

Review confirms that cocoa flavonoids may reduce cholesterol

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Consumption of cocoa products, including dark chocolate, may be able to lower levels of LDL cholesterol and total cholesterol, according to a recent review published by researchers from Brigham and Women's Hospital and Boston Veterans Affairs Healthcare System, USA.

The health properties of chocolate have been the subject of much scientific and public interest, not least because of the widespread consumption of chocolate around the world. Chocolate is known to contain large amounts of saturated fat which is associated with an increase in risk factors for coronary heart disease.

However, cacao beans are also rich in natural chemical compounds, called flavanols. There is evidence to suggest that these compounds may exert a beneficial effect on the concentration of fats, or lipids, in our blood. These include triglycerides, LDL cholesterol ('bad' cholesterol) and HDL cholesterol ('good' cholesterol). Maintaining healthy concentrations of these blood lipids is essential for preventing cardiovascular disease.

To review the evidence in this area, the authors of this review compared data from ten clinical randomized, controlled trials which looked at the effect of consuming flavanol-rich dark chocolate or cocoa products on blood lipid levels. Together, these trials included 320 participants over the age of 18 who were either healthy, had hypertension, obesity or diabetes.

They found that consuming dark chocolate and other cocoa products significantly reduced participants' LDL cholesterol and total cholesterol. This beneficial effect appeared to be stronger in subjects with a higher than normal risk of cardiovascular disease, and in more short-term trials. The authors also observed a non-significant decrease in triglycerides and HDL cholesterol.

Further studies are needed to discover what the optimal daily dose range is for cacao flavanols. The authors point out that many of the studies used large quantities which are unrealistic for everyday, long-term consumption. They also identify a need for longer-term studies which investigate the effect of flavanol-rich cocoa products on blood lipids over a period of several months and years.

For more information, see

[Tokede OA et al. \(2011\). Effects of cocoa products/dark chocolate on serum lipids: a meta-analysis. Eur J Clin Nutr 65:879-886.](#)