

True or False: Eating Dark Chocolate Can Lower Your Risk of Cancer and Cardiovascular Disease

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En Español (Spanish Version)



“Chocolate is good for you” sounds like an obvious entry in the “too good to be true” hall of fame.

But a significant body of evidence supports that statement, so chocolate lovers can indulge their cravings—to a point—without too much guilt. However, this does not mean that candy manufacturers are free to market their goods as health foods.

Evidence for the Health Claim

Cocoa and dark chocolate are rich in flavonoids and antioxidants, chemical compounds that help protect against the harmful products of oxygen reactions (known as “free radicals”) in body tissues. These free radicals have been linked to the development of heart disease and some cancers.

Antioxidants have also been shown to lower LDL cholesterol, the so-called “bad” cholesterol.

Studies of subjects who increased their daily intake of flavonoids from chocolate found that their LDL-cholesterol levels dropped, their blood vessels relaxed, and blood-clotting tendencies were diminished.

A Dutch study conducted on 470 men over 15 years found that the men with the highest cocoa consumption were half as likely to die from cardiovascular disease as those who consumed the least amount of cocoa. The researchers suggested two possible reasons for these results: flavonoids in the cocoa improved the function of blood vessels, and high levels of antioxidants stopped LDL cholesterol from forming on arterial walls. Additionally, a study published in the *Journal of Nutrition* reported that one serving of dark chocolate every three days reduced people's c-reactive protein (CRP) level, a type of measure for overall heart health.

In yet another study, participants who ate dark chocolate dropped their cholesterol level by about 10% and significantly lowered their blood pressure. Interestingly, participants in the “control” group, who ate *white* chocolate—which does not contain significant amounts of flavonoids (it only contains cocoa butter)—did not experience a decrease in blood pressure.

Based on these and other research findings, the American Heart Association (AHA) has stated that people who consume a bar-sized serving of flavonol-rich dark chocolate daily may lower their blood pressure and actually improve their blood sugar over the long run. While the AHA doesn't specify exactly what “bar-sized” equals, research suggests that 1-2 ounces a day is a safe bet.

Chocolate's flavonoids have been linked to other health benefits, as well. Two substances in particular, epicatechin and quercetin, have been shown to possess anti-cancer effects. And, some studies conducted in Europe, Asia, and North America have found that people who eat a diet rich in flavonoids from chocolate or cocoa have lower incidents of cancer than those who eat fewer flavonoids.

Evidence Against the Health Claim

While these studies suggest a link between dark chocolate consumption and a lower risk of heart disease and cancer, they do not prove cause and effect. The only way to reliably conclude that cocoa truly has health benefits is to perform a clinical trial in which one group consumes high amounts of dark chocolate, another group does not, and a comparison performed many years later showing that the cocoa group has lower rates of heart disease and cancer.

Even if the result of such a study came out in cocoa's favor, all chocolate is not created equal. To make many popular chocolate products, including milk chocolate candies, cocoa powder, and chocolate syrup, manufacturers often process cocoa by roasting it, fermenting it, and treating it with alkali. These processes can remove most of the beneficial flavonoids from chocolate.

Additionally, milk products such as those found in milk chocolate can hinder the body's ability to efficiently absorb flavonoids and antioxidants from chocolate.

And even if you get the pure, good stuff—high in cocoa and low in additives, preservative, and milk fat—you should still probably monitor how much chocolate you eat. Chocolate is relatively high in saturated fats and calories, and thus has the potential to contribute to weight gain if snacked upon religiously. Numerous studies have shown that being even modestly overweight can increase a person's risk of developing cancer and heart disease.

Conclusion

Dark chocolate contains high concentrations of beneficial flavonoids that may reduce the risk of cardiovascular disease and certain cancers. Of course, flavonoids are found in high concentrations in many other foods, such as onions, tea, and grapes, all of which are presumably beneficial to cardiovascular health.

The more processed chocolate is, however, the fewer flavonoids will remain. Indeed, many chocolate candies contain too many sugars and other additives, and too few flavonoids, to be able to claim many health benefits. Dark chocolate, which is higher in cocoa content, and in its purist form, does not contain added milk fat (only pure cocoa butter), and is probably more healthful than its milk-blended counterpart.

This sounds-too-good-to-be-true claim may actually turn out to be true. Yet the same claim can be made for many other antioxidants and flavonoid-rich foods. So go ahead and have a little (dark) chocolate—after you eat your vegetables.

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