# Health benefits of coffee argumentative essays example

Food & Diet, Coffee



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The morning cup of coffee and all its varieties, is under a constant scrutiny for its impacts on health and cognition of consumers. Various studies have tried to showcase the effects of caffeine on the functioning of human body; in the present essay we will discuss some of the health benefits of coffee based on existing scientific research. Coffee is derived from the dried, roasted, and crushed seeds of the coffee plant. Coffee beans are rich in caffeine, antioxidants and various other phytochemicals. Studies show that the phytochemicals derived from coffee play a significant role in lowering neurodegenerative disease risk(Mikuls et al.; Lindsay). The effects of coffee on health of regular consumers has been documented through various studies. Some studies associate regular coffee drinking with lower risk of prostate cancer(Wilson et al.), . Although some studies associated coffee consumptions with cardiovascular disease risk factors, more recent research work has eliminated these concerns (Sesso et al.). Furthermore, a high coffee consumption is often correlated to a reduced risk of type II diabetes (Agardh et al.). Certain other risk factors associated with coffee consumption include prematurity, abortion in gestating females(Armstrong, Mcdonald, and Sloan), urinary tract cancer (Cole) etc. We can see that there is some dispute regarding the exact nature of impact of coffee on health. Therefore, a comprehensive literature review is needed to understand the beneficial effects of coffee on health.

Coffee is a natural plant product that contains various phytochemicals that may improve body health. Some of the chemical found in coffee include, chlorogenic acid, and various other micronutrients. The epidemiological effects of individual phytochemicals found in coffee show that most of them are highly beneficial for healthy living when taken in moderate amounts (Demmig-adams and Taylor). In the present paper we will discuss how coffee consumption beneficially impacts the human body and helps us lead a better quality life. We hypothesize that beneficial health impacts of coffee consumption outweighs the few side effects associated with excessive consumption.

## Health benefits of coffee

The chemical composition of coffee has an impact on the health of the consumers. Most of the phytochemicals found in coffee are beneficial. In this section we will discuss some of the proven health benefits provided by coffee consumption.

Brain function. Contrary to popular belief, research has shown that coffee consumption is more likely to enhance rather than inhibit brain function and cognitive abilities in adults. Coffee drinking gas been also associated with lowering of risk factors of having neurodegenerative diseases like Alzheimer's and Parkinson's (Lindsay). The existing literature suggests that

the anti-oxidants present in coffee may reduce the oxidative stress on the neural network and thus prevent the onset of neurodegenerative diseases. The caffeine present in coffee stops the functioning of a chemical called phosphodiesterase (PDE). The function of PDE is to stop the cyclic Adenosine Monophosphate (cAMP) which is a part of the second messenger pathway. By blocking PDE activity, the caffeine molecule increase the duration of cAMP function. The indirect effect of cAMP induces the release of epinephrine and norepinephrine, which enhances the rate of contraction of heart muscles. The increased blood flow to the brain due to high heart beat increases the amount of oxygen reaching the brain and therefore improves cognitive functions. Therefore the primary beneficial effects of coffee consumption includes a prolonged ability of the brain to function at its highest cognitive ability. These advantages of coffee-consumption are absent from decaffeinated coffee.

Diabetes mellitus II. Type II diabetes is one of the most prevalent metabolic disorders, which is characterized by high blood sugar levels and low insulin in the body. The high caffeine content in coffee has been found to be beneficial in increasing glucose intolerance and thus curbs the harmful effects of high blood sugar in the body. Furthermore, a high coffee intake has been found to be associated with a low risk in non-diabetic individuals (Battram et al.). In a population level cross sectional study Agardh and associates (2004) found that Swedish men and women who drank a high amount of coffee had a reduced risk of getting type II diabetes and impaired glucose tolerance. Some other benefits of coffee consumption includes increased insulin response. These beneficial effects of coffee consumption can reduce

symptoms of diabetes and provide protection to non-diabetics.

Digestive system. The digestive system is closely linked to metabolism and therefore controls physiological condition of the body. A study by Michels and associates showed that caffeinated coffee drinkers were at a lower risk of contracting colorectal cancer. However, other confounding variables such as lifestyle and exercise level of the individuals tested. Nevertheless, one cannot ignore that caffeinated coffee protects consumers from significant health risks compared to decaffeinated coffee. Consuming coffee daily can reduce the chances of getting chronic liver disease, the caffeine and antioxidants found in coffee has positive impacts on the maintenance of homeostasis in the body and delays senescence (Freedman et al.). Chlorogenic acid is a phytochemical found in natural coffee; studies showcase that chlorogenic acid enriched coffee not only had more consumer acceptance, it also triggered weight loss(Watanabe et al.). Obesity. Obesity is a worldwide health concern and in most cases abdominal obesity is one of the primordial causes behind a primordial health syndrome. Chlorogenic acid is one of the most constituents among the polyphenols found in coffee. Watanabe and colleagues found that when subjects were given coffee with a high chlorogenic acid content and low amount of hydroxyhydroquinone is very effective at increasing weight loss. The hydroxyhydroquinone is an oxidative component which may lead to cell death and early senescence. The increased amount of Chlorogenic acid on the other hand helps reduce blood pressure and increase weight loss.

# NEGATIVE HEALTH IMPACTS OF COFFEE CONSUMPTION

There are certain negative health impacts of coffee consumption, some of the most common include addiction, withdrawal, insomnia etc. There are some other negative health impacts of coffee on gestating, and postmenopausal women as well epilepsy patients. We will review some of the literature associated with negative health impacts of coffee and see whether they outweigh the positive effects. These studies are the objection to the initial hypothesis that coffee consumption has significant health benefits. We will review these studies to understand how the negative health impacts of coffee compare with its health benefits. Due to this increase in blood pressure, it has been found that coffee consumption can increase the performance during prolonged physical exercise (Costill, Dalsky, and Fink). The alertness and visual attention of subjects under caffeine trials also improves significantly due to the more oxygen reaching the Central Nervous System (CNS) (Zwyghuizen-Doorenbos et al.). Coffee consumption therefore leads to an increase in mental alertness, higher capacity for aerobic activity. Bone and joint health, epilepsy. Some studies indicate that enhanced coffee drinking may be associated with an increased risk of rheumatoid arthritis. A few studies compared between decaffeinated coffee consumers and tea drinkers to show that coffee consumption was associated with higher chances of rheumatoid arthritis(Heliövaara et al.). Later, Karlson and associates showed conclusively that the previous studies that showed a positive relationship with coffee-drinking and chances of rheumatoid arthritis were statistically insignificant. Heavy coffee drinking has been associated

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with epileptic seizures(Bonilha and Li), but the study by Bonilha and Li was a single subject study that could be based on confounding variables other than coffee ( for example lifestyle, social circumstances).

Congenital heart disease and withdrawal symptoms. Some researchers believe that heavy coffee consumption in gestating mothers can have congenital heart defects (McDonald, Armstrong, and Sloan). The study however showcased that although there was an association between congenital heart diseases but it was statistically insignificant. Therefore confusing correlation with causation should be avoided. Most of the studies that link coffee drinking with disease risk fail to provide plausible statistical proof to support their hypothesis. Excessive coffee consumption may lead to addiction. People who try to quit coffee often suffer from muscle fatigue, cramps, headaches, and drowsiness (Mitchell, de Wit, and Zacny).

# **CONCLUSION**

We reviewed peer-reviewed articles showing positive effects of coffee consumption on health as well as some papers that documented possible side effects of excessive coffee consumption. Some of the papers that indicate a negative health impact of coffee consumption mostly suffer from one significant flaw, most of the papers merely create associations between coffee consumption and a certain disease. While some of the studies lack good experimental control, others simply use a single subject study design to explain their hypothesis. Contrary to the proposed negative impacts, the health benefits of coffee consumption is well-documented and illustrated through statistically significant results conducted on a cohort of individuals.

Most of the studies conclusively show that regular coffee consumption not only improves cognitive functions but also reduces chances of getting diabetes, cancer of the prostate gland and urinary tract. The positive effects of coffee is not necessarily related to caffeine (the primary constituent); chlorogenic acid and antioxidants found in coffee are also responsible for a large number of positive effects. Some of the antioxidants found in coffee can protect against the carcinogens. Antioxidants found in coffee can protect regular consumers from cancer related risk factors. Most of the studies only look at the synergistic effects of all the phytochemicals found in coffee. Very few studies actually try to see the effects of individual chemicals found in coffee and how they affect body functioning. The paper by Watanabe and colleagues shows that by increasing the chlorogenic acid content of coffee we may increase the beneficial impacts of the beverage. Coffee is a beverage that has a multitude of health benefits when taken in moderation, although it should be avoided by epilepsy patients and pregnant women. Through this review we conclusively show that coffee consumption has significant health benefits compared to certain side effects that is only associated with excessive drinking. Studies that showcase the effects of coffee on health need to adapt a standard protocol of measuring coffee intake, which may lead to better epidemiological studies. Therefore we can conclusively say that there are significant health benefits associated with coffee consumption.

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