

An excellent article on the benefits of coffee in people over 45 years. There are 4 substances that are able to cross the blood-brain barrier to provide a stimulating effect: caffeine; theobromine and theophylline and a unique amino acid called L-theanine. Tea caffeine is called teina. Cocoa offers the highest amount of theobromine and theophylline, molecularly different from caffeine. Some of the caffeine we eat is metabolized in theophylline and theobromine.

Caffeine has several mechanisms proposed, the main one being that it is believed to block a neurotransmitter inhibitor called adenosine in certain synapses in the brain, resulting in a stimulating effect. Adenosine is believed to increase in the brain throughout the day, creating a kind of "sleep pressure." The more adenosine, the greater the tendency to fall asleep. Genetic polymorphisms alter the caffeine response, causing risks of Parkinson's and cardiovascular diseases in the habitual consumers of caffeine. Genome association studies link variations in adenosine and dopamine receptors for anxiety and caffeine-induced sleep disorders

There are many people who do not adequately metabolize caffeine. This is because the genetic polymorphisms altered by cytochrome P450 microsomal liver and bacterial degradation: 7-N-demethylation and C-8 oxidation enzymes. They allowed two ways. bacterial degradation in the colon and the action of enzyme families specific to the detoxification of the cytochrome P-450 liver Extensive research on this topic has revealed two distinct pathways: N-demethylation and oxidation of C-8 for bacterial degradation of caffeine. these two enzymes.

www.ncbi.nlm.nih.gov/.../PMC4408171

www.ncbi.nlm.nih.gov/.../26503341

The PDSS2 gene is also involved in this enzymatic process. Some people genetically produce very little of this enzyme, while others produce a large amount. Most humans are somewhere in between.

www.caffeineinformer.com/caffeine-metabolism

Regular coffee has some advantages over decaffeination, potentiating caffeine, the action of coffee polyphenols. • Improves mood, reaction time, memory and mental function and some degenerative diseases • Increased metabolic rate and fat burning. • Improves sports performance. • Reduces the risk of mild depression and suicidal thoughts in women. • Much lower risk of liver cirrhosis. High intakes of coffee, decaffeinated coffee and tea are associated with a lower risk of diabetes.

jamanetwork.com/journals/jamainternalmedicine/fullarticle/773949?rel

Caffeine synergizes with coffee polyphenols to increase plasma GCSF: binding cognitive benefits in Alzheimer's. content.iospress.com/articles/journal-of-alzheimers-disease/jad110110

Consumption of coffee was inversely associated with the risk of type 2 diabetes dose-response. Both caffeinated and decaffeinated coffee were associated with reduced risk of diabetes. care.diabetesjournals.org/.../569.full.pdf

The effects of caffeine on performance efficiency during the workday have demonstrated the benefits of caffeine consumption in sustained and alert measures. onlinelibrary.wiley.com/.../full

From a review of double-blind, placebo-controlled studies published over the past 15 years, it appears that the range of caffeine intake that could maximize benefits and minimize risk in relation to mood, cognitive function, the yield and hydration is 38 to 400 mg a day, which equates to 1 to 8 cups of tea, or 0.3 to 4 cups of processed coffee per day. that is minimum.

onlinelibrary.wiley.com/doi/10.1111/j.1467-3010.2007.00665.x/full

Chronic ingestion of a low dose of caffeine induces tolerance to the caffeine yield benefits shapeamerica.tandfonline.com/doi/abs/10.1080/02640414.2016.1241421

Caffeine increases potency and improves training response. eprints.gut.edu.au/63939

Gui yes, just having my first cup.. I am a coffee drinker, i make and only drink my coffee black and from strictly organic dark roast raw beans...I know coffee has many health benefits as outlined, but the problem with coffee drinking is that you just get a short burst of energy ... and then you tend to crash. That's because coffee causes a release of existing energy, rather than building new energy. So how do we fix the crash issue. Our brains have a huge appetite for choline, and it is vital to mental performance. It's the primary building block for acetylcholine, which your brain uses to maintain clear communication between the cells throughout your body. We need it for thinking, remembering, sleeping and even maintaining your balance, stability and mobility.

Our brain needs choline to help you stay healthy. When choline is in short supply, our brain goes on a scavenger hunt and starts to extract choline from nerve cell membranes. In an attempt to maintain normal acetylcholine signaling, the cell takes itself apart . In the short term, our brain will use this technique to keep your memory and other functions up and running. But in the long run, it takes its toll on the brain at the cellular level.

So coffee drinkers need to ensure they are getting an adequate supply of Choline and eggs is a very good source. There's also another Amazon Rain forest healing herb, It comes from a seed called Paulina cupana and its active compound is guaranine, a member of the caffeine family. But unlike regular caffeine, it's full of healthy fatty acids and does not cause the crash that regular coffee does. It also causes the "slow" release of Acetylcholine so it does not deplete the brain causing the crash you see with regular coffee. This might be helpful for those that don't do well with coffee. Genetic variations are very real so not everyone would do well with coffee, or with any one substance. If you don't do well with coffee just forget it and continue on with a healthy lifestyle:)

Posted On 09/11/2017

stanleybecker

hi Gui - Essential Tremors - "the shakes" - associated with stimulant use - like caffeine - a common early marker for many disorders -

www.hopkinsmedicine.org/healthlibrary/conditions/nervous_system_disord.. - interesting that many stressed people use coffee/ tea/ cigarettes to calm themselves -

SEG, Very interesting the action of guaranine, to stimulate the brain in a moderate way. I personally take 1 gr. of red Ginseng extract (20% ginsenosides). for 1 month and rest 2 months. The benefits it presents improve resistance to stressful situations, increasing sexual capacity, sense of vitality, and work performance, both physical and mental. In this sense, ginseng can be interesting as a supplement to a balanced diet to increase physical and mental performance, improve concentration and reflexes, etc. Ginseng also stimulates protein synthesis, inhibits platelet aggregation and enhances our immune system. Should abstain from consumption in case of suffering from hypertension, tachycardia and insomnia, In this link, the best natural stimulants to increase energy. healthwyze.org/reports/332-the-best-natural-stimulants-for-increased-e..

Posted On 09/11/2017

iamblessediam

Hi Prof. G. Excellent summation! One more interesting read on caffeine - notice the homocysteine: [lpi.oregonstate.edu/.../coffee]. As your comment suggests - dosing and timing is a big component as well: [livelifewellinfo.com/coffee-tea-or-minerals-its-all-in-the-timing/]. I occasional will eat at the best Indian food restaurant I know of in my area that serves the BEST chai tea I've ever drunk with the meal. I don't get too concerned about digestion because I know the "spices" used - in particular cinnamon or cardamom - help in that department - Indian food is loaded with both: [svasthaayurveda.com/the-highs-and-lows-of-caffeine-consumption-an-ayur..]. I drink coffee everyday but I add cinnamon to it. Be well my friend! LBP!

seg

Gui with that amount of Ginseng you could have the madame sleeping in the spare bedroom, or as NJ would say running for the hills LOL..

Yam i use the good old fashion drip coffee with a non chlorinated filter to get out the undesirables...

Posted On 09/11/2017

Guillermou

Researcher IAM, With you, I always learn. .I congratulate you for the management of your knowledge and your power of communication. His work, systems analysis training in data and systems communications, it favors this communication. The early history of coffee includes an account of an Abyssinian goat herder in 850 AD, who observed that his goats were dancing around, which later became known as the coffee bush. He tasted the berries and, according to legend, joined the dance. This psychoactive effect, mediated by caffeine, probably contributed to the worldwide popularity of coffee as a beverage.

Intervention studies have shown that high levels of coffee consumption (6 to 10 cups of coffee per day) weakly increase homocysteine, which decreases if regular coffee users stop drinking coffee. However, a study based on 5 cups of espresso a day did not show a significant effect of homocysteine, possibly due to the lower volume consumed. It has been suggested that caffeine may be partly responsible for the effect of coffee on homocysteine, but the presence of chlorogenic acid in coffee may also contribute to a decrease in homocysteine. Of course the effect of folate, B12 and Betaine hydrochloride. has a much greater effect on methylation, in the reduction of homocysteine.

www.coffeeandhealth.org/topic-overview/coffee-consumption-and-blood-ho..

STAN. His intuition and ability to write, is EXCELLENT. I like very much how you link with the unprofitable effects of caffeine, probably related, with genetic polymorphisms. Nuchas thanks for the link.

Posted On 09/11/2017

mic40616

Coffee screwed up my digestion, it also used to make my stomach upset. I switched to an organic brand that offered a "stomach friendly roast" and it made all the difference in the world for me. I was going to stop drinking coffee prior to finding this. If Dr. Mercola can make a stomach friendly roast i'd switch

Posted On 09/11/2017

panotx

@mic40616 I'd suggest you consider trying organic cold-brewed coffee....much less acidic than hot brewed....also, be sure to use RO or other clean water...making coffee with chlorinated, fluoridated, etc. water not a good idea...

Posted On 09/17/2017

Loohan7

In such large, habitual quantities, coffee is PHYSICALLY ADDICTIVE. I have known people who decided to quit coffee habits who experienced significant withdrawal pains, especially headaches.

Krofter

I have a friend who is a roast master and imports organic green coffee beans from small farmers all over the world. As part of my line of products, I sell his roasted beans at the two weekly farmers market I attend. Without fail, all of my regular coffee customers over 50 are alert and active folks who seem to be in good health. Not exactly a scientific study, just an observation.

Posted On 09/11/2017

Guillermou

Scientific studies are also carried out with statistical data such as those provided by you. You manage wonderfully, value your farming, and the coffee your friends provide to you. The union of organic farmers, is a great good, for people who take care of their health. Do not you have a free plot to make me a small house and feed me with your organic products, freshly harvested? Well, the truth is that my land (and my wife) have me in love.

Posted On 09/11/2017

bar3430

My husband and I enjoy this keto coffee daily. For the two of us we make about four times the amount given and to this we add a heaped tablespoon raw organic cacao powder before blending. The result is luscious.

nita44

A friend of mine loves coffee but it always made her stomach upset. While in Iceland she was able to drink it with no problem. I wonder if the reason so many people here have stomach problems with coffee is the way we process it.

Posted On 09/11/2017

jeetmewada

Awesome article its really helpful thanks for sharing with us www.getinfo.ooo/.../heart-attack-home.html

Posted On 10/28/2018

jonatec

The only caveat for me is - never on an empty stomach, I usually drink ground black coffee with food. For some reason, my stomach reacts if I drink coffee on its own. Is this a common reaction to coffee?

Posted On 06/26/2018

Michael_Czajka

Interestingly coffee makes insulin sensitivity worst in the short term... but better in the long term:

care.diabetesjournals.org/.../2990

:-)

pk238789

"Place 1 tablespoon of MCT oil in a small food processor.... Process for 20 to 30 seconds...]"

My \$10 foamer from Jet does the blending in my cup. Light and ez. No cleanup.

Posted On 09/24/2017

nicknorwood

Hey there nice supportive coffe article but I'm mildly concerned when I don't drink my coffee in the morning I am mildly concerned over that mild headache caffeine withdrawal. I would appreciate your perspective on this it might be a good subject for an article about how to avoid The caffeine withdrawal headache. Thanks so much for what you do. Sincerely Nick

Posted On 09/17/2017

zealea

I love my morning coffee. Presently in a quart mason jar, I add: 8 gr. cacao butter, 12 gr Kerrygold butter, 10 gr. org. coconut oil (I do the Cronometer) + a pinch of pink salt, 1/16 tsp potassium powder, stevia glycerite and about 16 oz. of brewed organic coffee. I use a stick blender as there are no heat issues! In my travels I take the jar and the stick blender along. I can live without the coffee fairly easily, don't get headaches! There have been periods of time when I gave it up while having babies or heard I shouldn't drink it, but I see no reason anymore to give it up and use slightly more than I used to due to the precedence of thumbs up on consuming it. Especially in light of iron blocking!

mpk3149

My pre-workout coffee also contains raw cocoa powder, turmeric, ginger, cinnamon, cardamom, cayenne and cordyceps. I sweeten it a bit with blackstrap molasses, and add some coconut oil. Potent stuff, really gets me going.

Posted On 09/11/2017

benrock88

Thanks for this article, but is it possible that coffee is good for you, but it is not good for everybody? I, for one, am not a statistic and do not wish to become a statistic before I die. If I listen to my body and tell myself the truth, coffee is not good for me, but this does not mean to me that it is not for you. I prefer green tea, certain herbal teas, or seltzer water, if not water.

Posted On 09/11/2017

chieromancer

A note of caution when making Keto coffee. Avoid using a conventional blender. The bases are usually made of plastic and the hot coffee will crack the base and you could be sprayed with hot liquid while lifting the carafe from the blender. A Ninja-style blender works well. Just be advised the coffee will stain the plastic, but shouldn't affect you're ability to use if for other things. I do recommend this style coffee as it's absolutely delicious.

hoplitex

This junkie here's been given the green light! Kale: bad. Coffee: good. Hallelujah :9 Bring it, Klaus! I'm ready for ya!!!

Posted On 02/21/2024

cat67989

I know! I was saddened by the kale article, though. I put it in my smoothie from time to time.

Coffee is a complex beverage that contains more than 1000 described phytochemicals, which are responsible for its pleasant flavor, aroma and health-promoting properties. The five most abundant bioactive components in green coffee are (I) caffeine, which has been positioned by numerous studies as a protective agent of cell membranes against oxidative damage, with anticancer activity and anti-inflammatory effects; (II) polyphenols, which can cause a variety of important bioactivities with beneficial effects on human health; (III) trigonelline, which has hypoglycemic, neuroprotective, antitumor (antiinvasive), antibacterial, and antiviral activities; (IV) Chlorogenic acids, the most important class of polyphenols, which can be grouped into caffeoylquinic acids, feruloylquinic acids and di-caffeoylquinic acids, all of which are known to have powerful antioxidant, anticancer, anti-inflammatory, antibacterial, antipyretic effects, hepatoprotective and neuroprotective and can help prevent retinal degeneration, obesity and hypertension; and (V) cafestol and kahweol, the main diterpenes in coffee that have demonstrated anti-inflammatory, hepatoprotective, anticancer (inducing tumor cell apoptosis and antiangiogenesis), antidiabetic, and antiosteoclastogenic activities.

the improvement of blood pressure, plasma lipids and body weight (thus contributing to the improvement of the risk components of the Metabolic Syndrome) and benefits for cognitive functions.

www.hindawi.com/.../4420479 (2021) www.tandfonline.com/.../10408398.2021.1948817 (2023) www.sciencedirect.com/science/article/abs/pii/B9780128238110000067 (2023)

This study summarizes all the possible outcomes of coffee consumption on human health. The most common benefits of coffee consumption include increased agility and mood stability. It has been reported to reduce the risk of developing depression, type 2 diabetes, CVD, several types of cancer including liver cancer, metastatic prostate cancer, colon cancer, malignant melanoma and endometrial cancer, some neurodegenerative disorders such as. Alzheimer's and Parkinson's diseases, liver fibrosis and cirrhosis, as well as general and cause-specific mortality and improves musculoskeletal activity. Coffee is also known to influence the length of a person's life, as it has an inverse relationship with telomere length.

It also prevents the formation of gallstones. The most common possible negative effects of coffee consumption on human health are heartburn, diuresis, and addiction. Pregnant and postmenopausal women are also advised to discontinue coffee use. Overall, coffee has a host of health-protective effects in humans, resulting in fewer hospitalizations and less mortality. fcs.wum.edu.pk/.../18 (2021) Tea and coffee may be effective in the prevention and treatment of numerous metabolic disorders, including metabolic syndrome, cardiovascular disease, type 2 diabetes, and obesity. www.mdpi.com/.../htm (2019) www.biomed.cas.cz/.../70_161.pdf (2021)

Posted On 02/22/2024

Kippers

Kicking Horse organic coffee for me here in Ontario. Every day!

Posted On 02/21/2024

TruthseekJT

Coffee is healthy. My favorite part is the acrylamides. I also like to drink it out of a Styrofoam cup or paper cup loaded with forever chemicals! Consuming coffee is one of the ways I ensure my toxin load stays high... I've never had a cup of this trash in my life, & I never will. 100% of the people I personally come into contact with, have to drink it just to make it to the finish line each day due to their poor lifestyles.

In general, studies published in recent years have shown negative associations between coffee consumption and the risk or development of different types of cancer, including breast, prostate, oral, oral and pharyngeal, melanoma, skin, and non-melanoma skin cancers. , kidney, gastric, colorectal, endometrial, liver, leukemic and hepatocellular carcinoma, brain and thyroid cancer, among others. In contrast, only a few publications demonstrated a dual association between coffee consumption and bladder, pancreatic, and lung cancer. In this review, oral and pharyngeal cancer, melanoma, skin and non-melanoma skin, renal, gastric, colorectal, endometrial, liver, leukemic and hepatocellular carcinoma, brain and thyroid cancer, among others, are summarized.

The mechanisms of action of coffee depend on the effects of its components, including chlorogenic acids, polyphenols, terpenoids, alkaloids and other phytochemicals. Caffeine may contribute to some coffee-induced responses, but there are studies showing similar health benefits in people who consume caffeinated or decaffeinated coffee. There is evidence that the antioxidant activity of coffee, which activates Nrf2, may be an important mechanism of action. However, since Nrf2 exhibits health-protective and drug-resistant activities, other cellular context-dependent factors may also be important.

There is also evidence that coffee's protective effects on the gut and decreased risk of colon cancer may be due to its activity as an AhR ligand. Additionally, some of the coffee components bind to the orphan nuclear receptor NR4A1 in interactions with this receptor. Overall, these mechanisms, together with possible epigenetic pathways and modulation of gut microbiota/microbial metabolites, contribute to the health benefits of increased coffee consumption, and this suggests that clinical applications of coffee extracts, www.hindawi.com/.../4420479 (2021) www.mdpi.com/.../2706 (2023)

mei9282

I began drinking coffee young. A little cream and sugar secretly from my great-grandmother upset my parents: a cup or more for breakfast as a teen. When I lived in the USA, if I didn't have a cup by 9 am I would have a headache all day. It would take a month without coffee for the headaches to stop. That does not happen here in Colombia. If I have a cup or five or not, makes no difference, headache-wise, here. What additive is in coffee roasted in the USA that isn't present here?

Posted On 02/21/2024

jef9075

My guess is the coffee you drink living in Columbia is a lot fresher. A lot of the coffee sold in the USA probably contains mycotoxins from improper storage. Mold/mycotoxins is said to be a big problem with coffee that is not usually discussed. I don't work for Dr. Mercola, but a big reason I purchase his coffee is because every batch is tested for mycotoxins in addition to being certified organic. Biodynamic (Demeter certified) is the way to go.

Posted On 02/21/2024

hoplitex

A former coworker uttered this memorable line, "I like my coffee the way I like my women: . . . " . . . " silent." :9 ------ Two uses for spent coffee grinds and filters: (1) spent coffee grinds can be used to absorb and reduce odors in used items purchased online (remember to sequester the item from the spent grinds; clean newsprint works for this somewhat less well), in the trash, etc., (2) rinsed, dried, spent coffee filters can be used to absorb residual grease on dishes and the stove top, potentially reducing "Fatberg" grease in the plumbing system and saving on paper towels.

GoldCoaster

Pity about the pathetic masochists first sentence, saying women, who are human like you, shouldn't talk. Completely unnecessary and nothing to do with the topic.

Posted On 02/21/2024

ecr3977

I've always thought the coffee deal was blown way out of proportion. It's said that because it's a diuretic it dehydrates the body and for every cup consumed, one needs to drink 2 glasses of water. For me, I drink the best quality organic bean I can find, at about 12oz a day and drink my 8 glasses of water. Everything in moderation is how I attempt to live.

Posted On 02/21/2024

GoldCoaster

I only drink organic coffee due to coffee's heavy spraying. Glad to hear my 4 cups aren't too much. Adding honey doesn't cause tooth decay or raise blood sugar. Studies on diabetics didn't show any adverse effects. Listening to Paul Saladino's podcast on coffee, he lists a lot of bad effects of the bean juice and puts you right off it. Dave Asprey adamantly dismissed his concerns outright in an interview, saying multiple studies show it's good for you. Paul just laughed, to keep things cordial. Every naturopath tells you to not drink it. Paul's info was disturbing, but I need my coffee and LOVE the taste.

janFarb0730

All these studies were probably influenced and funded by huge billion dollars coffee industry. Coffee contains caffeic acid and chlorogenic acid that have been found to damage DNA at levels present in a single cup. Roasted coffee is known to contain 826 volatile chemicals, 21 have been tested chronically and 16 are rodent carcinogens. Acrylamide is yet another downside of coffee. It's formed during the roasting of many foods and it's found in cigarette smoke. So, how can coffee be good for our health? Personally, I can't drink coffee at all as the caffeine in coffee usually would trigger an anxiety attacks.

Posted On 02/21/2024

billstri

What is the definition of a cup of coffee? For example, is it one tablespoon of grounds or two? It is 4 ounces, 6 ounce, or 8 ounces? I drink mine weak but others I know make it 3 times stronger in the amount of grounds they use. Seems like drinking warm coffee lowers stress, but I don't know why.

Posted On 02/21/2024

lee35710

Excellent question to which I have not found an answer. The traditional "cup" used to be 5 oz. I read that somewhere. Now whenever I hear or read an article about coffee all they say is a "cup". Well, doesn't it matter what size cup that is? are they talking 8 oz (liquid measure "cup") or traditional 5 oz or what. And how much to use? And how does that affect the caffeine concentration? I make mine to my taste preference, which most people find too weak.

bchristine

I'm not a coffee drinker (I don't even like the smell of it), but I have heard it's ex-important to buy quality organic due to the pesticides.

Posted On 02/21/2024

wareagle82

Coffee is practically its own food group.

Posted On 02/21/2024

nan5159

Great news. Upon reflection coffee drinkers seem happier than tea drinkers to begin with. And coffee seems to make anyone happier, as discussed here. Being happy will likely extend anyone's life. To put a positive spin on it, maybe native Hawaiians can't get happier than they already are :0).

Posted On 02/21/2024

GoldCoaster

Tea contains calming thionine, but I don't like it, love coffee.