



# Caffeine withdrawal: Drinking good decaf coffee may reduce symptoms



By [Robby Berman](#) on February 22, 2023 — [Fact checked](#) by Jennifer Chesak



A study found that high quality decaf coffee can help ease caffeine withdrawal symptoms.  
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- **Good decaf reduces symptoms of caffeine withdrawal in a new study.**
- **Whether participants believed they were drinking standard coffee or decaf after 24 hours without coffee, they felt better afterward.**
- **The study is an interesting addition to research regarding surprising placebo effects.**

According to a new study, if a cup of decaffeinated coffee tastes sufficiently like real coffee, it may be able to reduce the unpleasant symptoms of caffeine withdrawal.

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decaf significantly reduced the withdrawal symptoms participants had been experiencing 24 hours after their last cup of caffeinated coffee.

Some individuals in the study were unaware that they were drinking decaf, while others knew what they were drinking. Interestingly, withdrawal symptoms also receded in the group who knew what they were imbibing.

The study is one of many describing the often-surprising beneficial effects that placebos produce in clinical studies.

A placebo is a substance with no therapeutic effect, often administered to some participants in a controlled drug study. Other participants receive the actual drug being tested. The placebo-receiving control group provides baseline measurements against which researchers can assess the drug's effect on those who have received it.

Participants sometimes gain the expected benefits of drugs being tested when they do not know they've been given a placebo.

In other studies, the placebo effect also occurs in participants who receive "open-label" placebos — that is, they have been told that they were getting a placebo.

The University of Sydney study may offer a means of escaping caffeine addiction for those who want to quit drinking coffee.

The study appears in the [\*Journal of Psychopharmacology\*](#).

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## Coffee and caffeine

Americans love coffee. According to market research company [DriveResearch](#), three out of four Americans drink coffee daily, and 49% drink three to five cups daily.

Many depend on caffeine's jolt of energy and credit its caffeine with making them more alert and focused. Research suggests, however, that coffee may offer much more than this. It may also [lower your risk](#) of type 2 diabetes, heart failure, colon cancer, Parkinson's disease, and Alzheimer's disease.

**The Food and Drug Administration (FDA) [recommends](#) <sup>✓</sup> consuming no more than 400 milligrams of caffeine daily, or the amount in about four to five cups of coffee.**

Caffeine is also an ingredient in tea, energy drinks, and sodas. According to the FDA, it is both a food additive and a [drug](#).

While caffeine is not technically addictive, quitting coffee can result in [withdrawal](#) symptoms, including headaches, fatigue, sleepiness, irritability, depression, scattered concentration, nausea, and muscle pain or stiffness.



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These symptoms were reduced or alleviated by decaf in the new study.

“A convincing cup of decaf has the power to reduce withdrawal symptoms a lot when the person drinking it is unaware it’s decaf,” the study’s lead author [Dr. Llew Mills](#) tells the [University of Sydney News](#). “But our study suggests that even if they are aware it’s decaf, their withdrawal still subsides.”

Dr. Mills told *Medical News Today* that decaf should work as long as it “does not taste like decaffeinated coffee.”

For the study, researchers used a U.S. brand called Major Dickason’s. “Despite Sydney folks being notorious coffee snobs, our participants were pretty easy to trick,” Dr. Mills said.

For the study, 61 heavy coffee drinkers used to three or more cups a day took a 24-hour break from consumption. At the end of that period, participants filled out a withdrawal-symptom questionnaire.

Researchers divided the individuals into three groups. One group was under the impression they would be drinking coffee, and one group was told they would be drinking decaf. The third, which was the control group, received water.

Forty-five minutes after downing their beverage, participants again filled out the questionnaire.

“The group we lied to had a sizable reduction in their caffeine withdrawal,” said Dr. Mills. “But surprisingly, the group we told the truth to also reported a reduction in their caffeine withdrawal, although not as large a reduction as the group we lied to.”

## What caused the effect

According to Harvard Medical School’s [Dr. Ted Kaptchuk](#), a leading investigator of placebo effects who was not involved in the study:

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## pressure?



By [Annie Lennon](#) on February 14, 2023 — [Fact checked](#) by Alexandra Sanfins, Ph.D.



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**blood pressure.**

- **Drinking two or more cups of coffee per day was linked to lower blood pressure.**
- **Further studies are needed to confirm the results.**

Coffee is among the most popular beverages around the world. According to the British Coffee Association, people consume an estimated [two billion cups](#) of coffee daily.

Research shows that coffee is beneficial for cardiovascular health. One study found that people who drink [3-5 cups](#) of coffee daily have lower cardiovascular risk than those who drink fewer cups daily.

However, some research suggests that coffee may negatively impact cardiovascular measures. One [study](#) found a link between heavy coffee consumption and an increased risk of cardiovascular-related mortality among people with severe hypertension.

**Further research into the link between coffee consumption and blood pressure could help develop preventive strategies for cardiovascular risk.**

Recently, researchers evaluated how coffee-drinking habits affect blood pressure.

They found that regular coffee drinking correlates to multiple measures of lower blood pressure.

The study appears in [Nutrients](#).

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## Coffee intake and systolic blood pressure

For the study, the researchers evaluated health data from 720 men and 783 women from the Brisighella Heart Study (BHS), a study that began in 1972 and involves the rural population of Brisighella, a small town in Northern Italy.

The study clinically assessed the participants every four years. In their analyses, the researchers compared various measures of blood pressure with self-reported coffee consumption. Among the cohort:

- 14.6% did not drink coffee regularly
- 27% drank one cup of coffee per day
- 48.3% drank two cups of coffee per day
- 6.6% drank three cups of coffee per day
- 3.5% drank more than three cups of coffee per day

**The researchers found that those who drank two cups of coffee per day or more than three cups had significantly lower systolic blood pressure than non-coffee drinkers.**

Systolic blood pressure measures the [pressure](#) in arteries when the heart beats. Higher systolic blood pressure levels are linked to a higher risk of stroke and heart disease.

They also found a correlation between higher numbers of cups consumed and other measures of blood pressure, including lower peripheral pulse pressure (PP) — the rate at which blood moves through the body.

They noted, however, that drinking coffee did not affect arterial stiffness — the gradual loss of elasticity in arteries — which correlates to an

[increased](#) risk for cardiovascular events, dementia, and death

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Heart and Vascular Institute at Orange Coast Medical Center in Fountain Valley, CA, not involved in the study, told *Medical News Today*.

“Those drinking 2 cups of coffee had 5-point lower blood pressure on average than those who didn’t drink coffee. The effect was higher for those drinking more than 3 cups of coffee, with a 9-point lower blood pressure on average compared to those who didn’t drink coffee. This trend towards lower blood pressure with more coffee consumption persisted for different types of blood pressure measurements, including an estimate of a more reliable blood pressure measurement called central blood pressure.

A recent meta-analysis of four similar studies demonstrated similar findings, so this study adds to an existing body of evidence suggesting a relationship between more coffee intake and lower blood pressure.”

## How coffee affects blood pressure

When asked about how drinking coffee may reduce blood pressure, [Dr. Robert Segal](#), founder of Manhattan Cardiology, Medical Offices of Manhattan, and co-founder of LabFinder, not involved in the study, told *MNT*:

“Caffeine in coffee can temporarily increase blood pressure by stimulating the sympathetic nervous system, but in the long term, regular coffee consumption can lead to a small reduction in blood pressure due to improved insulin sensitivity and antioxidant effects.”

[Dr. John Higgins, M.B.A., M.Phil.](#), is a sports cardiologist at the UTHealth



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the study, also told *MNT*:

“Certain antioxidants in coffee e.g. flavonoids boost production of nitric oxide, which helps the blood vessel wall to dilate and lower blood pressure, as well as other minerals like magnesium, potassium, niacin, and vitamin E, can combat blood vessel aging by blocking the damaging oxidation process and reducing harmful inflammation. Less inflammation and more nitric oxide mean lower blood pressure.”

On the same topic, [Dr. Shannon Hoos-Thompson](#), Cardiologist at The University of Kansas Health System, not involved in the study, told *MNT*:

“This is a subject that has been looked at repeatedly from several approaches, all over the world, and going back a long time. The general conclusion is that the regular consumption of coffee in moderation is safe with no clear benefit or risk to cardiovascular health.”

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## Study limitations

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added that not knowing the size, concentration, and whether or not beverages were caffeinated further limits the results.

Dr. Ni noted that although bias may have been somewhat limited as the study focused on people in a single town in Northern Italy- meaning the cohort likely had similar diets, genetics, and lifestyle practices- some bias likely remained.

“There may be something about people who drink more coffee that makes them more likely to have lower blood pressure. Perhaps physical activity or eating habits or stress levels, or something else entirely. Unless these additional factors are assessed in the same people and accounted for, it will be difficult to conclude with certainty that coffee is the main driver of better blood pressure in these people,” she explained.

“It is important to also keep in mind that coffee intake was self-reported. Italians drink primarily espresso-based coffee, which is much smaller and lighter than brewed coffee made in the United States. Don’t even start with sweetened coffees with flavor syrups and varied roasting and brewing methods that affect levels of healthy antioxidants in the coffee. The inability to fully account for these differences continues to prevent a conclusive determination of the health benefits of coffee,” she continued.

## Takeaway

Dr. Hoos-Thompson said:

“Ultimately, We cannot say coffee lowers blood pressure with this study. It can be added to the data that regular coffee consumption is safe. I would not reference this study when advising patients on coffee consumption.”

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health and its effect on blood pressure can vary from person to person. Drinking coffee can lead to a small reduction in blood pressure, but it is not a substitute for other lifestyle changes that help maintain a healthy blood pressure such as a balanced diet and regular exercise.”

“Most importantly, It’s important to talk to your doctor or cardiologist before making changes to coffee consumption, especially if you have pre-existing medical conditions or take medication,” he concluded.

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