

Are these statements the truth and nothing but the truth?

- “Eating walnuts or chocolate can help ward off disease.”
- “Eating walnuts may reduce the risk for Type 2 diabetes in women?”
- “Dark chocolate can reduce your risk of heart disease.”

A media story in *New York Times* (April 9, 2013) led with: “Eating walnuts may reduce the risk for Type 2 diabetes in women.” It never explained why the polar opposite that eating walnuts may not reduce that risk. Health news journalists evaluated the media report as being unsatisfactorily in some respects because it did not quote an independent source. Only the author of the study was quoted. “The story did note that the study was partially funded by the California Walnut Commission. It did not mention that the researcher quoted in the story has received funding support from that commission.” The news reviewers asked: “What about other nuts, such as almonds? Can the study be extrapolated to them? Or does it have to be walnuts?” “Given the fact that walnuts are an excellent source of Omega-3, would fish oil do the same thing? Or, do walnuts have something special for humans that fish, or fish oil does not?” <http://www.healthnewsreview.org/review/walnuts-for-diabetes/>

**Dark Chocolate:** “Stories on the health benefits of consuming Cocoa Products have increasingly made the news, following the discovery that they are a rich source of catechins, which are polyphenols of the flavanol group, and which are believed to protect against heart disease, cancer, and various other medical conditions. Chocolate manufacturers, retailers, and the media have been taking advantage of these findings by not only trying to make chocolate lovers feel less guilty about their addiction, but also by trying to target more health-conscious consumers with regular doses of "**research studies**" praising the supposed health benefits of consuming (dark) chocolate, among them that:

- eating chocolate does not trigger migraine headaches,
- eating chocolate reduces the risk of heart disease and cancer.
- eating chocolate does not give someone acne or other skin eruptions,
- eating chocolate boosts one's appetite, but does not cause weight gain,
- eating moderate amounts of chocolate makes one live almost a year longer,
- eating chocolate releases endorphins in the brain, which act as pain-relievers,
- the sugar in chocolate may have a calming and pain relieving effect.” <http://www.acu-cell.com/choc.html>  
(The Clinical Research Resource for Cellular Nutrition & Trace Mineral Analysis)

“If people were to consume **pure cocoa**, they might indeed be able to enjoy a few health benefits, including a positive effect on blood pressure and glucose metabolism, however the majority of people eat **processed chocolate** with all the other less desirable ingredients (i.e. added sugar, corn syrup, milk fats / dairy cream, hydrogenated oils, etc.), and where the actual cocoa content may be less than 20%, so unless premium dark chocolate is consumed,” the benefits are questionable. <http://www.acu-cell.com/choc.html>. Cocoa, which is the main ingredient in chocolate, is high in antioxidants (flavanols). These are also found in red wine, tea and certain fruits (e.g., blueberries, strawberries, and apricots). “Flavonoids is a broader category of compounds that include flavanols. “Some epidemiological studies have found an association between high flavanol intake (typically from sources other than chocolate) and lower rates of heart attacks and heart diseases, while other studies have found no relationships” (Davis, R. J. *The Healthy Skeptic*). Which type of chocolate has the most flavonoids? “The highest levels are in natural cocoa powder (not Dutch cocoa, though, because it is alkalized cocoa). The type second highest in flavonoids is unsweetened baking chocolate. Dark chocolate and semisweet chocolate chips rank third, with milk chocolate and chocolate syrup at the bottom of the list.” Not All Chocolate Is Created Equal! <http://www.webmd.com/diet/features/health-by-chocolate?page=2> Flavanol levels in types of chocolate can vary based on the cocoa beans selected, processing of the beans and chocolate, and storage and handling conditions. “The evidence for the health benefits of chocolate comes mostly from short-term and uncontrolled studies. More research is needed” <http://www.mayoclinic.com/health/healthy-chocolate/AN02060>. “While the amount of the healthy antioxidant flavonoids varies from one type of chocolate to another, there's one guideline you can take to the bank: The more nonfat cocoa solids in a chocolate product, the more antioxidants it likely contains.”

Web sources to consider: PubMed ([www.pubmed.gov](http://www.pubmed.gov)); The Cochrane Collaboration ([www.cochrane.org](http://www.cochrane.org)); Health News Review ([www.healthnewsreview.org](http://www.healthnewsreview.org)); Quackwatch ([www.quackwatch.org](http://www.quackwatch.org))