Caffeine's effects on health [1]

Hi Alice,

I drink a lot of Diet Coke in one day. I would guess I would finish off three or four two-liter bottles in one day. I am wondering what the effects of the caffeine are doing to my body. (I feel fine.) Sometimes I would drink caffeine-free soda. I'm very confused about if caffeine is good or bad for you, as well. And do I get enough sleep as well? I know I must be addicted to the caffeine by now! And is that bad for me? Thank you.

? addicted caffeine drinker

Answer

Dear addicted caffeine drinker,

While caffeine in reasonable quantities is not bad for you, based on your current intake, moderation might be a word to consider if you're thinking of revising your caffeine consumption. Caffeine belongs to a group of stimulants called xanthines. After drinking a caffeinated beverage, the trademark pep many people seek reaches its highest point within 30 to 60 minutes; that boost may keep you going for four to six hours. Caffeine is mildly addictive, as you already know. Maybe you were tipped off to this because you've experienced some of the signs of withdrawal from caffeine:

- Sleepiness
- Feeling overtired (from not having had any caffeine to energize you)
- A terrible headache (when you abruptly stop having caffeine regularly)

About four out of five Americans have some caffeine on any given day, the average amount being about 200 milligrams a day (approximately equivalent to what's found in one to two eight ounce cups of coffee, three to four twelve-ounce cans of caffeinated soda, or four eight ounce cups of tea). Since one twelve-ounce serving of a diet cola beverage has about 45 milligrams of caffeine, and you're consuming three to four two-liter bottles of it a day, you're getting anywhere from 675 to 900 milligrams of caffeine a day?far more than the average American gulps.

But does above-average consumption mean you're getting too much caffeine? It depends on the person; often times, you'll know when you've had more than enough if it makes you feel:

- Anxious
- Excitable
- Restless
- Dizzy
- Irritable
- Unable to concentrate
- Gastrointestinal (GI) aches
- Headaches that don’t seem to go away
- Trouble with sleeping

These are among the most common of caffeine’s effects on our bodies when taken in high doses (i.e., more than eight eight-ounce cups of coffee a day), but they can certainly occur from lesser amounts as well. Many are the result of caffeine’s stimulant effect.

As for caffeine’s impact on health and disease, these relationships have been less clear. Researchers have studied whether different amounts of caffeine can affect one’s risk for a number of health conditions. Although definitive evidence is lacking, too much caffeine could increase the possibility of osteoporosis later in life. Since caffeine is a diuretic (makes your body expel water), it can increase calcium loss in the urine. For every 150 milligrams of caffeine (approximately one eight-ounce cup of coffee or two to three twelve-ounce cans of caffeinated soda), approximately two to three milligrams of calcium is excreted out in the urine. This loss can add up and could be detrimental for your bones, particularly if your diet is already insufficient in calcium. If you must have your caffeine, bone up on calcium by adding at least two tablespoons of milk to each cup of coffee ? enough to offset the slight calcium loss from this moderate amount of caffeine ? in addition to getting your recommended daily intake of calcium. Check out the National Institutes of Health site [2] for recommendations.

Results have been inconclusive or inconsistent in definitively linking caffeine with the incidence of various cancers, fibrocystic breast disease, PMS, and birth defects. More research is needed, but current evidence suggests no increased risk for difficult conception, miscarriage, and delivery of low birth weight babies as long as caffeine intake is low (less than 150 milligrams a day), while more than 300 milligrams a day may elevate these risks. There is more uncertainty regarding the risks of moderate caffeine intake (150-300 mg/day). As a precaution, the Food and Drug Administration (FDA) recommends women eliminate or cut down on caffeine if they are pregnant or planning to become pregnant.

Aside from the caffeine in your diet soda of choice, your teeth may be reeling from all of the acid that is present in soda. Check out Pop versus coffee [3] for more information.

Based on the above information, it seems that your health could benefit by taking in less caffeine. You may want to consider gradually switching over to a diet cola beverage that’s caffeine-free, or at least alternating between the two, and making sure to drink plenty of water every day to help minimize withdrawal symptoms. Don’t forget about drinking enough low-fat or skim milk and juice, which provide the vitamins, minerals, and other nutrients your body needs that soda doesn’t.

For the caffeine contents of various foods and drinks, read Caffeine content [4]. Aiming for a moderate level of caffeine consumption (up to 400 mg daily) might be a worthy goal in your case. However, there is no need to quit caffeine cold-turkey. Gradually reducing your consumption can help you avoid caffeine withdrawal symptoms and allow time to adjust to a new beverage regimen. Cheers!
Related questions

Getting off colas, sodas, pop, fizz... oh, whatever! [7]
Risks of aspartame? [8]
Does caffeine raise blood pressure? [9]
Is decaffeinated coffee safe to drink? [10]

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