

WEB EXCLUSIVES

Diet and Lifestyle Influences in Breast Cancer

BY TED JAMES, MD AND JENNIFER MAY, RD

Breast cancer is the most common cancer among women in the United States and in other Western countries. Population-based and case-control studies provide evidence that diet-related factors may account for approximately 30 percent of all cancers in developed countries. It should come as no surprise then that diet and exercise, two controllable factors, are receiving a lot of attention as ways to reduce the risk of breast cancer.

After a diagnosis of cancer, patients often seek advice from their oncology care providers regarding dietary modifications that could help reduce the risk of recurrence, as well as help decrease the risk of cancer in family members. These discussions are important since many patients are contemplating, or already implementing, various diets, complementary and alternative medical therapies, or supplements—all of which may not have been evaluated in a rigorous scientific manner, and could cause more harm than good.

When searching the Internet for “breast cancer prevention diets,” many links lead to sites promoting low-fat diets that are high in fruits and vegetables. Unfortunately, thus far, no clinical trials have proven that this specific diet actually prevents breast cancer. Yet, many cancer centers recommend these foods for their patients. How come?

Few would argue that a diet low in fat and high in low-calorie fruits and vegetables helps to achieve a healthy body weight. This is important because of emerging research in the area of diet, exercise, and breast cancer. Most of the research linking diet and exercise to breast cancer focuses on body mass index (BMI), an estimate of body fat composition based on height and weight. In both adult men and women, the World Health Organization divides BMI into the following categories: underweight (less than 18.5), normal (18.5 to 24.9), overweight (25 to 29.9), and obese (30 or greater).

Women who had the lowest BMI and the highest physical activity levels had the lowest levels of circulating estrogen; hormones that can fuel breast-cancer growth.

According to findings from the Women's Health Initiative, women who want to significantly decrease their breast cancer risk are encouraged to exercise regularly and keep their BMI within normal range. Research indicates that women with increased BMI have a higher probability of developing breast cancer compared with women with a normal BMI, especially following menopause.

A multicenter team of researchers found that women who had the lowest BMI and the highest physical activity levels had the lowest levels of circulating estrogen; hormones that can fuel breast-cancer growth. To find your own BMI, refer to one of the several online BMI calculators, such as the [National Institutes of Health](#).

Another lifestyle change that has demonstrated some effect in reducing breast cancer risk is minimizing alcohol consumption. The public health recommendations for alcohol are complicated because consumption of one to two glasses of alcohol per day probably protects against cardiovascular disease, the leading cause of death among women. However, avoiding alcohol appears to be an effective method for reducing breast cancer risk. So what's a woman to do?

The evidence that breast cancer risk can be reduced by achieving and maintaining a healthy body weight through diet and exercise, and limiting alcohol consumption, is strong. Although many studies are still required to fully understand the relationship between diet, exercise, and breast cancer, we can be confident that improved nutrition reduces the risk of several other chronic diseases, such as diabetes, obesity, hypertension, and heart disease. Furthermore, a healthy lifestyle enhances overall quality of life. What do you have to lose?

Based on evidence from current research, the following is a simple list of action items that can be taken to reduce one's risk.

Tips to Maintain Healthy Diet and Lifestyle

To help reach or maintain a healthy weight:

- > Multiply your weight in pounds by 12 for a rough estimate of how many calories you need each day to maintain your weight.
- > For a one- to two-pound weight loss per week, subtract 500-1,000 calories from the number you previously calculated. (Make sure to consume at least 1,200 calories each day.
- > Add more vegetables, fruits, whole grains, and beans to your meals. Aim for at least five to nine servings of a variety of vegetables and fruits every day. They're packed with fiber and water, so they make you feel full without all the extra calories.
- > Check out the [American Institute of Cancer Research's](#) site for healthy recipes.
- > Try to limit your fat intake to about 20 percent of your total calories per day. Start by decreasing your intake of saturated fats from animal products, such as fatty meats, butter, full-fat dairy products, and other foods such as

coconut/coconut oil and palm oil. Avoid trans fats. Many processed foods contain trans-fatty acids, such as some margarine, vegetable shortenings, commercially prepared cookies and crackers, fried foods, fast foods, and baked goods. One way to spot trans-fatty acids in a food is to check the nutrition facts label. You'll find it listed as "Trans Fat" on the label, right under "Sat. Fat."

> Avoid charred, salt-cured, smoked, and preserved meats.

> Try to choose mostly healthy fats. Unsaturated fats are found in greatest amounts in food from plants, such as olive oil, canola oil, nuts, avocados, and olives.

> Aim for one to two servings of fish per week. They are rich in omega-3 fatty acids, which are best known for their healthy heart benefits. Try salmon, mackerel, lake trout, herring, Albacore tuna, or sardines.

> Limit alcohol to one serving per day for women, two for men, if consumed at all. If you do drink, make sure to meet your daily recommended intake of folic acid of 400 mcg per day. This can be met with a standard multivitamin or choosing a fortified cereal that contains 100 percent of the daily value.

Make a commitment to regular physical activity every day:

> Check with your physician to determine any limitations you may have.

> Work up to at least 30 minutes of moderate activity on five or more days of the week; for breast cancer risk reduction, 45 minutes or more may be even better.

> Check out [AICR's exercise action plan](#).