

Coffee and Health – Some Surprising Findings

Coffee is drunk all over the world, every day, by both young and old, but like many other things we enjoy in our everyday life, we sometimes question whether it is good for us. From the thousands of studies done on coffee, it is becoming increasingly clear, that drinking a moderate amount, of up to 4/5 cups a day, is not harmful and may even have some health benefits. To help dispel a few of the misconceptions, here are the latest findings on some of those less well-known health related benefits of drinking coffee.

Can Coffee Protect Against Alzheimer's Disease?

Alzheimer's Disease (AD) is one of the most common forms of dementia today and its prevention and treatment have become a major public health challenge worldwide. Understanding the role of coffee as a protective factor has been growing, as scientific studies show that caffeine intake is associated with a lower risk for AD.

One such study undertaken nationwide in Canada (1), involved a group of 6,434 people. All were 65 yrs of age or over when the study began in 1991, and none showed any signs of AD. In 1996, of the 4,615 still alive, 194 were diagnosed with AD. Analysis of these 4615 people showed that coffee consumption, among other factors such as regular activity, was associated with a reducing risk of developing AD. Similar results for coffee were observed in a small Portuguese study (2).

Does Coffee Inhibit Sleep?

Many people blame coffee for disturbing their sleep and refrain from drinking it in the evening. We are all aware that coffee gives us a boost during the day and of its well known immediate effects on keeping us alert. This may mean it takes longer to fall asleep, but studies show that the dream phase of sleep remains unaffected.

One such recent study showed that drinking up to seven cups during a day is not associated with us enjoying any less sleep (3) and in another survey, involving 760 nurses (4), results showed that other factors such as age and family issues were more important in keeping us awake. In a study involving elderly women (5), there was no difference in caffeine consumption between good and poor sleepers.

Can Coffee Help Relieve Headaches?

Many people suffer from headaches, so new research that suggests a cup of coffee may help relieve the symptoms is good news to us all. In a recent study (6) 301 regular headache sufferers took a combination of a recognised painkiller (ibuprofen) and caffeine. 80% of the patients saw a significant improvement within six hours compared with 67% of those taking only the painkiller.



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Caffeine is often added to pain medications because it improves their absorption and increases their pain killing effect. Many claim that the caffeine in a strong cup of coffee can help relieve a migraine or even end it if consumed in the very early stage of a headache. It is known that substances that dilate blood vessels, like alcohol, can cause vascular headaches. Substances that constrict blood vessels, like caffeine, can help counter the painful effects of blood vessel dilation in the head.

Does Coffee Affect Osteoporosis?

Given the growing awareness about the incidence of the degenerative bone disease, osteoporosis, in older women, the possible relationship between caffeine intake and bone health is a relatively new area of research. One recent study (7) showed that although urinary excretion of calcium increased slightly after drinking caffeinated drinks, the caffeine effect was compensated for by reduced calcium excretion later in the day, so the net effect was negligible and therefore on any development of osteoporosis or on bone density.

An earlier study (8), which looked specifically at the long-term consumption of coffee on the bone status of women aged 55 -70, who had little or no HRT treatment, produced similar results. Results showed that caffeine intakes in this study group were not associated with any changes in bone density.

Can Coffee Cause Heartburn?

Heartburn, or acid indigestion, is a very common and uncomfortable condition for which there are many possible causes ranging from eating rich or spicy foods to undue stress. In a study involving 394 patients with heartburn, neither the acidity nor the strength of the coffee was associated with their reported heartburn (9). Some people do report suffering heartburn after drinking coffee, but it is thought more likely to be associated with the meal eaten previously, rather than the coffee. There is also no conclusive evidence that drinking coffee is bad for the stomach or involved in the formation of gastric or duodenal ulcers.

Does Coffee Help Manage Asthma?

The incidence of asthma as a respiratory disease has increased significantly worldwide during the past twenty years. In some industrialised countries the incidence is now as high as 10% (UK) and 14% (Japan) of the population. The beneficial effect of coffee on asthma was known over a hundred years ago and coffee has been used to treat the condition in Scotland since at least 1859 (10).



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This benefit is confirmed by recent research findings. An Italian study of 72,284 people (11) showed that the incidence of asthma fell by 28% when they drank three or more cups a day. Similar results were observed in the second National Health and Nutrition Examination Survey (12) where, in a group of 20,322 Americans, the incidence of asthma fell by 29% and the incidence of wheeze fell 13%, when regular coffee drinkers were compared with non-coffee drinkers.

Is Coffee Addictive?

No. Whilst enjoying drinking coffee regularly may be described as a habit, and coffee is known to act as a stimulant and keep us alert, in no way should this be confused with it being addictive. Regulatory agencies such as the World Health Organization, has stated that, "There is no evidence whatsoever that caffeine use has even remotely comparable physical and social consequences which are associated with serious drugs of abuse" (13).

Evidence to support the claim that coffee drinking is not addictive was confirmed in a recent study (14), which showed caffeine did not act on the brain areas responsible for reward, motivation and addiction in the same way as amphetamines and cocaine. Likewise mild withdrawal symptoms, such as headaches and lethargy, experienced by some coffee drinkers, do not seem to relate to the quantities consumed daily.

Can Coffee Cause Dehydration?

The caffeine in coffee is a mild diuretic i.e it can increase the volume of urine excreted, but moderate consumption of coffee, up to 4/5 cups a day, has no greater effect than that seen with plain water.

Many people, including athletes and those travelling long haul flights, are often recommended to abstain from consuming caffeinated beverages. It is assumed that caffeine will exaggerate the dehydration and lead to impaired athletic performance or health, although there is no scientific evidence to support this assumption. In relation to athletes, nine studies, which have looked at the effects of caffeine consumption on the volume of urine, have recently been reviewed (15).

The author concluded that scientific findings confirmed that athletes and recreational sport enthusiasts would not incur detrimental fluid-electrolyte imbalances if they consume caffeinated beverages in moderation and eat a healthy diet. Official government advice for long haul travellers is to ensure a regular fluid intake to help reduce the risk of deep veined thrombosis. Coffee can contribute significantly to that recommended daily fluid intake of at least 1.5 to 2 litres.



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