

Can Coffee Reduce Your Risk of Alzheimer's Disease?

Analysis by Dr. Joseph Mercola



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STORY AT-A-GLANCE

- > A report revealed coffee could potentially reduce the risk of developing neurodegenerative conditions or relieve some symptoms
- > The results support past studies that found coffee protects the neurological system, reduces cognitive decline and improves insulin sensitivity
- > Rates of Alzheimer's Disease are rising. It is also called Type 3 diabetes, as the effect of insulin dysregulation in the brain may induce changes seen in Alzheimer's Disease
- More possible benefits from coffee include reduced risks of dying early and of contracting certain cancers and Type 2 diabetes; it also may boost athletic performance
- > Coffee crops are heavily sprayed with pesticides, so seek out organic selections; consider grinding it at home and drinking it without sugar

Coffee is an integral part of many people's morning and afternoon routines, with long lines at neighborhood coffee shops as testaments to its popularity. According to Daily Coffee News, the 2019 coffee report from the National Coffee Association found that 63% of people report they had a cup of coffee within the past day, which is a 6% increase from 2016.1

For the first time in the association's history of reporting, the preference for brewed gourmet, espresso-based beverages and blended or cold brew drinks surpassed traditional, non-gourmet selections. The report also reveals coffee consumption was relatively stable in the past year.

This is fortunate since the U.S. Department of Agriculture² forecasted reduced production since this is an off-year in the cyclical harvesting of Brazil's Arabica trees. Lower shipments from Brazil and Honduras may result in 4.7 million fewer bags exported.

Despite the high number of people who drink coffee in the U.S., America ranks 25th globally in coffee consuming countries per capita, according to World Atlas.³ For comparison, Finland consumes 12 kg (3.2 gallons) per capita of coffee while the U.S. drinks 4.2 kg (1.1 gallons) per capita.

In the past, coffee drinking has been looked at as a vice or crutch to get some quick energy during the day. But research is revealing health benefits from it. It's important, however, to remember that most coffee is heavily sprayed with pesticides. If you're a java aficionado, it's wise to purchase organic coffee to reduce your exposure to chemical toxins.

Enjoy Neuroprotective Effects From Caffeine

Coffee drinkers are familiar with its short-term stimulating effects on the nervous system. It can make you more alert but in larger amounts, even a little jittery. Scientists are also evaluating the long-term effects caffeine may have on cognition, specifically in people with dementia and Alzheimer's disease. The results have been encouraging.⁴

The Institute for Scientific Information on Coffee (ISIC) recently released a report written by Elizabeth Rothenberg, Ph.D., which identified coffee as a potential dietary intervention that could reduce the risk of developing neurodegenerative conditions or relieve some symptoms.⁵

Researchers have found that caffeine and coffee drinking may provide a protective effect on the neurological system.⁶ The authors of several studies have found that drinking coffee lowers your risk for Alzheimer's disease⁷ and reduces overall cognitive decline.^{8,9} There are also indications that the caffeine in coffee might increase insulin sensitivity, as well.¹⁰

In a collaborative effort, German and French research teams used an animal model to demonstrate how caffeine could block adenosine-activated brain receptors and have a positive effect on tau deposits found in the brains of those with Alzheimer's disease.¹¹

Researchers have also studied¹² the effect of coffee on multiple sclerosis, another neurodegenerative condition. In their review of the literature they found "that coffee and caffeine intake in moderation must not be considered as a health risk." As an aside, they also noted that consuming high amounts of coffee and caffeine to "what equals about six cups of coffee per day" may help "reduce the risk of some diseases significantly."

While they didn't specify what those diseases might be, the authors did warn that a negative side effect of consuming coffee in large amounts could result in an addiction that can be hard to quit.

Alzheimer's Rates Are Rising

The research demonstrating some neuroprotective effects of coffee is one step that may help to stem the tide of a rising number of people diagnosed with Alzheimer's Disease. It is estimated the number who have Alzheimer's disease 65 years and older will rise to 88 million by 2050.¹³

Currently, the Alzheimer's Association estimates there are 55 million age 65 and older who have Alzheimer's disease. The growth in numbers is related to one of the largest aging generations, baby boomers. Alzheimer's Disease remains incurable and one of the more pressing and tragic public health issues that takes a steep social and economic toll on families and communities.

Alzheimer's Disease Described as Type 3 Diabetes

Type 3 diabetes is a newly-coined term that describes alterations of insulin signaling in the brain, as it "... represents a form of diabetes that selectively involves the brain and has molecular and biochemical features that overlap with both Type 1 diabetes mellitus and [Type 2]."15

As you can imagine, overindulging in grains and sugar-laden foods raises your risk of Type 2 diabetes; we're now learning that it likely increases your risk for Type 3 as well. Research published in the American Diabetes Association's journal Diabetes Care¹⁶ showed that those with Type 2 have a 60% increased risk of dementia.

Another study¹⁷ showed that "higher glucose levels may be a risk factor for dementia, even among persons without diabetes." On the other hand, researchers have found that eating a high-fat, high-protein diet could lower your risk of dementia.¹⁸

Since the same study found that higher carbohydrate intake increases your risk of dementia, it stands to reason that lowering your carb intake and increasing healthy fat and protein intake would be a good strategy for lowering the risk of cognitive impairment in seniors.

You Have More Reasons to Drink Coffee

If you've steered clear of coffee because you've heard it is dehydrating, you may be happy to hear this was just a rumor. Researchers from the School of Sports and Exercise Sciences at University of Birmingham in the United Kingdom have concluded that having several cups of coffee each day doesn't cause dehydration. ¹⁹ This is good news because it means there's no reason to ditch the java simply on the basis of dehydration dangers. Other benefits of drinking coffee include:

Potentially reducing your risk of dying early — In a study of 210,501 people, data showed that drinking coffee, caffeinated or decaffeinated, each day reduced the overall risk of death.²⁰

Potentially reducing your risk of skin cancer — Drinking four cups of caffeinated coffee may reduce your risk of melanoma, the more dangerous form of skin cancer.²¹

Boosting athletic performance — Results from a meta-analysis^{22,23} showed that drinking 3 to 8.1 mg of caffeine per kilogram of body weight (1.36 to 3.68 mg per

pound) could increase the average endurance measurement in athletes by 24%.

Stimulating brown fat — Caffeine has been found to "rapidly generate heat and metabolize macronutrients ... and may have the potential to be used therapeutically in adult humans."²⁴

Reducing your risk of Type 2 diabetes — A study of adult men and women followed for 5.8 years demonstrated that coffee drinking "may have favorable effect in prevention of prediabetes and T2D [Type 2 diabetes]."²⁵

Lowering your risk of cancers — In a meta-analysis, scientists found that drinking coffee was associated with a lower risk of several cancers.²⁶ Interestingly, they found the "largest relative risk reduction at intakes of three or four cups a day versus none."

Boosting colon cancer survival — In those with stage 3 colon cancer, four or more cups of coffee each day lowered the risk of recurrence and death by 42%. They also found coffee drinkers were "34% less likely to die from cancer or any other cause."²⁷ Another research team found coffee was associated with a lower risk of colorectal cancer and that it had a dose-dependent response.²⁸

The Healthiest Coffee Is Black and Organic

It's important to remember your coffee beans are one of the most heavily sprayed crops. Look for coffee that is certified organic. Some researchers have also suggested that adding dairy products can interfere with the body's absorption of beneficial chlorogenic acids you get from coffee.²⁹ It's also best to steer clear of sugar since it spikes your insulin level and contributes to insulin resistance.

Consider grinding coffee yourself to prevent it from going rancid. A pack of pre-ground may go bad even before you get it home, depending on how long it's sat on the shelf. If you use a drip coffee maker, choose non-bleached filters. Bright white filters are often

chlorine bleached, and heat from the coffee can leach chlorine out of the filter during the brewing process.

The bottom line is coffee can be a healthy addition to your diet, but you don't need to start drinking it (or tea) if you don't already. If you enjoy it, then feel free to indulge without guilt when you choose black, organically grown coffee.

If you're pregnant, you would be wise to avoid caffeine from coffee and other sources because it's been shown to increase your chances of prolonging your pregnancy and having a baby with a low birth weight.

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