

The health benefits of dark chocolate



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It seems you no longer need to feel guilty for indulging in that chocolate bar. According to a study published the Journal of American Medical Association, eating a small portion of chocolate each day can lower your blood pressure - without adding pounds. But not all chocolate is created equal. Nutrition expert Leslie Beck tells us more.

(AP Photo / Carolyn Kaster)

Q: Leslie, tell us about this new study. How much chocolate do you need to eat to lower blood pressure?

Today's findings are interesting because they suggest it takes only a 6.3 gram serving of dark chocolate per day - only 30 calories worth - to lower blood pressure. In the study, researchers from the University Hospital in Cologne, Germany gave 44 volunteers, aged 55 to 75 years, either 6.3 grams of dark chocolate or an equivalent 30 calorie portion of white chocolate for 18 weeks. Participants were otherwise healthy except for having prehypertension or hypertension and were not taking blood pressure medications.

After 18 weeks, no one gained weight but only dark chocolate eaters experienced a decline in blood pressure. Everyone in the dark chocolate group had lower systolic or diastolic blood pressure and four people moved from hypertension to prehypertension.

The researchers noted that while the magnitude of blood pressure lowering was small, it was noteworthy. On a population level, such reductions would lower deaths from stroke and heart disease.

This isn't the first study to demonstrate chocolate's ability to reduce elevated blood pressure. In 2005, Italian researchers reported that eating a daily dose (100 grams) of dark chocolate for two weeks lowered blood pressure in 20 men and women with high blood pressure. Other studies have found similar results. But 100 grams of dark chocolate translates into 470 calories and 30 grams of fat - and amount that over the long term could cause weight gain and undo the positive effects on blood pressure.

Q: Can you get the same effects with milk chocolate?

Dark chocolate's heart healthy effects are thought to be due to the action of flavonoids, natural compounds in cocoa beans which give dark chocolate its bittersweet taste. Dark chocolate has a high concentration of flavonoids, milk chocolate contains fewer because it's diluted with milk, and white chocolate contains none.

Flavonoids in dark chocolate are thought to reduce blood pressure by increasing the production of nitric oxide, a substance which causes blood vessels to widen and relax. After eating dark chocolate participants had higher blood levels of S-nitrosoglutathione, a marker of nitric oxide. Blood levels of

this compound remained unchanged in the white chocolate group.

Q: What should you look for on a label when buying chocolate?

If you're planning to add dark chocolate to your diet, be choosy. Read labels to look for bars that contain at least 70 percent cocoa solids (cocoa mass). Milk chocolate tends to have 30 to 40 percent cocoa solids, but brands vary

Q: What are some other tips to help people reduce high blood pressure?

If you want to achieve a more potent blood pressure-lowering effect, you will need to do more than eat dark chocolate each day. You need to follow the DASH diet which is a diet that has been scientifically tested in randomized controlled clinical trials and proven to lower blood pressure. In fact, people on the diet who had mild hypertension achieved a reduction in blood pressure similar to that obtained by drug treatment. What's more, blood pressure reductions occurred within two weeks of starting the plan.

Eat fruit, vegetables, low fat dairy, and legumes.

The DASH diet is low in saturated fat, cholesterol and total fat, and emphasizes fruit, vegetables and low fat dairy products. It also contains nuts and legumes four times per week.

The diet is thought to lower blood pressure by providing food choices that are high in fibre, calcium, magnesium and potassium, all of which have been associated with lower blood pressure. It's also low in refined carbohydrates, which can cause salt retention and boost blood pressure.

Limit sodium. The DASH-Sodium trial tested the effects of the DASH diet at three different sodium levels: 3300, 2400 and 1500 milligrams per day. While participants achieved significantly lower systolic blood pressure readings at each sodium level, the most powerful effects were seen in people who consumed no more than 1500 milligrams of sodium each day.

Lose excess weight. If you're overweight and have hypertension, losing 5 kilograms will lower your blood pressure. In some cases, losing weight can reduce or eliminate the need for blood pressure medication. The DASH diet was not designed to promote weight loss. If you need to cut calories, replace high calorie foods with more fruit and vegetables.

Exercise daily. Participating in 30 minutes of moderate intensity physical activity on most days of the week can help control and prevent high blood pressure, not to mention manage your weight.