



MANY PEOPLE HAVE pushed olive oil aside in recent years in favor of coconut oil, which has garnered headlines for its ability to improve everything from your cholesterol profile to weight loss. But a new study may have you extending an olive branch, so to speak, to extra virgin olive oil. When researchers added a compound found only in certain types of olive oil—an antioxidant called oleocanthal—to cancer cells in the lab, something amazing happened: It wiped out the cancer cells in less than an hour. Even better, the oleocanthal didn't harm the healthy cells.

“That was definitely an OMG moment,” says study co-author Paul Breslin, a professor of nutritional sciences at Rutgers University. The findings showed that oleocanthal proves lethal to cancer cells because it can penetrate their lysosomes (the part of the cell that stores and recycles waste), says David Foster, a study co-author and professor of biological sciences at Hunter College. “Lysosomal membranes are larger and more fragile in cancer cells than in healthy cells, making those cells vulnerable to any compound that can rupture this barrier,” says Foster, who notes that they used roughly the amount of oleocanthal found in a sixth of a cup (about 50 milliliters) of high-quality oleocanthal-rich oil from Corfu, Greece. “It isn't that much,” Foster adds. “It's certainly an amount you can ingest in one day.”

Of course, oleocanthal is just one of many promising compounds that scientists are finding has dramatic cancer-fighting abilities. A recent study from Penn State demonstrated that a substance in green tea was able to kill oral cancer cells while sparing healthy ones. A number of studies have identified curcumin (a.k.a. the aromatic spice turmeric, which gives yellow curry its vibrant color) as a potent weapon against many kinds of cancers, including breast cancer. And don't toss that parsley decorating your main course. A University of Missouri mouse study revealed that apigenin, found in parsley and celery, shrank a type of breast cancer tumor that is stimulated by progesterin, a

synthetic hormone given to women to ease menopausal symptoms. Scientists at the University of California, Davis, recently reported that walnuts and walnut oil slowed the spread of prostate cancer in mice and reduced levels of a hormone implicated in both prostate and breast cancer. And, as if we needed more proof that broccoli and other cruciferous veggies are VIPs, growing research has shown that compounds called indoles and

isothiocyanates can stymie the development of bladder, breast, colon, liver, lung, and stomach cancer in rodents. Unfortunately, because of the chasm between controlled studies in the lab and real-world dietary habits, it's unclear just how much of each of these compounds a person needs to consume to see similar results.

So, in an effort to thwart cancer, should olive oil elbow out coconut oil, or should we, say, add curried broccoli topped with walnuts and parsley to our diet and wash it down with green tea? At the very least, is something like extra virgin olive oil going to become a cancer treatment? Not so fast. “Seeing something in a lab or artificially induced in a rodent is far different from how it might impact

you when you eat it,” says Victoria Stevens, strategic director of laboratory services for the American Cancer Society in Atlanta. Plus, food entering the digestive tract has to go through a host of systems that affect how it's processed.

Still, it can't hurt—and chances are it may help, asserts Stevens. After all, almost all of these killer compounds have one thing in common: They're found in the Mediterranean diet, which time and again comes out on top in terms of being associated with longevity and lower rates of cancer, heart disease, and dementia, Breslin says. The takeaway? Eat plenty of fresh fruits, vegetables, and fatty fish, use olive oil generously, limit processed foods and meats, and drink green tea. “When it comes to cancer,” says Carrie Daniel-MacDougall, an assistant professor of epidemiology at MD Anderson Cancer Center in Houston, “it's long-term behaviors that count.” ■

DOES OLIVE OIL KILL CANCER?

Recent news that a key substance in olive oil destroys cancer cells is a good reason to rethink your diet. By Liz Krieger

