

Keep the big C at bay

there's little question that cancer is a frightening reality for far too many people. But as widespread and even inevitable as the dreaded disease may seem, the reality is that 90 percent to 95 percent of all diagnoses are attributed to lifestyle and environmental factors, many of which are within our control. "For a long time, people believed that if your parents had cancer, there was a good chance you would too—but there has been a huge shift in that thinking in the past decade," says Ajay Goel, Ph.D., director of epigenetics and cancer prevention at Baylor Research Institute, Baylor University Medical Center in Dallas. "Your DNA is, in fact, just a small piece of the puzzle."

Indeed, according to the American Institute of Cancer Research (AICR), one-third of cancers could be prevented if we all maintained a healthy weight, got regular exercise and ate a "cancer-protective diet" rich in antioxidant-loaded fruits and vegetables, healthy fats and detoxifying fiber. If everyone quit

Take a proactive approach to cancer prevention with these powerfully protective herbs and supplements.



Natural Healing

smoking, another third of cancers would disappear. Meanwhile, mounting research suggests that certain herbs and supplements may actually help fend off the abnormal cell proliferation we know as cancer—and others are believed to activate genetic pathways involved in mopping up cancer-fueling toxins and boosting immunity. Here are five worth considering:

Curcumin >>

This yellow spice, the principal ingredient in turmeric that's used in curry, is the rock star of cancer studies today, with researchers from the prestigious MD Anderson Cancer Center in Houston recently calling it "one of the most powerful and promising chemopreventive and anti-cancer agents." In addition to being a potent antioxidant, it has been shown in laboratory studies to reactivate sleeping tumor suppressor genes (TSGs), killing off proliferating cells before they become cancerous. Hundreds of animal trials have shown oral curcumin prevents or shrinks tumors in the colon, skin, stomach, liver, lung and breast. In one trial of 44 smokers, researchers at the University of Illinois found that those given 4 grams of oral curcumin daily saw a 40 percent reduction in the number of

precancerous lesions in their colons. Because it is not well absorbed (sprinkle the spice on food and you absorb just 6 percent), supplements are the way to go, says Joe Pizzorno, N.D., author of *Natural Medicine for the Prevention and Treatment of Cancer* (Riverhead Trade).

Try: Curacel by Europharma (\$20 for 30 softgels; vitacost.com). It contains the BCM-95 form of curcumin, said to be six to 10 times more bioavailable.

Dose: 250 milligrams to 1 gram daily, or 2 grams to 4 grams if you are at high risk.

Green tea >>

ECGC, a compound abundant in green tea, has also been shown to wake up sleeping TSGs, and kill off budding cancer cells. One massive study of Asian-American women found that those who drank green tea regularly had a lower risk of breast cancer. Another recent clinical trial of men showing early signs of prostate cancer found that those who took 200 milligrams of green tea supplements daily were less likely to have developed full-blown cancer after one year.

Try: Drinking green tea, suggests David Leopold, M.D., an integrative medicine specialist with the Scripps Center for Integrative Medicine in La Jolla, Calif. (There is some concern that excess ECGC supplements could



Cabbage contains sulforaphane, believed to help fend off hormone-fueled cancers.

harm the liver, and tea contains other beneficial compounds you don't want to miss out on, he notes.) **Dose:** 4 to 6 cups daily; be sure it's decaffeinated so you aren't up all night.

Vitamin D ➤➤

Studies have long shown that people living in cloudy climes, where they have less chance to synthesize vitamin D from sunlight, are more prone to cancer. And, while the research is mixed, some suggest that supplementing with D can fend it off. One four-year trial of 1,179 postmenopausal women found that those who took 1,100 IUs of vitamin D₃ plus calcium daily "significantly" reduced their all-cancer risk. Not only does D promote "apoptosis," or programmed cell death, it also appears to keep cancer from breaking apart and spreading once it forms. "People with low D levels have more cancer, and it metastasizes more quickly," says Pizzorno.

Try: Having your D levels tested to determine how much of the vitamin

you need. **Dose:** 500 to 8,000 IUs, depending on your metabolism and how much sun you get (or don't get).

Turkey tail mushrooms ➤➤

Also known as *Trametes versicolor*, turkey tail mushrooms contain compounds called beta-glucans, which stimulate anti-tumor messengers in the body and supercharge your body's immune response, notes Leopold. They also have few side effects (though watch for mushroom allergy), so they may be safe to use alongside chemotherapy. (Just be sure to discuss this with your oncology team, Leopold adds.) Multiple clinical trials from Asia have shown that gastrointestinal and breast cancer patients given turkey tail extracts alongside chemotherapy have better cancer-free survival rates than those who undergo chemotherapy alone. In Japan, where it is widely accepted among oncologists, 25 percent of cancer care costs go to turkey tail cancer therapy.

Try: Fungi Perfecti Host Defense Turkey Tail (\$32 for 60 capsules; fungi.com) **Dose:** 1 to 3 tablets daily.

Sulforaphane ➤➤

This compound, found in cruciferous vegetables like broccoli sprouts and cabbage, is believed to be particularly helpful in fending off hormone-fueled cancers like those of the breast and prostate. "It stimulates production of enzymes in the liver that help you break down chemicals and excess hormones," explains Pizzorno. Research is young, but studies from the University of Illinois suggest that as little as three to five servings of steamed broccoli per week can have an anti-cancer effect.

Try: Loading up on broccoli and cabbage—or, if you can't stomach them, look for supplements containing sulforaphane like Natural Factors EstroSense (\$29 for 60 capsules; vitaminshoppe.com). **Dose:** 200 milligrams daily. ✖

Lisa Marshall is a writer in Boulder, Colo.