

Title:

Caffeine Benefits - Does It Boost Memory?

Word Count:

528

Summary:

Coffee can produce anxiety in excess, but what are its benefits? The good news is that the picture of caffeine and health is not all bad, and not completely one sided.

Keywords:

beverage coffee, benefit of coffee, coffee tea, caffeine health, caffeine benefit

Article Body:

Caffeine, like chocolate, often receives bad publicity. Whilst in some instances, and in excess, these can have negative effects on our body, they can also be quite beneficial.

I am not disputing that some people are more sensitive to the negative effects of either caffeine or chocolate. For example, excess caffeine can create anxiety, nausea (particularly if taken on an empty stomach), an increase in heart rate, and even depression in some people. And chocolate is certainly not something that should form the mainstay of one's diet. If struggling with sugar addiction, or wanting to lose weight, there are more nutritionally complete foods that are available.

But scientists have turned up some interesting facts on caffeine. For example, caffeine actually blocks the effects of a neurotransmitter in the brain (adenosine) that otherwise makes us feel tired. This is why it works so well to keep us awake. It also encourages the release of another brain chemical, dopamine (as well as adrenaline). Dopamine contributes to a feeling of well being.

Two studies, one a population based study (which are not as specific or rigorously defined as other types of studies, but nonetheless valuable indicators) found that drinking caffeine containing drinks like coffee and tea had a protective effect for those at risk of developing liver disease. Issues that the study participants had that increased their risk of liver disease included alcoholism, hepatitis B or C, obesity, or other complications.

And the results indicated that people who drank more than 2 cups of coffee a day had a 44% lower chance of showing actual liver damage compared to those who drank no caffeine. This was not a clinical trial, and the reason why coffee and tea had such an effect is not known. Coffee and tea contain a range of plant chemicals (phytonutrients) that could be responsible for this. A 2005 Norwegian study also found similar benefits for coffee with regards liver disease. This study found that drinking 3 cups of coffee a day could lower the risk of death from liver cirrhosis.

Even if you're not at risk of liver disease, caffeine still has some advantages. Recent research from Austria showed that caffeine may actually enhance short term memory. Researchers found that there was an increase in brain activity (as measured by functional magnetic resonance imaging) in the parts of the brain that were associated with memory and attention. These parts of the brain were the frontal lobe and the anterior cingulum. This was a placebo controlled study, meaning that some people were not given any caffeine. Another, earlier study (2004) found that caffeine did support short term memory, but only when it was in relation to a topic that people were already thinking about. This study found that when testing coffee's effects on unrelated subjects, short term recall was actually inhibited.

Everything does have a flip side though. Adenosine, which is blocked by coffee, is also calming. This could be why it can also cause anxiety in excess, and in some individuals. After all, the balance of our brain chemistry is unique. And when we are addicted to stimulants like caffeine, we lose the sensitivity to our own natural stimulants (dopamine and adrenaline).