

Coffee's Mysterious Benefits Mount

From lowered cancer risks to a sharper memory, more studies are showing that coffee is good for you - but why?

Regular coffee drinkers have a 39 percent decreased risk of head and neck cancer, according to a new study published in the journal *Cancer Epidemiology, Biomarkers & Prevention*. Those who drank an estimated four or more cups a day had significantly fewer cancers of the mouth and throat than non coffee drinkers, the study found.

"Coffee contains more than a thousand chemicals, some of which have antioxidant and antimutagenic activities," Mia Hashibe, assistant professor of medicine at the University of Utah and the study's lead researcher, told *Life's Little Mysteries*. "Further research is necessary to identify which ingredients in coffee are responsible for the results we observed in our study."

Scientists are still trying to determine exactly what it is about coffee that gives it its [disease-fighting properties](#), but recent research is getting closer to unlocking the mysterious power behind the energizing brew.

Your brain on coffee

Coffee may be good for the brain, too. A study earlier this year by neuroscientists at the University of Lisbon showed that drinking coffee can help to prevent the neural degeneration associated with brain disorders and aging. The scientists found that drinking up to four cups of coffee a day over a long period of time actually [prevented the deterioration of memory](#).

Other research has shown that coffee is good for the cardiovascular system. Women who drank one to three cups of java a day reduced their risk of cardiovascular disease by 24 percent, according to the Iowa Women's Health Study that tracked 27,000 women for 15 years, although it was noted that this benefit diminished as the quantity of coffee rose above three cups.

And while coffee has been given a bad rap for supposedly upping the risk of stroke and coronary heart disease, scientific studies have revealed the contrary. Drinking coffee lowers the risk of stroke by 19 percent among women, according to a 2009 Harvard Medical School study that tracked the coffee habits and stroke occurrences

among 83,000 American women for nearly a quarter century.

The risk of some cancers may be cut by drinking coffee. Research presented at the 2009 American Association for Cancer Research Frontiers in Cancer Prevention Research Conference showed that coffee cut male coffee drinkers' risk of aggressive prostate cancer by 60 percent, based on a 20-year study of 50,000 men.

And people who drink coffee reduce their risk of developing liver cancer by 41 percent, compared to people who never drink coffee, according to a study in the journal *Hepatology*. The researchers theorized that compounds found in coffee may block the action of enzymes involved in detoxifying carcinogenic compounds that may lead to liver cancer, the third largest cause of cancer deaths around the world, after lung and stomach cancer.

Other recent studies have shown that coffee is protective against certain brain tumors, endometrial cancer and advanced prostate cancer, Hashibe said.

While it is true that some of the chemicals present in a cup of joe may be gastrointestinal irritants, coffee is not as much of a cause of heartburn and acid reflux as previously believed. Scientists have actually identified a chemical in coffee, called N-methylpyridinium, which inhibits acid production. The compound is more common in dark roasts like espresso and French roast blends, according to the Research Platform of Molecular Food Science at the University of Vienna.

Chemical coffee concoction

But not all of the chemicals found in coffee are good for you. It's been blasted for containing pesticides and dangerous chemicals.

A typical cup of coffee contains about 10 milligrams of known carcinogens, such as benzene and formaldehyde, according to McGill University chemistry professor Joe Schwarcz, writing in "The Fly in the Ointment: 70 Fascinating Commentaries on the Science of Everyday Life" (Ecw Press, 2004). However, other experts argue that these trace amounts are too small to pose a serious cancer risk, and point to studies showing that coffee reduces the risk of several cancers.

In fact, for most adults, coffee is the number one source of antioxidants, or chemicals that prevent cellular damage, according to a study funded by the American Cocoa Research Institute.

"Americans get more of their [antioxidants from coffee](#) than any other dietary source," said Joe Vinson, lead author of a study on antioxidants conducted by the University of Scranton, in Pennsylvania. "Nothing else comes close."

While antioxidants help to reduce cell damage and aging, scientists have yet to determine if they are the compounds responsible for coffee's weird -but wonderful- health benefits.

There are many organic and inorganic compounds in a regular cup of coffee, including chemicals called phenolic compounds, melanoidins, and diterpenes. Some of these chemicals are believed to be beneficial, such as chlorogenic acid, which is a natural compound found in coffee beans and other plants that is an antioxidant and believed to aid in digestion, according to the American Journal of Clinical Nutrition.

"Coffee is a very complex mixture of various chemicals," Hashibe said. Researchers are still trying to track down exactly what it is that makes coffee so mysteriously beneficial, but it's antioxidant components may be part of its protective effects against cancer.

Potential downside

But because coffee contains caffeine, which is a stimulant, drinking too much of it could lead to headaches, jitters and a racing heartbeat. Even decaffeinated coffee contains at least trace amounts of the drug, as [the decaffeinating process](#) cannot remove caffeine completely.

The safe daily dosage of caffeine is 300 milligrams for adults and 35 to 40 milligrams a day for children, according to the U.S. Department of Health & Human Services (HHS). While caffeine was once [considered unsafe for women](#) to consume while pregnant, the HHS has determined that mothers-to-be who drink less than 300 milligrams of caffeine a day do not put their child in any risk.

However, the HHS warns that women who drink or eat more than 300 milligrams of caffeine per day may have a harder time getting pregnant, and a study by the Kaiser Permanente Division of Research found that high doses of daily caffeine - two or more cups of regular coffee or five 12-ounce cans of [caffeinated soda](#) - during pregnancy may increase the risk of miscarriage.

"Each individual metabolizes caffeine and the other components of coffee differently," Hashibe said, so broad recommendations for everyone aren't possible. Coffee can increase heart rate, blood pressure, and affect sleep, but do each of these things differently in different people.

- [Can Caffeine Kill You?](#)
- [Do Neuroenhancing Drugs Really Work?](#)
- [Top 10 Bad Things That Are Good For You](#)
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