

Did you know?

Obesity is the single biggest cause of CANCER in women

40% of ALL cancers diagnosed in the US are attributed to being overweight or obese

55% of ALL cancers diagnosed in WOMEN in the US are attributed to being overweight or obese

In 2013-2014, about 2 out of 3 adults in the US were **OVERWEIGHT** (defined as having a body mass index of 25-29.9 kg/m²) or had **OBESITY** (having a body mass index of 30 kg/m² and higher). BMI is calculated by a person's weight (in kilograms) divided by the square of the person's height (in meters).

Cancers associated with overweight and obesity have increased 7% between 2005-2014

Cancers NOT associated with overweight and obesity decreased 13%

Cancers associated with overweight and obesity increased among adults younger than age 75

(Of note, colon cancer has decreased by 23% due in a large part to screening programs)

Being overweight or obese increases the risk of 13 cancers

Including postmenopausal **breast cancer**, **uterine cancer** and **ovarian cancer**

Other associated cancers are meningioma, multiple myeloma, adenocarcinoma of the esophagus, and cancers of the thyroid, gallbladder, stomach, liver, pancreas, kidney, colon and rectum (colorectal)

Obesity & Breast Cancer

Obesity and breast cancer are both on the rise worldwide. These two disorders are also linked to one another. Excess body weight, poor diet and physical inactivity have been associated with an increased risk of breast cancer in postmenopausal women. With 70 percent of postmenopausal women in the U.S. estimated to be affected by excess weight or obesity, this is cause for concern.

The good news is that weight management also plays a key role in the prevention of breast cancer and in improving the prognosis once breast cancer is diagnosed. The relationship between obesity and breast cancer, however, is complex and not fully understood.

What do we know about the relationship between excess body fat and breast cancer?

A strong relationship exists between **obesity and many cancers**, particularly postmenopausal breast cancer.

Excess body fat may increase the risk of developing postmenopausal breast cancer through factors that include:

Insulin resistance

Changes in the level of sex hormones

Chronic inflammation

In contrast to postmenopausal breast cancer, the relationship between excess body fat and premenopausal breast cancer is less certain. We also know that many pre and postmenopausal women, after receiving a breast cancer diagnosis, end up gaining weight. Weight gain and obesity lead to poorer breast cancer prognosis, more obesity-related conditions like heart disease and diabetes and worse surgical outcomes including higher infection rates, poorer healing, lymphedema, fatigue and functional decline.

Why is this important? Breast cancer is the most common cancer among American women, excluding skin cancer. About 1 in 8 women in the U.S. will develop invasive breast cancer in their lifetime. Understanding the connection between excess weight and breast cancer risk gives individuals more reasons to better manage their weight and decrease risks of developing this all-too-common and life threatening disease. It can also empower individuals to take control of their weight after a breast cancer diagnosis.

Understanding Breast Cancer Risk Factors. A risk factor is anything that increases your risks of developing a disease. Different types of cancer have different risk factors. However, risk factors don't tell the whole story. Some women can have multiple breast cancer risk factors and never develop the disease, while others may have no risk factors and develop the disease. Still, it's important to **be aware of your breast cancer risk factors** and be able to distinguish between the ones you can change, and the ones you cannot change.

Main breast cancer risk factors you cannot change

- Being a **woman** (breast cancer is 100 times more common in women than in men)
- **Aging** (two out of three invasive breast cancers occurs in women age 55 and older)
- **Genetics** (about 5-10% of breast cancer is thought to be due to gene defects inherited from a parent)
- **Family history** of breast cancer (breast cancer risk is higher if a relative has had the disease)

Lifestyle-related breast cancer risk factors you can change

- **Alcohol intake** (women who consume 1 drink a day have a slightly higher risk as compared to nondrinkers and women who drink 2-5 drinks daily have about 1.5x the risk as nondrinkers)
- Being affected by **excess weight or obesity** (after menopause, this is a significant risk factor)
- **Physical inactivity** (research is growing in this area to show that physical activity decreases your risk of developing breast cancer)
- **Poor diet** Processed sugary food has been linked to insulin resistance and inflammation. Eat healthy fats and cut out sugar and alcohol

What can you do to prevent breast cancer?

- See your healthcare provider for **regular breast exams** and breast cancer screening mammograms
- Control your **weight**
- Be **physically active** by engaging in aerobic activity (a minimum of 150 minutes per week of moderate activity or 75 minutes per week of vigorous activity) and muscle strengthening exercises 2 days/week
- Choose a **healthful, balanced diet** that is rich in vegetables and fruits, lower in saturated fat, higher in fiber and calorie-controlled
- **Limit your alcohol** intake-no more than ONE alcoholic beverage daily
- Talk to your healthcare provider about your **family history of breast cancer** and ways to lower your risk
- Learn about the risks and benefits of **hormone replacement therapy**

How can you improve your prognosis after a breast cancer diagnosis?

Survival rates for early-stage breast cancer have improved remarkably with the introduction of new therapies. A woman diagnosed with early-stage breast cancer has a 98 percent chance of being cancer free five years later and survival rates remain more than 77 percent even 10-15 years after treatment.

Weight management is considered standard of care in women affected by excess weight or obesity diagnosed with early-stage breast cancer. If someone affected by excess weight or obesity is motivated to lose weight during cancer therapy, there is no contraindication to modest weight-loss (of no more than two pounds per week) through exercise and calorie restriction, as long as the oncologist (cancer specialist) approves, weight is closely monitored and no adverse effects are noted. Intentional weight reduction through exercise (aerobics and resistance training) and calorie restriction has been associated with health benefits.

For some cancer survivors, however, intentional weight reduction may be better tolerated once chemotherapy, radiation or surgical therapies are complete. In these situations, preventing weight gain, weight maintenance and preserving, or rebuilding, muscle mass are the recommendations.

Some cancer survivors may unintentionally lose weight as a result of cancer treatment and these patients need to be assessed and managed to improve their nutritional status. Many factors can negatively affect the ability of cancer survivors to engage in exercise, such as severe anemia, severe fatigue or having a compromised immune status, which makes going to the gym risky. Under a health professional's direction, it's prudent for cancer survivors to avoid inactivity and return to normal activities as soon as possible.

Conclusion. Though the relationship between obesity and breast cancer is complex, we do know that achieving or maintaining a desirable body weight, through eating a healthy, well-balanced diet and regular exercise, may be one of the most important lifestyle behaviors in the prevention of breast cancer and to improve survival after a breast cancer diagnosis.

Preventing Cancer: Nine Practical Tips for Consumers

Four of every 10 Americans will be diagnosed with cancer in their lifetimes, and two of every 10 will die of it. But there are some things you can do to reduce the risk. Talk to your doctor about lifestyle changes that are known to make a difference – stopping smoking, reducing drinking, losing weight, exercising and eating right.

But according to a new report from the President's Cancer Panel, environmental toxins also play a significant and under-recognized role in cancer, causing "grievous harm" to untold numbers of people. Environmental Working Group's own research has found that children are born "pre-polluted" with up to 200 industrial chemicals, pesticides and contaminants that have been found to cause cancer in lab studies or in people. Here are some simple things you can do to reduce your exposures:

Filter your tap water. Common carcinogens in tap water include arsenic, chromium, and chemical byproducts that form when water is disinfected. A simple carbon filter or pitcher can help reduce the levels of some of these contaminants. If your water is polluted with arsenic or chromium, a reverse osmosis filter will help. Learn about your tap water and home water filters at EWG's National Tap Water Database. <http://www.ewg.org/tap-water>

Seal outdoor wooden decks and play sets. Those built before 2005 are likely coated with an arsenic pesticide that can stick to hands and clothing. Learn more at <http://www.ewg.org/reports/allhandsondeck>

Cut down on stain- and grease-proofing chemicals. "Fluorochemicals" related to Teflon and Scotchgard are used in stain repellents on carpets and couches and in greaseproof coatings for packaged and fast foods. Some of these chemicals cause cancer in lab studies. To avoid them, skip greasy packaged foods and say no to optional stain treatments in the home. Download EWG's Guide to PFCs here: <http://www.ewg.org/Health-Tips>

Stay safe in the sun. More than one million cases of skin cancer are diagnosed in the United States each year. To protect your skin from the sun's cancer-causing ultraviolet (UV) radiation, seek shade, wear protective clothing and use a safe and effective sunscreen from EWG's sunscreen database. <http://www.ewg.org/2010sunscreen>

Cut down on fatty meat and high-fat dairy products. Long-lasting cancer-causing pollutants like dioxins and PCBs accumulate in the food chain and concentrate in animal fat. If you are going to eat meat or dairy choose products that are grass-fed and organic.

Eat EWG's Clean 15. Many pesticides have been linked to cancer. Eating from EWG's Clean 15 list of the least contaminated fruits and vegetables will help cut your pesticide exposures. (And for EWG's Dirty Dozen, buy organic.) Learn more at EWG's Shopper's Guide to Pesticides. <http://www.foodnews.org>

Cut your exposures to BPA. Bisphenol-A (BPA) is a synthetic estrogen found in some hard plastic water bottles, canned infant formula, and canned foods. It may increase the risk of reproductive system cancers. To avoid it, eat fewer canned foods, breast feed your baby or use powdered formula, and choose water bottles free of BPA. More at <http://www.ewg.org/bpa/tipstoavoidbpa>

Avoid carcinogens in cosmetics. Use EWG's Skin Deep cosmetic database (www.cosmeticdatabase.com) to find products free of chemicals known or suspected to cause cancer. When you're shopping, don't buy products that list ingredients with "PEG" or "-eth" in their name.

Read the warnings. Some products list warnings of cancer risks – read the label before you buy.