

Breast cancer prevention: Lifestyle choices and more

If you're like most women hoping to avoid breast cancer, you're looking for something you can do — some changes you can make in your life — that will steer you away from the disease.

Some things you can't avoid when it comes to breast cancer risk, such as your age, genetic makeup and environmental exposures. But other breast cancer risk factors are well within your control. Employing preventive health measures can't guarantee that you won't develop breast cancer, but it's a step in the right direction.

Diet and exercise prevention strategies

Among the easiest things to control are what you eat and drink and how active you are. Here are some strategies that may help you decrease your risk of breast cancer:

- **Limit alcohol.** A strong link exists between alcohol consumption and breast cancer. The type of alcohol consumed — wine, beer or mixed drinks — seems to make no difference. To help protect against breast cancer, limit alcohol to less than one drink a day or avoid alcohol completely. Some studies indicate that folic acid — a nutrient found in citrus juices and green, leafy vegetables — might help reduce the risk of breast cancer in women who consume moderate amounts of alcohol.
- **Maintain a healthy weight.** There's a clear link between obesity — weighing more than is appropriate for your age and height — and breast cancer. This is especially true if you gain the weight later in life, particularly after menopause. Excess fatty tissue is a source of circulating estrogen in your body. And breast cancer risk is linked to how much estrogen you're exposed to during your lifetime.
- **Stay physically active.** Regular exercise can help you maintain a healthy weight and, as a consequence, may aid in lowering your risk of breast cancer. Aim for at least 30 minutes of exercise on most days of the week. If you haven't been particularly active in the past, start your exercise program slowly and gradually work up to a greater intensity. Try to include weight-bearing exercises such as walking, jogging or aerobics. These have the added benefit of keeping your bones strong.
- **Consider limiting fat in your diet.** Results from the Women's Health Initiative low-fat diet study suggest a slight decrease in risk of invasive breast cancer for women who eat a low-fat diet. But the effect is modest at best. However, by reducing the amount of fat in your diet, you may decrease your risk of other diseases, such as diabetes, cardiovascular disease and stroke. And a low-fat diet may protect against breast cancer in another way if it helps you maintain a healthy weight — another factor in breast cancer risk. For a protective benefit,

limit fat intake to less than 35 percent of your daily calories and restrict foods high in saturated fat.

Aspirin therapy and hormone therapy: Consult your doctor

Talk with your doctor about your individual health risks before trying daily aspirin therapy or deciding on long-term hormone therapy.

- **Ask about aspirin.** Taking an aspirin just once a week may help protect against breast cancer. A study in the "Journal of the American Medical Association" in May 2004 found that women who had a history of breast cancer and who took aspirin once a week for six months or longer were 20 percent less likely to develop breast cancer than women who didn't take the drug. Women who took a daily aspirin had an even greater reduction in risk — 28 percent. Regular use of ibuprofen (Advil, Motrin, others) also seems to help protect against breast cancer, but not as effectively as aspirin. On the contrary, acetaminophen (Tylenol, others) works differently from aspirin and ibuprofen and has no anti-cancer benefit.

Aspirin and ibuprofen are effective only against breast cancers that have receptors for the female hormones estrogen and progesterone, which are known to stimulate tumor growth. The drugs work by reducing estrogen levels in your body and breast tissue. They do this by blocking a hormone-like substance (prostaglandin) that's needed to activate an enzyme important in the synthesis of estrogen.

However, be sure to talk to your doctor before you start taking aspirin as a preventive measure. When used for long periods of time, aspirin can cause serious side effects, including stomach irritation, bleeding and ulcers; bleeding in the intestinal and urinary tracts; and hemorrhagic stroke. In general, you're not a candidate for aspirin therapy if you have a history of peptic ulcers, liver or kidney disease, bleeding disorders or gastrointestinal bleeding.

- **Discuss discontinuing long-term hormone therapy.** Study results from the Women's Health Initiative (WHI) raised concerns about the use of hormone therapy for symptoms of menopause. Among other problems, long-term treatment with estrogen-progestin combinations, such as those found in the drug Prempro, increased the risk of breast cancer. The WHI investigators also reported that women taking hormone therapy while in the study who developed breast cancer had more aggressive and larger tumors. The women in the study taking hormone therapy were also found to have more abnormal mammograms — requiring additional imaging methods, such as ultrasound — due to the hormones' effects on breast tissue density.

If you're taking hormone therapy, consider your options with the advice of your doctor. You may be able to manage your menopausal symptoms with exercise, dietary changes or nonhormonal therapies that have been shown to provide some relief. If none of these are effective, you may decide that the benefits of short-term hormone therapy outweigh the risks. In that case, your doctor will likely encourage you to use the lowest dose of hormone therapy for the shortest period of time.

Pesticides and antibiotics: Be cautious

Both pesticides and antibiotics have been linked to increased breast cancer risk.

- **Avoid exposure to pesticides.** The molecular structure of some pesticides closely resembles that of estrogen. This means they may attach to receptor sites in your body. Although studies haven't found a definite link between most pesticides and breast cancer, researchers have learned that women with elevated levels of pesticides in their breast tissue have a greater breast cancer risk.
- **Avoid unnecessary antibiotics.** Scientists recently found a link between antibiotic use and breast cancer — the longer antibiotics were used, the greater the risk of breast cancer. Researchers caution, however, that other factors, such as underlying illness or a weakened immune system, rather than antibiotics themselves, may account for the elevated cancer risk.

New directions in research

Scientists are continually making new discoveries that may impact breast cancer prevention. Among the most promising agents are retinoids and flaxseed.

- **Retinoids.** Natural or synthetic forms of vitamin A (retinoids) may have the ability to destroy or inhibit the growth of cancer cells. Unlike other experimental therapies, retinoids may be effective in premenopausal women and in those whose tumors aren't estrogen-positive. Research is ongoing.
- **Flaxseed.** Phytoestrogens are naturally occurring compounds that lower circulating estrogens in your body. Flaxseed is particularly high in one phytoestrogen, lignan, which appears to inhibit estrogen production and which may have the ability to stop the growth of breast cancers.

Do what you can

Nothing you do will guarantee your life will be cancer-free. But if you practice healthy habits and consult your doctor about extra measures you can take, you will at least reduce your risk of this potentially fatal disease.

Credit – Mayo Clinic