
Obesity in People with Spina Bifida

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People with Spina Bifida—especially those with myelomeningocele (MMC)—are more likely to become overweight or obese than their peers.

The terms *overweight* or *obesity* mean that the body is carrying excess fat. The excess fat or its location on the body can increase the risk of certain health conditions or make daily activities harder.

What Affects Weight?

Several things affect a person's weight, including:

- Genes (what we inherit from our parents)
- Hormones
- What we eat and how much we eat
- How much we move

Our bodies get **energy** from **the food we eat**, and this energy is measured in **calories**.

Most of our energy (about 60-70%) goes toward **breathing and basic body functions (called metabolism)**. The rest goes toward:

- Moving and **physical activity** (about 20-25%)
- **Digesting** food (about 10%)
- **Growing during childhood and teenage years** (about 5%)

How Does Obesity Happen?

Obesity has many causes. A primary reason obesity occurs is due to the imbalance of the amount of energy or calories we eat and the amount of energy or calories we use to move and be active.

- **When we eat more calories than we use**, our bodies store the extra energy as fat—this causes weight gain.
- **When we eat fewer calories than we use**, our bodies burn stored fat and muscle for energy—this causes weight loss.

While this is important, it is not this simple. Each person's **genes, hormones**, the **environment** in which we live, and **daily behaviors or choices** also influence obesity and how the body uses or stores energy.



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How Do Doctors Measure Obesity?

Doctors use something called **Body Mass Index (BMI)**. It's a number based on **height and weight**. It is a screening tool that helps show if someone is **overweight or obese**.

For adults:

- A **BMI over 25** = overweight
- A **BMI over 30** = obese

For children, BMI is compared to others of the same age and sex:

- Children over the **95th percentile** = obese
- Between the **85th and 95th percentiles** = overweight

Important: BMI doesn't directly measure fat. It includes both **fat and muscle**. It can be useful to screen for weight concerns or monitor trends over time.

For people with Spina Bifida, **measuring height can be hard**. Doctors may use:

- Arm span
- Lying-down length (recumbent length)

Some clinics also use **skin-fold calipers** (a tool that measures body fat under the skin).

CDC.gov provides helpful **growth charts and calculators** to track weight. Search for "growth charts."

Why Is Obesity a Problem?

Being overweight can lead to serious **health problems**, such as:

- High blood pressure
- High cholesterol or triglycerides
- Type 2 diabetes
- Heart disease or stroke
- Sleep problems, like sleep apnea
- Joint pain (osteoporosis)
- Fatty liver disease
- Some cancers, like breast or colon cancer

Emotional and Social Effects

Individuals who are overweight may also face:

- Teasing or bullying
- Low self-esteem
- Feeling left out or alone
- Depression



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Why It's Important to Start Healthy Habits Early

Young children with Spina Bifida often grow and play just like other kids. But as they get older, they may become less active. If **unhealthy habits** start in childhood, they can be **hard to change** later on.

Obesity that starts early often continues into adulthood. That's why it's important to learn **healthy eating** and **activity habits** while young.

Why Obesity Is a Bigger Problem for People with Spina Bifida

People with **Spina Bifida** are at a higher risk for health problems if they become overweight. Extra weight makes it harder to:

- **Move around**
- **Take care of themselves** (like getting dressed or staying clean)
- **Stay active at school or work**

Weight gain can cause a cycle: less movement → more weight gain → even harder to move.

Skin Problems from Extra Weight

Obesity can also put more **pressure on the skin**, especially in areas that stay warm or wet. This increases the chance of **skin breakdown** and **sores**.

About **1 in 5 adults** with Spina Bifida get skin wounds each year. These wounds take longer to heal in people with extra weight and may require special treatment like surgery.

Emotional Health

People who are overweight may feel **bad about themselves**, **be left out of activities** or have **low self-esteem**. This can lead to feeling lonely or sad, and may make it harder to make friends or feel confident.

Why It's Hard to Stay Active

People with Spina Bifida may already have trouble moving due to **nerve problems**. As they get older, it gets even harder to stay active because:



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- School and work take more time
- Bigger bodies are harder to move
- They often don't grow as tall as others and need fewer calories

Also, people with Spina Bifida have **less muscle** than others, which means they burn fewer calories—even when they are just resting, so they may need fewer calories.

Helping Prevent Obesity

The best way to avoid obesity is to start healthy habits at a young age and keeping them going for life.

Children **learn what and how to eat at home**. When families make healthy choices together, it helps the child stay healthy too.

It's not always easy—especially if other family members are also struggling with weight or feel upset about their child's disability. But choosing healthy food and being active is a powerful way to help your child's body and mind.

How to Stay Healthy and Avoid Gaining Too Much Weight

Healthy Thinking About Food

- Try to think of food as fuel—something your body needs to grow and move.
- Don't use food for comfort when you're having a tough day. Food should help your body, not your feelings.
- Don't use food as a reward
- Don't eat out of boredom.

Smart Eating Habits

- **Let kids help** plan meals and shop for groceries. It helps them learn about good food.
- Most foods should come from:
 - Fruits and vegetables
 - Some dairy and meats
 - Whole grains like bread and cereal
 - A little bit of fat and sugar
- Choose drinks with less sugar and fewer calories. Water or low-fat milk are good options.
- Eat regular meals together and slow down so you can notice when you're full.
- Pay attention to portion sizes. Don't eat more just because it's on the plate.



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- No food is off limits, but treats should be in moderation
- Keep junk food out of sight or out of the house to make it easier to eat less of it.
- Don't make food the main focus of celebrations—find other fun activities.
- Use rewards that aren't food, like stickers, outings, or praise.
- Teach kids to tell the difference between real hunger and boredom.
- On tough days, encourage talking with someone instead of using food for comfort.
- Eat out less often and cook more meals at home.
 - Restaurant meals can be really big. Sharing your food or taking some home can help you feel just right, not too full.
 - Food from restaurants or fast-food places often has extra salt and less-healthy fats, so it's best to enjoy these meals once in a while.
 - It's not always easy to find fruits and veggies when eating out, so add them when you can or eat more at home.

Fun Ways to Move

- Moving your body burns calories and helps you feel less hungry.
- Try activities like:
 - Horseback riding
 - Wheelchair sports like tennis, basketball or track
 - Swimming
- Change routines to include even small amounts of activity. Spending 10 -15 minutes a couple of times a day may be easier than doing an activity for a long period of time.
- Ask local groups like the YMCA to offer programs for people with physical disabilities.
- Even **chores** like folding laundry or feeding pets counts as exercise!
- Limit screen time like watching TV or playing on the computer.
- Examine your **quality and quantity of sleep**. Getting good sleep can help our bodies regulate our hormones and provide the energy we need for our daily activities.

What If I Am Already Overweight?

- Weight loss is harder for people with Spina Bifida, but **it is possible**.
- Focus on what you can control, such as daily activities and food choices.
- Review your daily environment and routines. Consider any changes that can be made.
- Start small—change **one thing at a time**. Don't try to do too much at once.
- Ask your **healthcare provider or a nutritionist** for help.
- Celebrate progress—but **not with food!**
- Even **a little weight loss** can help your health.

Healthy eating and exercise help your body feel and work better for a long time.



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Additional resources

- [Nutrition, Metabolic Syndrome, and Obesity Guideline - Spina Bifida Association](#)
- [Spina Bifida Association on YouTube Playlists](#): Physical Activity, Weight Management
- [Obesity | CDC](#)
- www.choosemyplate.gov/
- www.nchpad.org/

Originally created by Stephen Kinsman, M.D. and Gregory S. Liptak, M.D

Reviewed by Michele Polfuss, PhD, 2024

This information does not constitute medical advice for any individual. As specific cases may vary from the general information presented here, SBA advises readers to consult a qualified medical or other professional on an individual basis.