Lower BMIs for chocolate-eating teens, finds study



Trimmer waists for teens eating more chocolate, say researchers

Young people consuming larger amounts of chocolate each day have slimmer waists and lower body mass indices, according to research.

A study due to be published in the journal *Nutrition* by researchers at the University of Granada in Spain found that European adolescents eating 42.6 g of chocolate a day had lower BMIs than those eating less.

Chocolate's unhealthy image

The study said: "Chocolate consumption traditionally has been linked with sweets, having an abundance of calories in the absence of significant nutrients, and is therefore considered an unhealthy food."

"Our results demonstrate that a higher chocolate consumption was associated with lower total and central fatness in European adolescents."

Are catechins responsible?

The researchers speculated that chocolate's flavonoid content may be responsible, but did not go into depth on the possible biological effect.

"Chocolate is rich in flavonoids. The flavonoids from chocolate, especially catechins, may promote health due to their antioxidant, antihypertensive, antiatherogenic, antithrombotic and anti-inflammatory effects, as well as their influence on insulin sensitivity, vascular endothelial function, and activation of nitric oxide," said the research.

Method

The scientists assessed the chocolate intake of 1,458 adolescents aged 12.5-17.5 participating in the HELENA-CSS (Healthy Lifestyle in Europe by Nutrition in Adolescence Cross-Sectional Study).

Study participants entered their food intake on two non-consecutive days onto a computer. Each participants' BMI was calculated as well as adiposity (obesity level) and waist circumference.

Chocolate was considered as any product where chocolate was the main component such as chocolate bars, candy bars, pralines and chocolate spread. The research did not differentiate between dark, milk and white chocolate.

Findings

The study found that young people eating 42.6 g of chocolate a day had lower BMIs, were more physically active and had higher energy than those consuming low amounts, 4.7 g per day.

The researchers said this came regardless of sex, age and sexual maturation as well as high consumption of other flavonoid-rich food and drinks such as tea, coffee, fruit and vegetables.

"Our findings should be taken, however, with caution, due to the cross-sectional nature of this study," warned the researchers.

Dark and milk chocolate variations

"Another limitation is that we could not assess the association between dark chocolate (with a higher flavonoids concentration) and fatness because information about type of chocolate was not available."

According to the US Department of Agriculture (USDA) there is a mean of 11.99 mg of catechins in a 100 g dark chocolate bar, while milk chocolate has just 4.16 mg per 100 g.

The study findings concur with earlier research in adults by Golomb *et al.* which linked chocolate consumption frequency to lower BMls.

The only approved health claim in the EU associated with chocolate is a blood flow claim for cocoa flavanols in dark chocolate and cocoa beverages, which was recently awarded to Barry Callebaut.

Source:

Nutrition (2013) - In Press http://dx.doi.org/10.1016/j.nut.2013.07.011

'Association between chocolate consumption and fatness in European adolescents'

Authors: Cuenca-Garcia et al.