

Coffee drinks: A protective against or promoting to diseases?

Abstract

Coffee is the second most universally consumed liquid substances, second to water (Linskog et al., 2002). There are many studies with positive findings that shows coffee is beneficial to human health. Coffee affects the body in many different ways and the most obvious affect is that being an energy boost, which became the main reason why people drink it. Coffee is rich in antioxidants, such as 'chlorogenic acid' and 'melanoidins'. Antioxidants help prevent oxidation, a process that causes damage to cells and contributes to aging. Regular coffee drinking also reduces the risk of Parkinson's disease. Saaksjarvi et al. (2008) and Hu et al. (2007) have demonstrated that people who drink coffee on a regular basis are significantly less likely to develop Parkinson's disease. Meanwhile, Shino et al. (2010) revealed that coffee consumption exerted a protective effect against type 2 diabetes. vanDam et al. (2006) also found that moderate consumption of both caffeinated and decaffeinated coffee may lower the risk of type 2 diabetes in younger and middle aged women. Coffee drinking may also protect against liver diseases, especially liver cirrhosis. A Japanese study (Inoue et al., 2005) found that those who drank coffee daily, or close to it, had about half the risk of hepatocellular carcinoma (HCC), a type of liver cancer. There is some evidence from Leitzmann et al. (2002) that coffee drinking may be protective against gallstone formation (known as 'cholelithiasis') in both men and women. In addition, coffee consumption lowers the risk of kidney stone formation where coffee increases the urine volume, preventing the crystallization of calcium oxalate, which is the most common component of kidney stones. Coffee consumption may also associate with decreased risk of kidney cancer (Lee et al., 2007a). Coffee can also improve mental performance. Caffeine in coffee is a well-known stimulant where it can promotes alertness, attention and wakefulness. Regular coffee drinking may help to protect against Alzheimer's disease. A study by Cao et al. (2011) revealed that a yet unidentified mystery ingredient in coffee interacts with the caffeine to help protection from Alzheimer's disease. A study by Arendash et al. (2006) in mice showed that caffeine equivalent to 5 cups of coffee

per day reduced the build-up of destructive plaques in the brain. For people with asthma, caffeine can also open airways and improve asthma symptoms due the relationship between caffeine and theophylline, an old asthmatic medication. Furthermore, a large study by Wilson et al. (2011) of nearly 50,000 men found that men who drank 6 cups of coffee per day had 60% lower risk of lethal prostate cancer and those who drank 3 cups per day had 30% lower risk. Lee et al. (2007b) also suggested that coffee consumption may lower colon cancer risk among women and a study by Nettleton et al. (2010) revealed a beneficial effect of coffee on the pulmonary function of non-smokers. Women who drank more than 1 cup of coffee per day also had about 25% lower risk of stroke than women who drank less (Larsson et al., 2010). Meanwhile, a study by Garcia et al. (2009) found that women who drank 4 or more cups of coffee per day reduced their stroke risk by 20%. From a study by Jaquet et al. (2009) showed that coffee produced an increase in the metabolic activity and numbers of Bifidobacterium, which are beneficial bacteria in the gut.