# Eating Chocolate May Reduce Stroke Risk

### **Description**



Eating Chocolate May Reduce Stroke Risk.

While a bar of chocolate might be considered as a guilty pleasure by many of us, perhaps we don't need to feel quite so bad about our weakness for this sweet treat. Research published recently in the journal Neurology indicated that men who consume a moderate amount each week have a lower risk of experiencing a stroke.

# The Study and its Finding

Over 137,000 Swedish men were recruited for the study conducted by researchers at the Institute of Stockholm. Participants completed a self-reported questionnaire of their dietary intake and were followed over a ten year period, during which time 1,995 of them had a stroke. Looking back at their dietary intake at the start of the study, those who had consumed the most chocolate had a 17% lower risk of stroke than their counterparts who did not eat any chocolate. This equates to 12 fewer strokes per 10,000 participating men over ten years. In context, the amount of chocolate eaten by the highest consumers was 63g each week and as a guide a standard sized bar of Dairy Milk weighs 49g. What was interesting is that while the benefits of eating dark chocolate have previously been shown in various studies, in Sweden 90% of chocolate eaten is milk chocolate. That said the cocoa solid content – which is high in dark chocolate – of milk chocolate in Sweden and other European countries, is higher than the milk chocolate commonly found in North America. Following the finding of the beneficial link between chocolate and stroke risk in this study, the same team analysed five sets of data from

European and North American studies, which showed that the same benefits were conveyed – those who ate the most chocolate had a 19% lower risk of stroke, with a 14% reduction in risk for each additional 50g of chocolate eaten each week.

## **Study limitations**

Like all scientific studies, this one has its short comings. The participants had to self-record their dietary intake, which is likely to have introduced some errors and they were only asked about their intake at the start of the study, which might have changed over the course of the decade. The study also did not differentiate between different types eaten. Those men consuming the most did show different characteristics to those who ate the least, but even when factors such as high blood pressure were controlled for, higher chocolate intake was still associated with a lower risk of stroke.

#### Flavonoids and their benefits

A number of other studies had previously shown that eating chocolate was linked to a lower risk of diabetes, heart disease and high blood pressure. It was thought that chocolate exerted its beneficial action on disease risk through its flavonoid content and it is through this mechanism that it is postulated to protect against stroke too. Flavonoids are plant compounds thought to be beneficial to health and those in chocolate that are of particular interest are epicatechins, catechins (also contained in tea) and procyanidins (also found in certain fruits such as apples, grapes and blackberries). They are thought to exert their benefits through a number of roles. Flavonoids act as antioxidants, so are able to protect the cells of the blood vessels from damage and the build up of cholesterol plaques that would otherwise narrow them and restrict blood flow to the brain. They also have anti-inflammatory properties, again protective of the blood vessels, as well as reducing the stickiness of the blood, so a blood clot is less likely to occur and cause a blockage in an artery supplying the brain. Flavonoids may also reduce blood pressure, which is a risk factor for stroke when raised, by their ability to dilate the arteries.

# **Everything in moderation**

It is important to remember that this is just one piece of research and the team who conducted this most recent work admit themselves that much more work needs to be carried out before chocolate consumption can be encouraged for health. After all, whilst rich in flavonoids, chocolate is high in calories due to its fat and sugar content, which can contribute to weight gain, as well as being high in saturated fat, the type of fat which raises levels of bad cholesterol – both risk factors for heart disease and stroke. Chocolate is best consumed as part of a balanced diet, as studies have consistently shown that components such as fruit and vegetables, wholegrains and oily fish are linked with a lower risk of heart disease and stroke. If you are interested in including chocolate for its potential cardiovascular benefits, choose one higher in cocoa solids, as this will provide more flavonoids.

#### Amy Millband

**Stroke** – What happens when not enough blood (and thus oxygen and nutrition) reaches a part of the brain. The medical term for stroke is cerebrovascular accident, or CVA.

### There are three types of strokes:

- Thrombotic stroke â€" When a blood clot forms in an artery and blocks the flow of blood
- Embolic stroke â€" When a blood clot forms in another part of the body and moves to the brain
- Hemorrhagic stroke â€" When a weak blood vessel in the brain bursts and blood moves into the brain tissue. The brain cells and tissue do not receive oxygen and nutrients.

### Category

- 1. Factual
- 2. Information
- 3. News

#### **Tags**

- 1. Blood Pressure
- 2. Catechins
- 3. Chocolate
- 4. Cholestorol
- 5. Dark Chocolate
- 6. Diabetes
- 7. Epicatechins
- 8. Flavanoids
- 9. Milk Chocolate
- 10. Neurology
- 11. Procyanidins
- 12. Stroke

**Date Created** 

July 8, 2015

**Author** 

sephra

