

# Drinking tea may help prevent chronic illnesses

by Yagana Shah, USA TODAY



Research has long shown the antioxidant properties and health benefits of drinking tea, but new findings suggest that tea may also have significant preventative properties against chronic disease.

Recent findings were discussed Wednesday at the Fifth International Scientific Symposium on Tea and Human Health in Washington, D.C.

"If there's anything that can confidently be communicated to the public, it's the ability of tea to be associated and demonstrated in the primary prevention of chronic disease," says meeting chair Jeffrey Blumberg, a professor in Friedman School of Nutrition Science and Policy at Tufts University, Boston.

One of those is osteoporosis, the "brittle bone" disease. Green tea in particular may help reduce the risk for fractures and improve bone mass, a leading health concern as people age, suggests a study by researchers at the Texas Tech University Health Sciences Center. "Osteoporosis is a non-curable

disease and prevention is key," said Chwan-Li "Leslie" Shen, associate professor of pathology.

In a six-month trial of 171 postmenopausal women with low bone mass, researchers found participants had improvements in bone formation by consuming 500 mg of green tea polyphenol capsules a day, the equivalent of four to six cups of tea, alone or in conjunction with practicing tai chi. Tai chi is a gentle form of exercise based on Chinese martial arts.

Green tea promoted bone remodeling within three months of consumption and reduced oxidative stress damage, Shen said. "Bone loss can be slowed. You can slow the progression. You can delay the onset of osteoporosis."

Among other preventative properties of tea reported were in the area of cardiovascular health. A small study of 19 people with hypertension and 19 people without found that drinking just one cup of black tea before consuming a high-fat meal supported healthy arterial function and prevented negative effects on blood pressure.

"It is evident that the ingestion of black tea may be able to induce a protective effect by not only reducing blood pressure but also reducing the negative action of the fat load on the arteries," said researcher Claudio Ferri, director of Internal Medicine at the University L'Aquila, Italy. Flavonoids, which induce dilation of the arteries, are the most important component in tea, Ferri said. Consumption of black tea could lead to a reduction in strokes, heart attacks and cardiovascular diseases, he said.

"If we were able to reduce blood pressure just slightly and shift the entire population to a lower blood pressure, that has a significant public health impact in terms of reduced numbers of

(people with) hypertension and of course the consequences for cardiovascular disease. Small, modest, long-term benefits on blood pressure can be quite important on the public health point of view," Blumberg said.

Additional findings were also presented, building on previous studies:

-- Consumption of green tea and caffeine can help burn up to 100 more calories a day, through increased energy expenditure and fat oxidation, according to researchers at Maastricht University, the Netherlands.

-- Tea drinkers experienced better task performance and alertness in a placebo-controlled study conducted by Unilever R&D, Vlaardingen, the Netherlands.

-- Flavonoids in green and black tea can provide a probiotic effect in the lower gastrointestinal tract, according to Alan Crozier, professor at the University of Glasgow, Scotland. Tea's polyphenols, natural plant compounds, and flavonoids, compounds in plant-based foods, are full of health benefits, Blumberg said.

"There are a lot of flavonoids in fruits and vegetables. Many people aren't getting as many flavonoids as they need to. Another way to get them is tea."

"If you don't drink tea," Blumberg said, "you should start. It's really delicious. It's convenient. ... It has zero calories."