

Coffee may help perk up your blood vessels

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The caffeine in a cup of coffee might help your small blood vessels work better, according to research presented at the American Heart Association's Scientific Sessions 2013.

A study of 27 healthy adults showed – for the first time – that drinking a cup of caffeinated [coffee](#) significantly improved [blood flow](#) in a finger, which is a measure of how well the inner lining of the body's smaller [blood](#) vessels work. Specifically, participants who drank a cup of caffeinated coffee had a 30 percent increase in blood flow over a 75-minute period compared to those who drank [decaffeinated coffee](#).

"This gives us a clue about how coffee may help improve cardiovascular health," said Masato Tsutsui, M.D., Ph.D., lead researcher and a cardiologist and professor in the pharmacology department at the

University of the Ryukyus in Okinawa, Japan.

The study adds to a growing body of research about coffee, the most widely consumed beverage worldwide. Previous studies showed that drinking coffee is linked to lower risks of dying from heart disease and stroke, and that high doses of caffeine may improve the function of larger arteries.

Study participants were people who did not regularly drink coffee, ranging in age from 22 to 30. On one day, each participant drank one five-ounce cup of either regular or decaffeinated coffee. Then researchers measured finger blood flow with laser Doppler flowmetry, a non-invasive technique for gauging blood circulation on a microscopic level. Two days later, the experiment was repeated with the other type of coffee. Neither the researchers nor the participants knew when they were drinking caffeinated coffee.

The researchers noted blood pressure, heart rate, and vascular resistance levels. They also took blood samples to analyze levels of caffeine and to rule out the role of hormones on blood vessel function.

Compared to decaf, caffeinated coffee slightly raised participants' blood pressure and improved vessel inner lining function. Heart rate levels were the same between the two groups.

It's still unclear how caffeine actually works to improve small blood vessel function, although Tsutsui suggests that [caffeine](#) may help open [blood vessels](#) and reduce inflammation.

"If we know how the positive effects of coffee work, it could lead to a new treatment strategy for cardiovascular disease in the future," said Tsutsui.

Provided by American Heart Association

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