

Children's Health

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What Is Childhood Obesity?

Childhood obesity is a global epidemic that has been on the rise for the past three decades. It is a serious, life-endangering problem for at least **16%** and as many as **33%** of children and adolescents in the United States alone,¹ and the problem has tended to worsen over time, tripling in the past 30 years (Figure 1).

Parents have a responsibility and obligation to their children, to provide them with the opportunity to live a healthy lifestyle.

First, it's important to know the facts about obesity:^{1,2}

- Between **16-33%** of children and adolescents in

the U.S. are currently overweight or obese.

- In the past 30 years, the obesity rate for children 2-5 and 12-19 has more than **tripled**, and for children 6-11 it has more than **doubled**.
- 32 states have childhood obesity rates over **25%**, and only one state has a rate under **20%**.
- According to the CDC, **70%** of obese youth have at least one risk factor for heart disease.
- Children with at least one obese parent are **50%** more likely to also

be obese.

- When both parents are obese, the child's chances jump to **80%**.
- Children who are obese between the ages of 10 and 13 have an **80%** chance of becoming obese adults.
- Less than **1%** of childhood obesity is caused by physical problems.
- Obesity most often begins in children **5-6** years old, and during adolescence.
- Obesity is estimated to cost society almost **\$100 billion** every year.

As indicated in Figure 1, childhood obesity rates are rising at a fairly constant pace. With over **300,000** people dying each year due to unhealthy weight gain, it's time to stop the epidemic before more children's lives are ruined by obesity.²

The purpose of this newsletter is to raise awareness of the issue of childhood obesity and what's being done to combat it, to provide information about the epidemic in America, and to suggest ways for parents to help their children avoid or overcome obesity.

Special Points of Interest:

- How serious is childhood obesity?
- How can obesity affect my child?
- What should I know about food in the U.S.?
- How can my family snack healthily?
- What is being done to combat obesity in children?

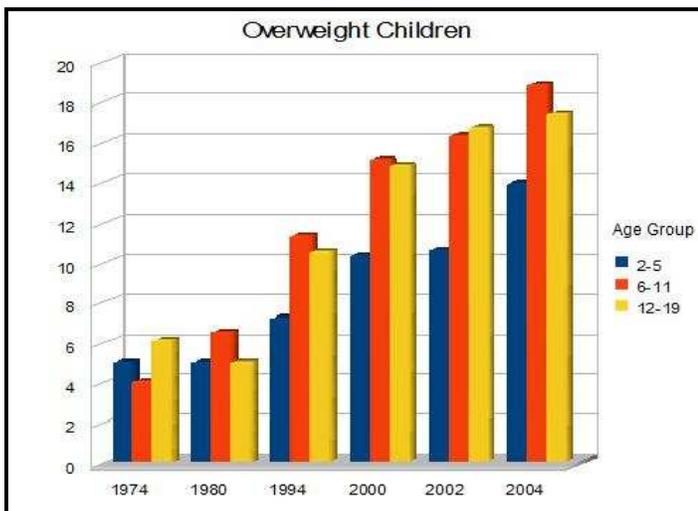


Fig 1: Rates (%) of childhood obesity over time.³

How Weight Gain Can Happen

There are a number of factors that can contribute to a child's gaining excessive weight. With effort, each factor can be overcome through diet, exercise, and in some cases, psychological counseling if



Unhealthy eating practices can increase a child's chances of weight gain.

the problem requires professional help.

According to the Mayo Clinic, a child may become obese due to any combination of the following risk factors:⁴

- **Poor diet** — consuming foods and beverages that are high in fat, sugar, and calories.
- **Insufficient exercise** — often caused by overindulgence in leisure activities such as television, computers, or video games.
- **Family influence** — family can influence a child's weight both genetically and environmentally—by set-

ting a bad example.

- **Psychological issues** — overeating can be brought on by stress, boredom, or depression.
- **Socioeconomic status** — children from low-income families are more likely to become obese.

Pay attention to your children's lifestyle to ensure healthiness. Schedule regular doctor's appointments to keep up-to-date with your child's health. If you feel that your child is gaining an unhealthy amount of weight, check with a physician before starting any weight loss plans.

Why You Should Care

It's fairly common knowledge that being overweight or obese is unhealthy. But many people think that all diseases caused by obesity take years or even decades to become a problem. This is untrue.

There has been a recent rise in type 2 diabetes, and it has not only affected the adult population. Obese children are also developing diabetes, usually between the ages of 12 and 14. Unfortunately, most of these new cases deal with type 2 diabetes.⁵



Because the body is not built to carry so much weight, many physical ailments arise as a consequence of obesity.

Type 2 diabetes, unlike Type 1, is preventable. People who are overweight are more likely to develop type 2 diabetes, which causes insulin to function improperly. When found in children and adolescents, it can result in cardiovascular disease and kidney failure. This disease can be managed with diet, exercise, and possibly insulin injections.⁵

The truly unfortunate reality is that type 2 diabetes can actually promote weight gain, making it more difficult for people with this condition to lose the weight that is contributing to their disease in the first place.⁵ This can act to trap both children and adults alike in an obesity loop.

Obesity in children also affects the respiratory system, according to studies. Overweight children frequently develop breathing problems like asthma or sleep apnea.⁵

Asthma is characterized by difficulty breathing, including coughing, wheezing, and tightness of the chest. Children must regularly use steroid inhalers to breathe properly, making daily life difficult.

Sleep apnea can cause a person to stop breathing for up to ten seconds while asleep, causing the blood's oxygen levels can decrease significantly. Symptoms are labored breathing and loud snoring.

"CHILDREN WITH A HIGHER BODY FAT PERCENTAGE ARE MORE AT RISK FOR HIGH BLOOD PRESSURE..."

Children with a higher body fat percentage are more at risk for **high blood pressure**, which can lead to heart disease as early as young adulthood. Their hearts also tend to beat more quickly, and they can develop serious heart abnormalities that require medical attention even during childhood.⁶

Blount's disease, in which one or both tibia bend, is another possible effect of obesity in children. Another condition, bowlegs (where the knees are far apart) improves over time, but Blount's tends to worsen. A child with Blount's disease may have to wear leg braces and/or undergo surgery to correct the problem. Even after surgery, there is a chance of recurrence.⁷

If your child is overweight or obese, be sure to schedule regular medical check-ups, and do your best to begin helping him or her to lose weight and lead a healthier, happier life.

Alternative Snack Options for Children (and Adults!)

If your children have snacking problems, you may be desperate to solve the issue, but helpless as to how it can be solved. It isn't an easy endeavor, and your kids aren't going to like it, but they'll be healthier in the long run and may later thank you for having the courage to take the situation out of their hands.

Most people love chips, but some people love them too much—so much, in fact, that they can easily empty a full-sized bag in one sitting. If this describes your child (or you), then you might be interested to learn some nutrition facts about chips.

A regular bag of Cool Ranch Doritos has about 9 servings in a bag. At 150 calories, 8g of fat, and 180mg of sodium per serving, the bag contains about 1,350 calories, 72g of fat, and 1,620mg of sodium.

Don't worry, though—there are many alternative snacks that are easy to prepare and just as tasty as a bag of chips:

Low- to no-fat popcorn

Popcorn is a great snack, and as long as you don't use too much butter, it can be a very healthy one as well. Many popcorn

brands market microwaveable mini bags that contain about 100 calories. If you have a hot air popcorn machine, though, air popped varieties are much more healthy than their microwaveable counterparts. Popcorn machines are relatively cheap—usually under \$20.

Reduced-fat cheese on whole wheat, low-fat crackers

Cheese with less fat has more protein, and the lower the fat content in crackers, the less trans fat there will be. Keep in mind that saturated and trans fats are the 'bad' fats. Monounsaturated and polyunsaturated fats are good—in small to moderate doses.

Mini candy bars

When kids are entirely deprived of something they love for long periods of time, they tend to overindulge when they finally have the opportunity. By allowing your kids to have a little bit of chocolate on a regular basis, they will be less likely to binge at the drop of a hat. 'Everything in moderation' is very applicable here.

Limit these mini candy bar snacks to one per day at the most.

Fruit and low-fat yogurt dip

Fruit is delicious, healthy, and easy to prepare. Cutting up a single apple provides a much larger snack than you'd think by looking at it when it's whole.

Fun fruit dips can be prepared, including a simple one containing only one cup of low-fat yogurt, two tablespoons of brown sugar, and one teaspoon of vanilla extract.⁸

Mix the ingredients together in a bowl, and put the yogurt in a coffee filter over a container of some kind. Place the container in the fridge for an hour or so to let it drain, and you'll have a delicious, healthy fruit dip that your whole family can enjoy.

"A REGULAR BAG OF COOL RANCH DORITOS...CONTAINS ABOUT 1,350 CALORIES, 72G OF FAT, AND 1,620MG OF SODIUM."



Portion Sizes in the United States

Portion size is thought by experts to be one of the major contributing factors to the obesity epidemic.⁹

A recent historical study found that from the year 1000 to 2000, main course size increased by 69%, the size of plates increased by 66%, and bread loaves have gotten 23% bigger.¹⁰

When faced with larger portions, people tend to eat more. Unfortunately, restaurants that try to cut portion size

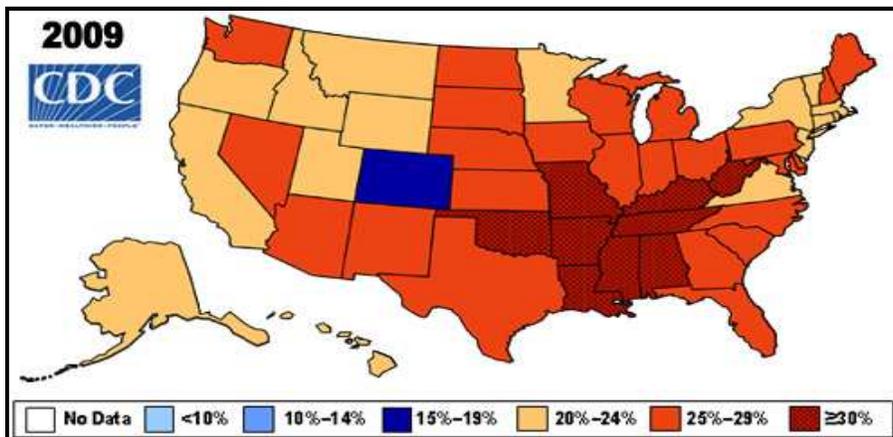
usually meet with heavy resistance from customers. In addition, many restaurants don't want to try, since smaller sizes and their corresponding lower prices would bring in less money.¹¹

Nutrition labels are required by law on most packaged foods, but many people don't pay attention to them, especially to the recommended serving size. This can result in consumption of multiple serving sizes in a single setting.

Evidence shows that with training, children can improve their ability to accurately measure portion sizes.¹² Parents can help their children learn about portion control by using simple measuring devices. Meal-times can include a brief reminder of why smaller portions are a healthy choice.



Obesity Rates in America: The Best and Worst States



The obesity epidemic in America is widespread, sparing no state. As of 2009, the average U.S. obesity rate was 27.2%.¹³ This is significantly worse than 20 years previous (1989), when no state was above the 10%-14% range.¹³ Only Colorado and Washington D.C. have an obesity rate below 20%.¹³

Unfortunately, while Colorado has one of the best overall obesity rates in the

nation, its rates rose faster than the national average from 1995 to 2008.¹⁴ And between 2003 and 2007, only a four-year span, Colorado's childhood obesity rate climbed an alarming 23%, an increase second only to Nevada.¹⁴

In an effort to combat this startling statistic, the Colorado Legislature re-

Fig 2: 2009 U.S. obesity rates.¹³

cently passed a bill that requires elementary students to participate in at least 30 minutes of physical activity every day at school. The bill passed by a narrow margin, however, revealing the surprising reluctance of many to reverse the problem.

While Colorado is still the least obese state in the U.S., Mississippi is the *most* obese. The Mississippi state health officer, Dr. Ed Thompson, is focusing on reversing the problem, primarily in schools.¹⁵

He says that school lunches are being modified to be lower in calories and fat, replacing food that was high in calories and starch. As in Colorado, Mississippi's school schedules are being adapted to include more physical activity. Children are also being educated about why proper exercise and eating habits are vital to a healthy lifestyle, in an effort to reverse Mississippi's obesity rates in future years.

How to Encourage Good Lifetime Eating Habits

One of many difficult parental questions is "How can I instill good eating habits in my children?" It's a difficult goal for many parents to reach, but there are a few basic rules that can help:¹⁶

Keep in mind that *you* control what foods are allowed. You have the final say in what you buy, and if you provide healthy food and snacks, your kids will be well-fed and happy.

Don't eliminate junk food from your child's diet entirely. Denying unhealthy food only increases desire for it, so try to save this type of food for special occasions.

Don't make your child eat everything on his or her plate. Children will eat until they've had enough, and forcing them to continue eating will only make them believe that it's okay to eat when they're not hungry, which will likely in-

turn lead to overeating and weight gain.

It's never too early to start good nutrition habits. Many parents wait until their child is already exhibiting signs of weight gain to teach them about proper nutrition. By beginning nutrition education early, your child has the best chance of developing healthy eating habits and avoiding weight problems.

Don't reward good behavior with food. Instead of showing your love with food or even material goods, give your children praise and affection. Spend time with them at the park, play a game with them, or simply tell them 'I love you.'

Rarely allow snacking while watching TV. Eating while on the computer or watching television can cause mindless eating. Before your child has realized it,



he or she could have finished a bag of chips or an entire plate of cookies. Instead, eat as a family at a dinner table.

Eating meals as a family is always a good choice.

Lead by example. If you exhibit good nutritional habits, then your child will consider those habits to be normal. You can be the most important role model in your child's life, so make the best of that influence.

Michelle Obama: Let's Move!

One of the most important current movements toward producing a healthier generation is First Lady Michelle Obama's "Let's Move!" initiative, aimed at eliminating childhood obesity quickly and efficiently. According to its website, the program's five main goals are:

1. Creating a healthy start for children
2. Empowering parents and caregivers
3. Providing healthy food in schools
4. Improving access to healthy, affordable foods
5. Increasing physical activity¹⁷

It aims to solve the obesity problem in one generation. Fast food can't be seen as a common or frequent indulgence, people have to tear themselves away from their computers and televisions in order to exercise, and nutrition labels have to be scrutinized for more than just calorie count.

Luckily, Mrs. Obama is working alongside food and drink manufacturers to design better nutrition labels. She thinks that these labels need to be more accessible to the average consumer, "so people

don't have to spend hours squinting at words they can't pronounce to figure out whether the food they are buying is healthy or not."¹⁸

The program stresses the importance of outdoor physical activity. 'Let's

Move!' encourages families and schools to get kids moving outside during recess, and while playing with friends.

In fact, Mrs. Obama launched a 'Let's Move Outside!' campaign specifically for this purpose. She strongly advocates outdoor play and wants "...every child in this country to have op-

portunities...to get outdoors and to get fit and to lead active lives right from the beginning."¹⁹

Parents are urged to lead by example.

The program stresses equal responsibility for parents and community members when it comes to health and fitness.

Mrs. Obama's own family was a large

"[I WANT] EVERY CHILD IN THIS COUNTRY TO HAVE OPPORTUNITIES ...TO LEAD ACTIVE LIVES RIGHT FROM THE BEGINNING."

part of her motivation for starting the campaign. When her children's pediatrician told her that she needed to change her family's eating habits, which previously included too much fast food and microwave dinners. "That was a moment of truth for me," she said. "It was a wakeup call that I was the one in charge, even if it didn't always feel that way."²⁰

Michelle Obama is serious about the program and its goals, and if it's implemented widely, her program will help the obesity epidemic immensely.

Simply by identifying herself as an advocate of a healthier next generation, the First Lady is helping to catapult the childhood obesity issue into the public sphere, generating both interest and awareness when previously, the gravity of the problem was ignored by many.



Michelle Obama and Senator Harry Reid participate in a 'Let's Move Outside!' event at Red Rock Canyon in Nevada.

Dana Brooks: Champion of Youth Health and Fitness



As a college professor and dean of the College of Physical Activity and Sports Sciences at West Virginia University, Dr. Dana Brooks has come a long way from his childhood interest in basket-

ball.²¹

He tells me that he didn't develop a serious interest in physical education until

college. His accomplishments include four academic degrees, including master's and doctor of education degrees from WVU.

In addition to his scholarly efforts, Dr. Brooks is project administrator for the National Youth Sports Program (NYSP), a summer camp that provides disadvantaged children with education, especially in sports and physical fitness. The program is 24 years old, Brooks says, and serves around 300 children yearly.

NYSP encourages families to work to-

gether to achieve good fitness and health. Dr. Brooks believes that a lack of family support is a large component of the childhood obesity problem.

Dr. Brooks' other work includes his duties as past president of the American Alliance for Health, Physical Education, Recreation and Dance, a massive organization that promotes research education, and activities related to health and physical activity. He chairs its finance committee and oversees the budget.

More Resources for Parents

"Help For Parents of Overweight Children"

provides tips for parents who aren't sure how to help their overweight children. The article provides specific, numbered suggestions that parents can put to practical use on a daily basis. Unlike many similar articles, the authors encourage parents not to restrict the foods their children can eat, but to lead by example and make eating right a fun and stress-free experience.

<http://www.annecollins.com/help-for-overweight-children.htm>

"Treatment of Childhood Obesity: The Diet Component"

provides seven tips for changes in food preparation designed to improve nutrition quality. The article also includes a list of possible changes in food selection, ideas for involving children in the process, and suggestions for seeking help if needed. Instead of simply instructing parents to eliminate certain foods, the article suggests substitutions that will cut down on calories and fat while maintaining flavor.

<http://www.thedietchannel.com/Childhood-Obesity-Treatment-With-Diet.htm>

"Childhood Obesity" is written by the Assistant Secretary for Planning and Evaluation at the U.S. Department of Health and Human Services. It draws from close to a hundred resources to provide an analysis of childhood obesity causes in America, including sedentary lifestyle, eating habits, lack of physical activity, socioeconomic status, race/ethnicity, genetics, and food advertising. It's a fantastic resource for parents who want to be informed about the dangers posed to their children's health.

http://aspe.hhs.gov/health/reports/child_obesity/#_ftnref4

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