

# **Body Weight and Cancer Risk**

Being overweight or obese is clearly linked to an overall increased risk of cancer. According to research from the American Cancer Society, excess body weight is thought to be responsible for about 11% of cancers in women and about 5% of cancers in men in the United States, as well as about 7% of all cancer deaths.

- What types of cancer are linked with excess body weight?
- Why does excess body weight increase the risk of cancer?
- Does losing weight reduce cancer risk?
- How common is excess body weight?
- Excess body weight in children and teens
- What does the American Cancer Society recommend about body weight?

### What types of cancer are linked with excess body weight?

Being overweight or obese is clearly linked with an increased risk of many types of cancer, including:

- Breast cancer (in women past menopause)
- Colon and rectal cancer
- Endometrial cancer (cancer of the lining of the uterus)
- Esophagus cancer
- Gallbladder cancer
- Kidney cancer
- Liver cancer
- Ovarian cancer
- Pancreas cancer
- Stomach cancer

- Thyroid cancer
- Multiple myeloma
- Meningioma (a tumor of the lining of the brain and spinal cord)

Being overweight or obese might also raise the risk of other cancers, such as:

- Non-Hodgkin lymphoma
- Male breast cancer
- Cancers of the mouth, throat, and voice box
- Aggressive forms of prostate cancer

The link to body weight is stronger for some cancers than for others. For example, excess body weight is thought to be a factor in more than half of all endometrial cancers, whereas it is linked to a smaller portion of other cancers.

#### Find Your Body Mass Index (BMI)

BMI is one way to look at whether a person is at a healthy weight. Easily calculate your BMI using the American Cancer Society online calculator.

#### BMI Calculator<sup>1</sup>

### Why does excess body weight increase the risk of cancer?

Excess body weight may affect cancer risk in a number of ways, some of which might be specific to certain cancer types. Excess body fat might increase cancer risk by affecting:

- Inflammation in the body
- Cell and blood vessel growth
- Cells' ability to live longer than they normally would
- Levels of certain hormones, such as insulin and estrogen, which can fuel cell growth
- Other factors that regulate cell growth, such as insulin-like growth factor-1 (IGF-1)
- The ability of cancer cells to spread (metastasize)

The links between body weight and cancer are complex and are not yet fully understood. For example, while studies have found that excess weight is linked with an increased risk of breast cancer in women after menopause, it does not seem to increase the risk of breast cancer before menopause. The reasons for this are not clear. The timing of weight gain might also affect cancer risk. Being overweight during childhood and young adulthood might be more of a risk factor than gaining weight later in life for some cancers. For example, some research suggests that women who are overweight as teenagers (but not those who gain weight as adults) may be at higher risk for developing ovarian cancer before menopause.

Clearly, more research is needed to better define the links between body weight and cancer.

# Does losing weight reduce cancer risk?

Research on how losing weight might lower the risk of developing cancer is limited. Still, there's growing evidence that weight loss might reduce the risk of some types of cancer, such as breast cancer (after menopause) and endometrial cancer.

Some body changes that occur as a result of weight loss suggest it may, indeed, reduce

- High cholesterol levels
- Stroke
- Gallbladder disease
- Sleep apnea and breathing problems
- Arthritis
- Low quality of life
- Depression and anxiety
- Certain cancers

Overweight and obese people, on average, do not live as long as people who stay at a healthy body weight throughout their lives.

# Excess body weight in children and teens

Not only are more adults overweight or obese, but more children are, too. Among children and teens, about 20% are now obese. This number is much higher than it was a few decades ago, although it has leveled off in recent years.

Some of the same health problems affecting obese adults can also affect obese children. These include heart disease risk factors such as high cholesterol levels and high blood pressure, as well as asthma, sleep apnea, type 2 diabetes, muscle and joint problems, and liver disease. Obese children and teens are also at higher risk for anxiety, depression, and social and psychological problems, such as being bullied and having poor self-esteem.

Overweight and obese children and teens are also more likely to have weight problems as adults, as well as the risk of health problems that can come with this.

# What does the American Cancer Society recommend about body weight?

#### To help lower your risk of cancer

As part of its <u>Guideline for Diet and Physical Activity for Cancer Prevention<sup>2</sup></u>, the American Cancer Society recommends that people try to **get to and stay at a healthy weight throughout life**. The best way to stay at a healthy body weight is to balance

**Follow a healthy eating pattern:** You can lower the number of calories you take in by eating healthier foods; eating smaller amounts of food (smaller portion sizes); limiting between-meal snacks; and limiting foods and drinks that are high in calories, fat, and/or added sugars, and that provide few nutrients. Fried foods, cookies, cakes, candy, ice cream, and regular soft drinks should be replaced with vegetables and fruits, whole grains, beans, and lower calorie beverages.

**Be physically active:** The American Cancer Society recommends that **adults** get 150 to 300 minutes of moderate intensity or 75 to 150 minutes of vigorous intensity activity each week (or a combination of these). Getting more is even better. **Children and teens** should get at least 1 hour of moderate or vigorous intensity activity each day.

It's also important to limit the time you spend sitting, lying down, watching TV, and looking at your phone or computer. Doing some physical activity on top of your usual activities, no matter what your level of activity, can have many health benefits.

Along with helping you get to or stay at a healthy weight, eating a healthy diet and increasing your physical activity can have their own health benefits, including lowering your risk of cancer.

#### For people already diagnosed with cancer

More and more evidence suggests that being overweight or obese raises the risk of cancer coming back after treatment and may lower the chances of survival for many cancers. Both during and after cancer treatment, people should try to get to and stay at a healthy weight whenever possible.

Some cancer survivors can be malnourished and underweight when they are diagnosed or as a result of cancer treatment. These people may need help gaining or maintaining their weight.

Other people may be overweight or obese when they are diagnosed with cancer. While each person's situation can be different, many people may choose to wait until after treatment is finished before making lifestyle changes that could result in weight loss. Others may choose to talk with their doctor about whether to try to lose modest amounts of weight during treatment, assuming it is monitored closely and does not affect treatment. If a person chooses to try to lose weight, it should be done safely, through a well-balanced diet and increased physical activity tailored to their specific needs. and cooked whole grains), limiting your intake of fat and sugars, and limiting portion sizes – especially of high-calorie foods. Increased physical activity is also important in promoting weight loss, and in keeping weight off. Even if an ideal weight is not reached, it's likely that any weight loss will still have health benefits.

For more information, see <u>Nutrition and Physical Activity During and After Cancer</u> <u>Treatment: Answers to Common Questions</u><sup>3</sup>.

Calculator: Find Your BMI Flyer: Diet and Activity Guidelines to Reduce Cancer Risk

# **Hyperlinks**

- 1. <u>www.cancer.org/bmi</u>
- 2. <u>www.cancer.org/cancer/risk-prevention/diet-physical-activity/acs-guidelines-</u> <u>nutrition-physical-activity-cancer-prevention.html</u>
- 3. <u>www.cancer.org/cancer/survivorship/be-healthy-after-treatment/nutrition-and-physical-activity-during-and-after-cancer-treatment.html</u>