

Overcoming Obesity: It's a Family Affair

Obesity in America is at epidemic proportions with rapid progression since the 1980's. Over **60% of adults** and **30% of children** in the United States are either obese or at risk for obesity. Since the 1970's the percentage of overweight children and adolescents in the United States has more than doubled. Today, 10% of two to five-year-olds, and 15% of children between the ages of six and nineteen are obese. As the incidence of obesity increases among young people, so does the rates of Type II diabetes, hypertension, hypercholesterolemia, sleeping disorders, and the risk of heart disease in adulthood.

The root of this growing problem is a **decline in the quality of diets** of children, and a **decline in physical activity** among young people. Today's busy families have less time to prepare nutritious, home-cooked meals, therefore relying upon fast food as a primary source of nutrition of children. With the increase in electronic entertainment for children, there has been an associated decline in outdoor physical activity that was once considered the norm among American children.

Overcoming obesity in children **requires family participation**. Not only must parents model a lifestyle, which would include a healthy diet and active lifestyle, but it appears that the parenting style has an impact upon obesity as well. Authoritative parenting, as opposed to permissive or harsh authoritarian parenting, has been associated decreased obesity among children. So, helping children overcome obesity starts with the parents leading by example.

When is a child obese?

Obesity in childhood is defined as a body mass index (BMI) at or above 95th percentile for age and sex of the child. BMI uses height and weight measurements to estimate how much body fat a person has. BMI may be calculated by dividing the child's weight by his height squared (Wt/Ht^2). This result is then multiplied by 703 to convert pounds and inches. The easiest way to calculate the BMI is to use a **BMI calculator on the Internet**. The child's BMI is then plotted on a standard BMI chart and the child will fall into one of the four following categories:

1. Underweight: BMI below the 5th percentile
2. Normal weight: BMI between the 5th and the 85th percentiles
3. At-risk for obesity: BMI between the 85th and 95th percentiles
4. Overweight: BMI at or above 95th percentile

While the BMI is not a perfect measure of body fat, it is the most practical for use in a physicians' office and by parents at home. It is not a direct measurement of body fat, but rather an indicator of a child's overall weight condition.

What are the health effects of obesity?

Obesity places children at risk for serious medical conditions and creates a setting for social tensions, as well. Overweight children are often teased, bullied, and even rejected by peers at school. Children who become obsessed with their weight are more likely to develop unhealthy eating habits and eating disorders, such as anorexia nervosa or bulimia. Depression can result from social rejection, which can in turn lead to substance abuse.

Obesity puts children at risk for developing several medical problems that have direct impact upon their quality of life. These medical problems include:

1. High blood pressure, Type II Diabetes, and high cholesterol
2. Bone and joint problems
3. Liver and gallbladder disease
4. Depression and emotional disturbances.

What causes obesity?

Three factors are responsible for a child's overall body shape. The first is the amount of **calories consumed** by the child; the second is the amount of **calories burned** by the child, and third is a child's basic **innate metabolic rate**. Obesity is the result of either excessive caloric intake, insufficient calorie expenditure or a combination of the two. Depending upon the genetics of the family and the child, the calorie balance will vary. Therefore, some children may eat more and exercise less and not become obese, whereas others will gain excessive weight. Some medical conditions, such as disorders of the thyroid or the adrenal gland may rarely result in childhood obesity. A thorough examination by a pediatrician is necessary to begin the process of evaluation.

Overcoming obesity in the child (and the family)

Researchers find that children (at about 4 years of age) who are exposed to the following 3 household routines are 40% less likely to be overweight:¹

1. Eating dinner regularly together as a family.
2. Sleeping at least 10 ½ hours per night on weekdays.
3. Limiting screen viewing (TV, video, DVD) to 2 hours per day on weekdays.

Begin by making small changes in your child's and family's habits rather than dramatic changes in diet or exercise patterns. Set short-term achievable goals as a family. Avoid fad diets.

Evaluate the Eating Habits of the Family

1. **Shop smart** at the grocery store.
 - a. Buy beverages with only five calories or less per serving, with the exception of skim milk. Soft drinks, sport drinks, and even fruit juices, can be major stumbling blocks to a child's efforts to lose weight.
 - b. Choose only foods that have three or more grams of fiber per serving. High fiber foods are more filling and more easily digested. Look for whole grain breads, pastas, and breakfast cereals for your family. Try mixing high fiber cereal with your child's favorite cereal and gradually increase the healthier cereal portion.
 - c. Buy fresh fruits for snacking.
 - d. Avoid prepackaged, processed snack foods. These are less healthy and usually higher in fat content
2. **Serve healthy foods.** Try to include five servings of vegetables and fruits a day in the family diet. Prepare fresh cooked meals as often as possible. Store-bought, prepared foods are often higher in fat and overly processed. Teach your children to appreciate home cooked meals.
3. Encourage children to **eat a variety of foods**. Serve a variety, not just what you know the children will eat. For foods a child may dislike, encourage him to take at least one to two bites before leaving the table. Develop a practice of all family members remaining at the dinner table until everyone is finished eating. This discourages an early escape from the table by a child who dislikes the foods that are served and wants to return to an enticing play activity.
4. **Be creative** with your food servings. Mix vegetables into pastas with sauce to improve their likeability. Add vegetables to homemade pizza, and add chopped vegetables to salads with your child's favorite dressing.
5. **Eat together as a family whenever possible.** Family meals have been associated with fewer weight-control problems among family members. Not only is this beneficial for the social relationships within the family, but also provides an opportunity for the parents to model good eating habits, and for the entire family to eat healthfully together. Eat together around a table in a designated dining area within the home.
6. **Eat scheduled meals as a family.** Snacking/grazing, particularly in front of the television, results in higher intake of food than eating together at the family table.
7. Serve **only water or milk** at meals. Avoid serving sweet drink (tea, soft drinks, and juices) with meals, since children will often drink away their appetite.

8. **Turn off the television** to avoid distraction from family conversation and from eating for young children.
9. Serve food **from the kitchen counter** rather than from bowls on the dining table.
10. Discourage **excessively large** portion sizes for each individual.
11. Limit **seconds to the lower fat foods** being served.
12. Don't practice the "**clean-plate**" approach at mealtime.
13. **Don't serve dessert** on a regular basis.
14. Encourage children to **eat breakfast** every day; at least a piece of toast and glass of juice. Skipping breakfast often leads to overeating at lunch and supper.
15. **Grow a garden.** Children raised in homes where parents or grandparents grow their own vegetables tend to like vegetables.
16. **Limit eating out** at restaurants and fast food establishments. Initially, pledge to drop to once a week or once every two weeks.
17. Make **healthy choices** when eating out. Choose: grilled versus fried, fruit versus fries, water versus sweet drink, pretzels versus chips, regular versus super-size.
18. **Enforce a reasonably early bedtime.** Sleep deficiency leads to overeating.

Evaluate the Snacking Habits of the Family

1. **Make available healthy snack choices.** Provide fruit, yogurt and low fat snacks. Place a fruit bowl in easy reach. Have only limited supplies of the typical snack foods, such as cookies, chips and candy (and allow the supply to run out occasionally).
2. For Toddlers: **Limit their consumption of sweetened drinks** to 8-12 ounces a day. Offer only 100% fruit juice, diluted, and in limited quantities throughout the day. Toddlers who consume more than 16 ounces of sweet drink a day are at risk for obesity later in life.
3. **Drink more water.** Excessive sweet beverage drinking (even diet drinks) encourages pleasure by mouth and eventually leads to overeating. Water drinking (esp. cool filtered water) is healthier since a young child will drink according to his *needs*, rather than according to his *wants* when offered sweet drink.
4. Develop a **routine of designated snack times** and regular mealtimes.
5. Eat snacks **only in the kitchen**; not in front of the TV.
6. **Limit a child's access** to the refrigerator or pantry. Always require that your child ask permission before taking foods for snacks. Stock your pantry with healthier snacks, such as low fat popcorn and fresh fruit.
7. **Don't reward** children for good behavior with snacks or sweets.
8. Purchase small quantities of these beverages and **run out**.

Evaluate the Activity Level of the Family

1. **Limit television viewing.** For children under 2 years of age, intentional television watching should be avoided. For toddlers and preschools, television should be limited to one to two hours per day. For school-agers, **Limit screen time** (television, computer) to ½ to 1 hours on school day evenings. This time is quite sedentary and is characterized by heavy snacking. Limiting this time will encourage more physical activity and accomplish another goal of a reasonable bedtime on school day nights. Video games should be reserved for weekends.
2. **Encourage one hour or more of daily physical activity.** Encourage free play outside as well as involvement in organized sports as appropriate for each child's developmental and level of coordination. Activities around the home, such as walking in the neighborhood, jump rope, bicycle riding, and outside chores are beneficial.
3. **Don't allow a television or computer** in your child's bedroom. TVs in bedrooms are associated with obesity and insomnia. Restrict video game playing to weekends only.
4. **Take family walks.** Be active *together* as a family.
5. **Get enough sleep.** Children who get at least **10-11 hours of sleep per night** are less likely to be overweight. Not only does staying up late allow more time for a child to eat high-calorie foods,

but being sleepy or fatigued the next day leads to excessive hunger and eating, according to the latest research.

Evaluate the Parenting Style

1. Develop an **authoritative parenting style**. Children need and want leadership from their parents. The authoritative parenting style, which balances encouragement with consistent behavioral control has been associated with a lower incidence of obesity in children, as well as increased physical activity and sedentary behaviors.
2. **Be a positive role model**. Remember, the best way to get your child onboard with the new, active lifestyle is to commit to the changes yourself. Your actions teach your child what to eat, how much to eat and when to eat. You also encourage your child to be physically active every day if you make it a priority yourself. Model an active lifestyle around the house, including housework and yard work.
3. Here's how you can be a positive **role model**:
 - Eat nutritious foods and snacks.
 - Control your portion sizes.
 - Save treats and high-calorie snacks for special occasions.
 - Turn off the TV and computer.
 - Be physically active every day.
 - Stress the importance of healthy lifestyle choices, rather than a number on the scale.

Making lifestyle changes can be challenging, especially when you're busy juggling the demands of daily life. But if your family works together and supports each others' efforts, you're more likely to succeed. Eventually healthy habits will become routine — and you'll be well on your way to treating childhood obesity and improving your family's health.

¹ *Pediatrics*. 2010;125[3]:420-428.