and Promotion, 1999.

U. S. Department of Health and Human Services, "Obesity Still on the Rise, New Data Show,"  
www.cdc.gov/nchs/releases/02news/obesityon-rise/html.

Young, L., "The Contribution of Expanding Portion Sizes to the U. S. Obesity Epidemic," *American Journal of Public Health*, Vol. 92, No. 2, 2002, pp. 246, 49.

### ***About the author***

Bernadette Haschke, PhD, is an associate professor in the Department of Family and Consumer Sciences at Baylor University in Waco, Texas. She has served as a teacher and director in early childhood programs. She is a trainer for the Texas Career Development System for Early Care and Education and conducts workshops on childhood obesity.