

General Information about Chocolate



Enjoy Xoçai™ Chocolate

The Ultimate Antioxidant Chocolate

Health Tip: Choose Your Chocolate Carefully It's not all heart-healthy

(HealthDay News) -- Some kinds of chocolate, rich in antioxidants called flavonoids, have been shown to benefit heart health.

But all types of chocolate aren't the same, and too much chocolate can negate any benefits, the Cleveland Clinic says.

The clinic offers this additional information:

- Dark chocolate is richest in flavonoids, so choose dark chocolate over milk chocolate.
- Chocolate does contain fat, but it contains both saturated (unhealthy) and unsaturated (healthy) fats. Chocolate should still only be consumed in small amounts.

Processed chocolate is higher in fat and lower in flavonoids, so avoid candy bars loaded with caramel, peanuts, nougat and other fattening fillings.

Chocolate Has Sweet Effect on Blood Flow

Arteries function better when the dark delight is consumed, study suggests

SUNDAY, Nov. 4 (HealthDay News) -- Chocolate lovers, take heart: A Japanese study finds that flavonoid-rich dark chocolate can improve coronary blood flow.

The study looked at what's known as coronary flow velocity reserve (CFVR), an indicator of the ability of the coronary arteries to dilate and allow more blood flow in response to medications.

The two-week trial included 39 healthy adults, average age 29, who ate either 550 milligrams per day of dark chocolate versus white chocolate with no flavonoids.

The researchers used Doppler echocardiography to assess CFVR at the start and end of the study. They also measured the participants' blood pressure, blood lipids and two markers of oxidative stress.

Participants who ate dark chocolate showed significantly improved CFVR after two weeks, while those who ate white chocolate showed no change, the study found.

'Flavonoid-rich dark chocolate intake had acute effects in improving coronary function in healthy adults, as compared to non-flavonoid white chocolate, independent of changes in oxidative stress parameters, blood pressure and lipid profile,' wrote the researchers from Chiba University.

However, they noted that difficulties in blinding (preventing participants from knowing which kind of chocolate they were eating) may have affected the results.

The study was to be presented Sunday at the American Heart Association annual meeting in Orlando, Fla.

Contact Patricia Smith at 760-327-0864 or ChocolateForBeing.com

General Information about Chocolate

Chocolate Lovers May Be Hard-Wired That Way Study finds their metabolism reacts differently to the sweet treat

FRIDAY, Oct. 12 (HealthDay News) -- Even if you don't watch what you eat, your body will. That's the message from a small new study that suggests that diets 'imprint' themselves on the metabolic system, attuning people to the food they prefer to chow down.

Researchers found that the bodies of chocolate fans reacted differently when they ate the candy, compared to other people.

'The body appears to become attuned to a particular diet, which can have both positive and negative health consequences, but which could also ultimately open the door to novel dietary regimes,' said study co-author Sunil Kochhar, a researcher with the Nestlé Research Center in Lausanne, Switzerland.

The Nestlé company, best known in the United States for its chocolate products, paid for the study, which is expected to be published in the Nov. 2 issue of the American Chemical Society's *Journal of Proteome Research*.

At issue is the body's metabolism system, which converts food into energy. According to Kochhar, scientists are exploring whether it may be possible to detect metabolic problems and help people improve their metabolisms -- and weight control -- through diet.

In the study, the researchers recruited 11 men who love chocolate and 11 men who described themselves as 'indifferent' to the sweet treat. Over a five-day period, the participants ate either daily doses of 50 grams of different kinds of Nestlé Cailler chocolate (milk chocolate, dark chocolate, etc.) or a placebo.

The use of chocolate was 'not really the point of this study,' Kochhar said, but it did allow researchers to look at links between diet and metabolism.

Analysis of blood and urine samples found that the chocolate lovers had a specific metabolic profile -- low levels of LDL ('bad') cholesterol and marginally higher levels of a beneficial protein called albumin. It didn't matter if they ate chocolate during the five days or not.

The activity of beneficial bacteria in the digestive system was different in the chocolate fans, too.

'We now know that people's metabolic state is, in part, determined by their tastes and selection of food,' Kochhar said. 'In itself, this is not surprising. But what we have now is a way of measuring the [imprints] and as such may be able to help people make better food choices in the future.'

So, will the research help people avoid being fat? It's not clear yet, Kochhar said, but the research is a 'first step' toward manipulating metabolisms to improve health.

The next step, he said, is to look at possible gender differences by studying women and doing more research into how diet can affect the germs in digestive systems.

Kochhar said women weren't included in the first study, because previous research had shown metabolic variations linked to the menstrual cycle. But the researchers plan to include women in future clinical trials on metabolic responses to chocolate to see if there's a gender-based reaction to the candy.

Contact Patricia Smith at 760-327-0864 or ChocolateForBeing.com

General Information about Chocolate

Chocolate Does a Man's Heart Good

Dark variety seems to lower older men's risk of death, study finds

MONDAY, Feb. 27 (HealthDay News) -- Chocolate lovers, take heart: Dutch research suggests that eating or drinking cocoa appears to lower blood pressure and even reduce the death risks for older men.

Since the 1700s, cocoa has been associated with healthy hearts, but only recently has scientific evidence backed up these claims, according to a new report in the Feb. 27 issue of the *Archives of Internal Medicine*.

According to the study, cocoa contains flavan-3-ols, which have been linked to lower blood pressure and improved function of the cells lining the blood vessels.

In their study, researchers led by Brian Buijsse, of the National Institute for Public Health and the Environment, in Bilthoven, examined links between cocoa and cardiovascular health in 470 men aged 65 to 84 years. The men had physical examinations and were interviewed about their diet at the start of the study in 1985 and then again in 1990 and 1995.

The researchers found that over a 15-year period, men who ate cocoa -- including chocolate -- regularly had significantly lower blood pressure compared with those who didn't.

The sweet treat might even help ward off death. The researchers reported that 314 men died over the course of the study, with 152 of those deaths blamed on heart disease. Men who consumed the highest amount of cocoa were half as likely to die from cardiovascular disease, compared to men who ate little or no cocoa, the team found. In addition, men who ate the most cocoa were less likely to die from any causes.

For these men, the risk remained low even after taking into account other factors, such as weight, smoking, physical activity, calorie intake and drinking alcohol, the researchers found.

The researchers believe that the lowered death risk didn't stem so much from lowered blood pressure, as from other heart-healthy benefits linked to flavan-3-ols. And since cocoa is rich in antioxidants, it may also protect against other diseases linked to oxidative stress, such as chronic obstructive pulmonary disease, and certain types of cancer, the researchers speculated.

One expert said the study helps confirm the use of cocoa as part of a healthful diet.

'Cocoa is the most concentrated source of bioflavonoid antioxidants readily available in our diets,' said Dr. David L. Katz, an associate professor of public health, and director of the Prevention Research Center at Yale University School of Medicine.

'An accumulating body of evidence suggests that this translates into health benefits for those who consume cocoa or dark chocolate with a cocoa content of 60 percent or more. Benefits have been seen in endothelial function, a measure of blood vessel health, blood pressure, insulin levels, and serum lipids,' added Katz, author of *The Flavor Point Diet*.

The evidence is now very consistent that cocoa has health-promoting effects, Katz said.

'However, it is almost certainly dose-dependent,' he added, cautioning that there's a calorie-rich downside to excessive cocoa consumption. 'Cocoa comes in foods that tend to be energy-dense, and the harm of excess calories could readily offset the benefit of antioxidants.'

And he stressed that cocoa's heart-healthy benefits only come from bittersweet dark chocolate and in concentrated cocoa beverages, which contain an effective dose of antioxidants, along with magnesium, arginine and fiber.

'This is not the case for milk chocolate, which contains potentially harmful saturated fats, or candy bars that dilute cocoa with a long list of other ingredients,' Katz said.

Contact Patricia Smith at 760-327-0864 or ChocolateForBeing.com

General Information about Chocolate

Bitter is Better

If you're thinking about using chocolate as a health supplement, it's important to buy a high-quality product. And when considering it as an aid to control diabetes, it is even more important to ensure that the product you choose is high in natural cocoa polyphenols, the active ingredients that may increase insulin sensitivity, provide antioxidant protection and decrease the risk of certain diabetic side effects.

In short, bitter is better. Dark or bittersweet chocolate usually contains more polyphenols because of its higher percentage of cocoa solids. But although some reports suggest that the presence of milk in chocolate renders the polyphenols inactive, a recent study showed otherwise.

And some researchers feel that even milk chocolate products (those lower in cocoa and presumably polyphenol content) are a decent inclusion in a healthful diet. "During the production process of chocolate (especially alkalization and roasting of the cocoa beans), a part of the flavanols is broken down," says Dutch scientist Brian Buijsse. "This may be true to some extent, but commercially available cocoa foods still contain flavanols."

Possibly the most important determinant in whether a chocolate product is healthful is its processing. Most commercial chocolatiers overprocess chocolate, largely to remove its bitter taste, which comes from cocoa's polyphenols. They do this by roasting the cocoa beans, followed by "dutching," an alkalizing process neutralizing the bitterness. Both of these practices destroy at least a sizeable portion of cocoa's active compounds.

The good news is that due to a growing awareness of dark chocolate's health benefits, many commercial manufacturers who long produced only low-grade "milk" products high in fats, sugar and milk solids are now creating more healthful dark chocolates high in polyphenols (and delicious as well).

When comparing chocolate products for your health regimen, look for the following information about a product's manufacturing and processing:

- The product should contain at least 70 percent pure cocoa.
- The beans should be dried (rather than roasted).
- The processing temperature should not exceed 110 degrees F.
- No sort of alkalization or dutching should be part of the processing of high-quality chocolate products.

General Information about Chocolate

Açai — Chocolate's Perfect Complement

If there's one other natural source of antioxidants that compares with chocolate, it's probably the açai berry. Experts using the ORAC method to examine the antioxidant activity of açai found that it outperformed (often several times over) all other fresh and dried produce tested. The list of plants tested includes antioxidant-rich foods like kale, spinach, broccoli, tomato, raspberry, blueberry and cranberry.

Açai has become one of the hottest topics in antioxidant research. Every day new studies are performed to learn more about this exciting new development. Research completed by AIBMR Life Sciences discovered that açai berry pulp is among the most potent antioxidants of any known fruit or vegetable with antioxidant activity. In fact, researchers have determined that açai has 10 times more antioxidants than red grapes and 10 to 30 times more anthocyanins (potent antioxidant compounds) than red wine.

More cutting-edge research from Germany's University of Bonn Institute of Nutritional and Food Sciences published in the *international Journal of Food Sciences and Nutrition* found that many types of açai berries were effective against several kinds of free radical molecules. A recent study from the University of Florida Department of Food Science and Human Nutrition also reported findings about açai's antioxidant properties in a 2004 issue of the *Journal of Agriculture and Food Chemistry*. Researchers studying the antioxidant potential of açai discovered that it had several sources of antioxidants, including beneficially bioactive levels of anthocyanins and polyphenol. When it comes to antioxidant activity, açai may be rivaled by only one natural source: its natural complement, chocolate.

Blueberries in the News

For several years, researchers have been studying the antioxidant activity of blueberries. Dozens of published studies confirm that blueberries are among the most biologically active sources of antioxidants we now know. Current research from Tufts University indicates that blueberries' antioxidants are 40 times more bioactive than 40 other fruits and vegetables that were tested.

The antioxidant activity like that of blueberries has been linked to reduced rates of cancer, heart disease and stroke, among many other common health problems.

An important study published in the *Journal of Nutritional Biochemistry* examined the effect of blueberries on the human body. Researchers found that blueberries could be linked to lower cholesterol levels and that blueberries may protect against cancer and neurodegenerative diseases. The study also noted that people who consumed wild blueberries experienced increased levels of glycosaminoglycans, which help the tissues of blood vessel walls resist oxidative stress.

Even Chocolate Snacks Offer Protection

A 2004 study has revealed that a combination of flavonoids from cocoa and sterols from soy can significantly reduce cholesterol levels. The study involved the consumption of a cocoa-based snack bar with added sterols, and demonstrated how even snacks can contribute to a healthy heart.

Various studies have already demonstrated cocoa contains naturally occurring, heart-healthy compounds. And the inclusion of soy sterols in the diet has also been recommended by the American Heart Association as a lifestyle change to significantly lower the risk of heart disease. This study sought to determine if the consumption of both cocoa polyphenols and sterols in combination would lower cholesterol levels and the risk of heart disease.

In the study, one group of 35 participants received a placebo snack bar (the control group) twice a day while the other group of 35 participants ate the cocoa and sterol-containing bar twice daily (the treatment group). Study participants had their cholesterol levels checked twice at the beginning of the study, again at the midpoint of the study and twice at the end of the six-week study period.

At the end of the study, total and LDL cholesterol and the ratio of total-to-HDL cholesterol decreased significantly by 4.7 percent, 6 percent and 7.4 percent, respectively, in those who consumed the sterol and cocoa-based snack bars. In the control group, plasma lipids did not change.

Plant sterols are clinically proven to lower cholesterol and may reduce the risk of heart disease. Physicians and cardiologists have recommended sterol-containing foods to patients at higher risk of heart disease. Similar to the antioxidants in tea and red wine, studies suggest cocoa flavanols may have positive effects on heart health by reducing oxidation of LDL cholesterol, promoting healthy blood pressure, making blood vessels more pliable and maintaining healthy blood flow. This study suggests the need of development of more food options that include such heart-healthy ingredients as plant sterols and cocoa flavanols.

General Information about Chocolate

When Research goes awry, we sometimes benefit

You just can't trust some people, even in a controlled clinical trial. Nor can we predict how the next breakthrough in health will happen.

The Johns Hopkins School of Medicine, the staid and steady medical institution that's been in Baltimore for more than 100 years, prides itself on cutting-edge medical research and clinical studies. But in June 2004, a group involved in a study of the effects of aspirin dosing on the stickiness of blood showed up.

The Genetic Study of Aspirin Responsiveness (GeneSTAR) was conducted at John Hopkins from June 2004 to November 2005. Diane Becker, M.P.H., Sc.D., a professor at The John Hopkins University School of Medicine and Bloomberg School of Public Health, was part of the team who studied the results.

More than 500 men and 700 women participated nationwide. But 139 subjects were disqualified from the study for violating protocol. Shortly before the aspirin dosing began for the subjects, they were told to keep on a strict regimen of exercise and to refrain from smoking or using food known to affect platelet activity. This included caffeinated drinks, wine, grapefruit juice – and chocolate.

The noncompliers – who admitted to eating chocolate – were a diverse group who got their flavonoid fix from a variety of sources, including chocolate bars, hot cocoa, grapes, black or green tea and strawberries. Why they were excluded from the aspirin study, Becker and her team scoured their blood results for chocolate's effect on their blood platelets, which the body recycles on a daily basis.

The platelet samples from both groups were run through a mechanical blood vessel system designed to measure how long it takes for platelets to clump together in a hair-thin plastic tube. Platelets from the chocolate lovers were found to be less reactive, taking an average 130 seconds to form clumps. The platelets from those who stayed away from chocolate clotted more quickly, taking 123 seconds.

In another key test that analyzed urine for waste products from platelet activity, primarily urinary thromboxane (11-dehydro-thromboxane B2), scientists found that, on average, the chocolate eaters showed less activity and fewer waste products, 177 nanograms per millimol of creatinine, vs. an average 287 nanograms per millimol of creatinine in the group that abstained.

“What these chocolate ‘offenders’ taught us is that the chemical in cocoa beans has a biochemical effect similar to aspirin in reducing platelet clumping, which can be fatal if a clot forms and blocks a blood vessel, causing a heart attack,” Becker says.

Researchers at Johns Hopkins say the break in regimen by the chocolate cheaters led to what is believed to be the first biochemical analysis to explain why just a few squares of chocolate a day can almost halve the risk of heart attack death in some men and women by decreasing the tendency of platelets to clot in narrow blood vessels.

You just never know.