

Heart-Healthy Foods: Yes? No? Maybe So?

DARK CHOCOLATE

Maybe: Cocoa is processed into chocolate and it has specific flavonoids called flavanols.

Flavanols give cocoa a distinct, bold, and bitter taste. These flavanols act as antioxidants to prevent cell damage from free radicals caused by contamination, such as air pollution. They may also lower blood pressure, improve blood flow, and lower blood cholesterol.

What to look for: Not all chocolate has flavanols because it is lost during processing. Look for chocolates, specifically dark chocolates that have not undergone Dutch processing. Choose varieties with little added sugars and other ingredients.

Health Hints: Eat only small amounts, such as one dark chocolate candy 2-3 times a week.

Source: <http://my.clevelandclinic.org/heart/prevention/nutrition/chocolate.aspx>

APPLES

Yes: Apples have phytochemicals called phenolics and flavanoids that have high antioxidant properties. They have been known to decrease cancer cell growth, lipid oxidation and cholesterol. According to the Women's Health Study, women who ate apples had a 13 to 22 percent lower risk of having heart disease.

What to look for: Fuji apples are listed as having the highest amount of phenolics and flavanoids.

Health Hints: Eat the raw apple with the peel. The peel has a lot of antioxidants and fiber.

Source: Boyer, Jeanelle and Liu, Rui Hai. (2004). Apple phytochemicals and other health benefits. Nutrition Journal. 3:5.

RED WINE

Maybe: A moderate amount of red wine increases high-density lipoproteins (HDL, the "good cholesterol"). If fruits and vegetables are eaten regularly, red wine may not add health benefits. For those who eat fewer fruits and vegetables, moderate red wine consumption can be beneficial. Red wine has procyanidins, which help dilate blood vessels. White wine does not have the same effect because skins and stems are removed before fermentation. (Red wine keeps skins and stems on during fermentation.) One glass of red wine has the same antioxidant activity as 12 glasses of white wine, 2 cups of tea, 5 apples, 500 grams of onions, 5 ½ portions of eggplant, 500 ml of beer, 7 glasses of orange juice, or 20 glasses of apple juice.

What to look for: Red wines from southwestern France and Sardinia have the highest concentration of procyanidins because the traditional process ensures efficient extraction.

Health Hints: Limit red wine to one serving or less per day for women and 2 servings or less a day for men. Alcohol should never be consumed while pregnant or prior to driving. Talk to your healthcare provider before drinking red wine.

Sources: Corder, R., Mullen, W., Khan, N. Q., et. al. (2006). Oenology: Red wine procyanidins and vascular health. *Nature*. 444:566.

German, Bruce J., Walzem, Rosmary L. (2006). The health benefits of wine. *Annu. Rev. Nutr.* 20:561-693.

TEA

Maybe: Although tea has polyphenols and has some antioxidant activity, there seems to be limited conclusive evidence heart health benefits with normal amounts of tea consumption. One literature database search on black tea found evidence of decreased heart disease risk with 3 cups a day. Some studies showed no significant change in the heart disease risk. This is controversial and more research is being conducted.

Sources: Gardner, E.J., Ruxton, C.H., Leeds, A.R. (2007). Black tea – helpful or harmful? A review of the evidence. *European Journal of Clinical Nutrition*. 61:3-18.

Yang, Chung S. and Landau, Janelle M. (2000). Effects of tea consumption on nutrition and health. *J. of Nutr.* 130:2409-2412.

CRANBERRIES

Maybe: Cranberries do contain a high number of phenolics that act as antioxidants. In studies, cranberries have been shown to increase oxidation resistance in low-density lipoproteins (LDL), reduce platelet aggregation and thrombosis, and lower blood pressure. Cranberries are one of few foods with free phenolics (avocados, honeydew, and oranges are others).

What to look for: Dried cranberries have a higher concentration of phenolics than fresh cranberries.

Health Hints: Add cranberries to a salad for a tart flavor or topping toast with fresh cranberry relish instead of jelly.

Source: McKay, Diane L., PhD and Blumberg, Jeffery B., PhD. (2007). Cranberries (*Vaccinium macrocarpon*) and cardiovascular disease risk factors. *Nutrition Reviews*. 65:490-502.

SOY

Maybe: When soy protein is used in place of half the daily protein from animal sources, there is a possible heart health benefit. This may be because soy is high in polyunsaturated (good) fats, fiber, vitamins, and minerals and low in saturated fat. Evidence shows minimal reductions in LDL cholesterol and no effect in HDL cholesterol, triglycerides, or blood pressure.

What to look for: Soy protein may have greater cardiovascular benefits than soy isoflavones.

Health Hints: Talk with your healthcare provider about adding soy to your diet.

Source: Sacks, Frank M., Lichtenstein, Alice, Van Horn, Linda, et al. (2006). Soy protein, isoflavones, and cardiovascular health: An American Heart Association advisory for professionals from the nutrition committee. *Circular 113*:1034-1044.