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Healthy Reasons to Eat Dark Chocolate

—By Anna Brooks, *Everyday Health*

A bite of dark chocolate a day could not only be good for your heart, but may also improve brain function, alleviate stress, and lower the risk of diabetes.

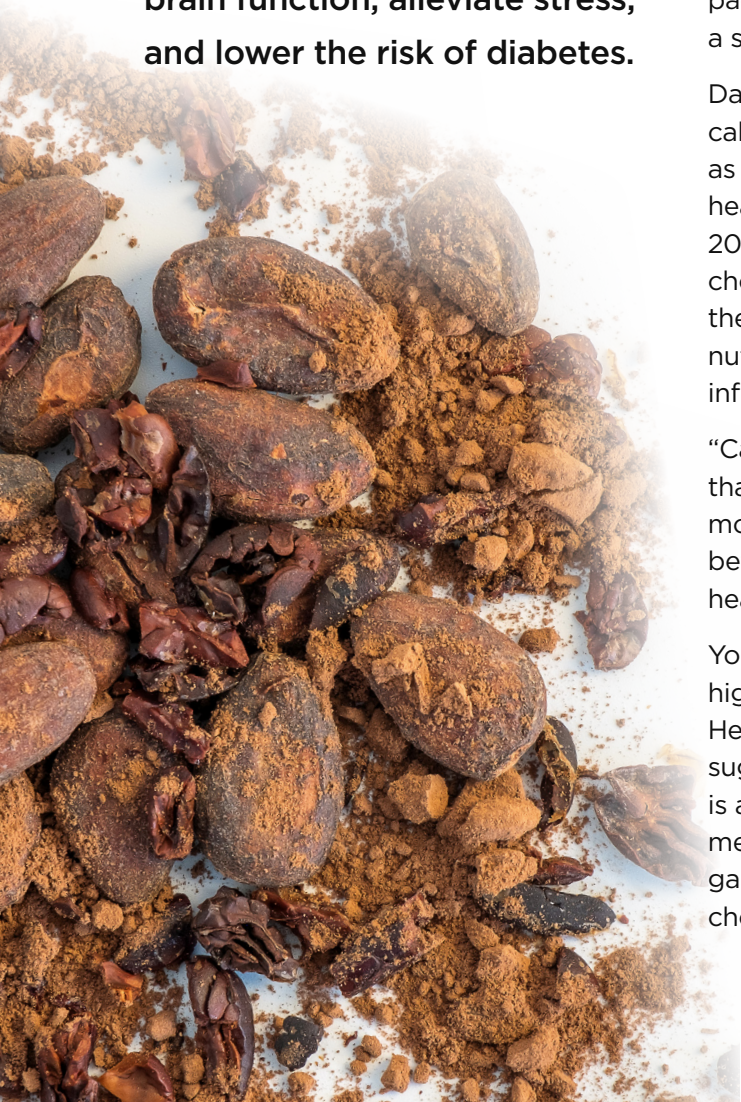
If you've dreamt of eating chocolate every day, now you have an excuse—or eight.

Scientific studies have shown that dark chocolate—sorry, milk and white chocolate don't count—is rich in antioxidants and packed with nutrients, making this bittersweet treat a superfood favorite.

Dark chocolate contains phytonutrients called flavonoids, which are plant chemicals that act as antioxidants and may play a role in cancer prevention, heart health, and weight loss, noted an article published in December 2016 in the *Journal of Nutritional Science*. The cacao plant that chocolate is derived from also contains a compound called theobromine, which Toby Amidor, RD, a cookbook author and nutrition expert for the Food Network, says can help reduce inflammation and potentially lower blood pressure.

“Cacao is packed with numerous antioxidants—actually more than green tea or red wine,” she says. “The darker you go, the more antioxidants you'll get, but there needs to be a balance between eating palatable dark chocolate and getting the health benefits.”

Your best bet is choosing a bar with 70 percent cacao or higher, according to the Harvard T.H. Chan School of Public Health; bars with lower percentages of cacao have more added sugar and unhealthy fats. Even though quality dark chocolate is a better choice than milk chocolate, it is still chocolate, meaning it's high in calories and saturated fat. To avoid weight gain, Amidor recommends eating no more than 1 ounce of dark chocolate per day. Now, a look at what this treat offers.





Dark Chocolate May Help **Prevent** Heart Disease and **Lower** the Risk of Stroke

One of the biggest benefits that researchers tout is the role dark chocolate may play in improving heart health. A meta-analysis of eight studies on the link between chocolate consumption and cardiovascular disease, published in July 2015 in the journal *Heart*, found that people who ate more chocolate per day had a lower risk of both heart disease and stroke.

A number of observational studies have also shown indulging in dark chocolate on a regular basis may reduce the risk of heart disease. For example, one earlier study published in the journal *Clinical Nutrition* found that people who ate dark chocolate more than five times a week reduced their risk of heart disease by 57 percent.

Researchers hypothesize it's the flavonoids in dark chocolate that maintain heart health, per a study

published in *The American Journal of Clinical Nutrition*. These chemicals help produce nitric oxide, which causes blood vessels to relax and blood pressure to lower, noted a review published in March 2017 in the *American Journal of Physiology: Cell Physiology*.

Because many of these studies are observational, the results could be skewed by people underreporting their chocolate intake. The studies are also limited in that they can't directly establish cause and effect. More study is needed to determine the exact amount and types of flavonoid-rich chocolate that would help lessen stroke risk.



The Treat May **Improve** Cognition, **Prevent** Memory Loss, and **Boost** Your Mood

No, it's not your imagination—studies show consuming high concentrations of dark chocolate may benefit your brain. Joy DuBost, PhD, RD, a nutrition spokesperson and owner of Dubost Food & Nutrition Solutions, says research has shown chocolate stimulates neural activity in areas of the brain associated with pleasure and reward, which in turn decreases stress and improves your mood.

Out of eight studies on chocolate and mood, five showed improvements in mood, and three showed “clear evidence of cognitive enhancement,” according to a systematic review published in the journal *Nutrition Reviews*. Further research presented at the 2018 Experimental Biology meeting found that eating 48 grams (g) of organic chocolate with 70 percent cacao increased neuroplasticity in the brain, which could have positive effects on memory, cognition, and mood.

Improvements in brain health may be due to the high levels of flavonoids in dark chocolate, which research, like a study published in April 2018 in *The FASEB Journal*, has found to have accumulated in regions of the brain responsible for learning and memory.

While some research, including a study published in May 2017 in the journal *Frontiers in Nutrition*, has indicated there may be a link between dark chocolate and the brain, studies with larger sample sizes need to be conducted, and further research is needed to investigate the mechanisms involved. And before you run out and stock up on chocolate bars, keep in mind most studies experimented with much higher quantities of chocolate than the recommended daily dose (1.5 ounces maximum).





3 Dark Chocolate Could **Improve** Blood Sugar Levels, and **Reduce** the **Risk** of Developing Diabetes

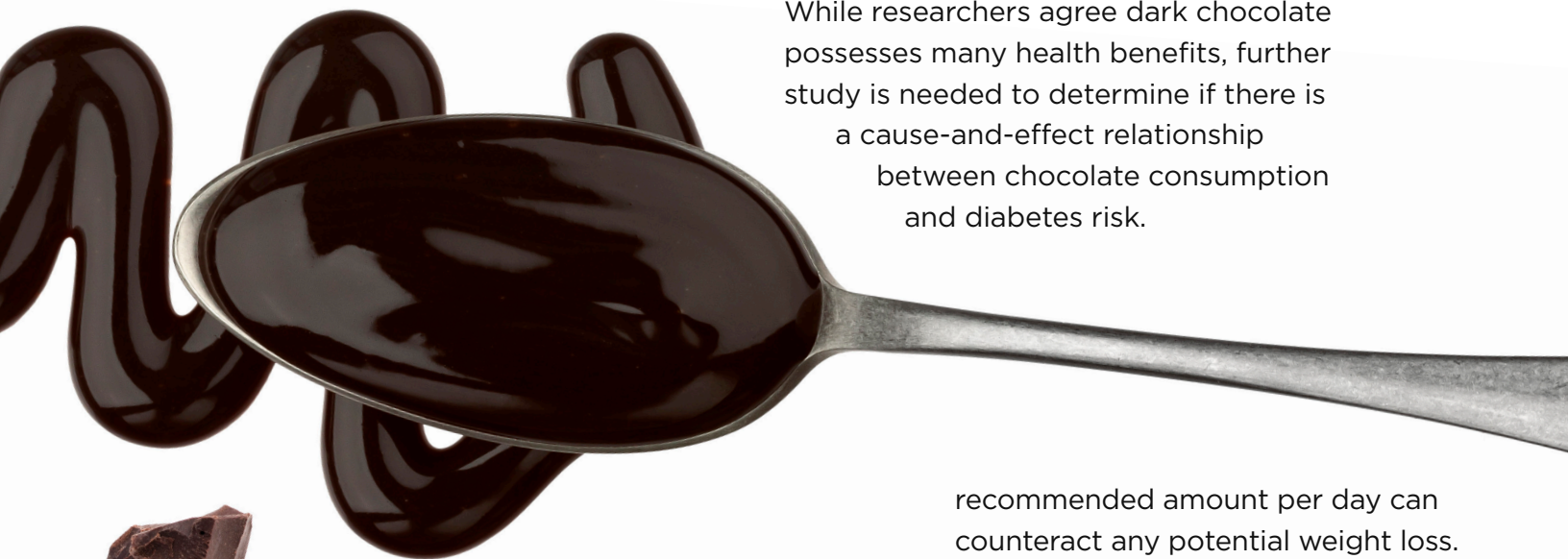
Eating chocolate every day doesn't sound like the best way to prevent diabetes, but studies have shown healthy amounts of dark chocolate rich in cacao could actually improve how the body metabolizes glucose. Insulin resistance causes high blood glucose (sugar) and is the hallmark of type 2 diabetes, per an article published in March 2019 by StatPearls.

In a study published in October 2017 the *Journal of Community and Hospital Internal Medicine Perspectives*, the flavonoids in dark chocolate were found to reduce

oxidative stress, which scientists think is the primary cause of insulin resistance. By improving your body's sensitivity to insulin, resistance is reduced, and in turn the risk of diseases like diabetes decreases.

Another study, this one published in January 2017 in the journal *Appetite*, showed that participants who rarely consumed chocolate had almost twice the risk of developing diabetes five years down the road, compared with participants who indulged in dark chocolate at least once per week.

While researchers agree dark chocolate possesses many health benefits, further study is needed to determine if there is a cause-and-effect relationship between chocolate consumption and diabetes risk.



4 Chocolate Is **Good** for Your **Gut** and May **Help** With **Weight Loss**

Eating chocolate every day probably seems like the last way to lose weight, but research suggests dark chocolate may play a role in controlling appetite, which in turn could help with weight loss. Neuroscientist Will Clower, PhD, wrote a whole book on the subject called *Eat Chocolate, Lose Weight*, which describes how eating a bit of dark chocolate before or after meals triggers hormones that signal to the brain you're full. Of course, eating more than the

recommended amount per day can counteract any potential weight loss.

Studies cited in an article published in the journal *Frontiers in Pharmacology* furthermore noted that during digestion, chocolate behaves like a prebiotic (not to be confused with probiotic), a type of fiber that encourages the growth of beneficial bacteria in the gut. The more "good" microbes are in your system, the better your body is able to absorb nutrients as well as support a healthy metabolism.



5 It **Fights Free Radicals** and May Play a Role in **Cancer Prevention**

Evidence that dark chocolate possesses properties that could help protect people from certain types of cancer is limited but growing. Antioxidants protect our cells from damage caused by free radicals, which are unstable oxygen molecules thought to be responsible for aging and disease, per an article published in January 2015 in the *Indian Journal of Clinical Biochemistry*.

“When you have too many free radicals in your body, they start to attack your cells, and that can lead, over time, to low-grade inflammation and to some diseases—cancer, heart disease, and Alzheimer’s.

Some studies, such as one published in the *Journal of the American Society of Hypertension*, have shown that people who eat many flavonoids or antioxidant-

rich chocolate develop fewer cancers than those who don’t consume them. Of the many flavonoids in chocolate, two in particular, epicatechin and quercetin, are believed to be responsible for the cancer-fighting properties.

Still, most studies are limited in using only animals or cell cultures, and the amount of chocolate needed to potentially yield preventative action against cancers is much higher than the daily recommended dose for humans, noted a review published in *The Netherlands Journal of Medicine*.



6 It's **Good** for Your **Skin** (in More Ways Than One)

The Harvard T.H. Chan School of Public Health lists vitamins and minerals dark chocolate is packed full of—like copper, iron, and magnesium, to name a few—that are also beneficial to your skin. Manganese, for example, supports the production of collagen, a protein that helps keep skin looking young and healthy. Other minerals, like calcium, help repair and renew skin, which is pretty important because, according to the American Academy of Dermatology, our bodies can shed up to 40,000

skin cells each day! Several earlier studies have also found the high levels of antioxidants in dark chocolate may protect skin from the powerful ultraviolet (UV) rays emitted by the sun.

Other research, like a study published in June 2014 in *Nutrition Journal*, failed to show any significant protective effects of antioxidant-rich chocolate against UV rays, but did show improvements in the elasticity of skin exposed to the sun, although the exact mechanism of this isn’t known.

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Dark Chocolate May Send **Good** Cholesterol **Up**, **Bad** Cholesterol **Down**

Dark chocolate is also touted as a cholesterol-lowering food. A handful of almonds, dark chocolate, and unsweetened cocoa showed a significant drop in low-density lipoproteins (LDL), also known as “bad” cholesterol, which in high amounts can clog arteries, in a study published in November 2017 in the *Journal of the American Heart Association*.

The cocoa butter in dark chocolate may also play a part in raising high-density lipoproteins (HDL), or “good” cholesterol.

Cocoa butter contains oleic acid, which is a monounsaturated fat—the same fat you find in heart-healthy olive oil, notes the U.S. Library of Medicine. However, unlike olive oil, cocoa butter is also high in saturated fat (per the U.S. Department of Agriculture), which in excess can be harmful to the heart, further emphasizing the need for portion control.

Not to mention, many of the studies on chocolate and good cholesterol are short term, so it’s premature to say that chocolate is a cholesterol cure-all.

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Dark Chocolate Is **Nutritious**—and **Delicious**!

On top of all the other potential benefits, one thing is for sure: Dark chocolate contains a ton of nutrients. Of course, the darker the chocolate the better, but any 70 percent dark chocolate or higher contains antioxidants, fiber, potassium, calcium, copper, and magnesium, according to a study published in the journal *Antioxidants & Redox Signaling*.

It also contains a good chunk of calories and fat, so be mindful of your daily intake. Each brand of chocolate is also processed differently; Amidor says going organic is always best because it’s grown without the use of chemical fertilizers and

pesticides (look for Rainforest Alliance Certified products), and recommends always checking the ingredient list to make sure you’re consuming chocolate with fewer and more natural ingredients.

