



Caffeine Intake:

How much to actually consume?

Enjoy a hot mug of coffee or caffeinated tea as part of the morning routine or as a way to help wake up and start the day?

Do you continue to drink energy drinks or soda throughout the day to stay motivated and beat post-lunch sleepiness?

If this sounds familiar, how much caffeine are you having, and is this something to worry about?

WHAT IS CAFFEINE?

Caffeine is a chemical that occurs naturally in some plants, such as coffee beans, tea leaves, and cacao pods that are used to make chocolate. Caffeine can also be manufactured and added to medicines, foods, or beverages. Caffeine is a natural stimulant, which means it increases brain and nervous system activity and can make one feel more awake and alert. It is also a mild diuretic, which means it helps the body get rid of extra salt and water with more frequent urination. Because of this, caffeinated drinks shouldn't be the only source of hydration. Another important thing to note is that caffeine can remain in the system for a while. It can take the body 4-6 hours to metabolize only half of the caffeine consumed, so be careful drinking it before bed!

WHAT PRODUCTS TYPICALLY CONTAIN CAFFEINE?

Most of the caffeine we consume comes from beverages. The amount of caffeine in different drinks can vary greatly, but below are a few general guidelines the US Food and Drug Administration (FDA) provides:

- An 8-ounce cup of coffee: 80-100 mg
- A 12-ounce can of cola: 35-55 mg
- An 8-ounce energy drink: 40-250 mg
- An 8-ounce cup of tea: 30-50 mg
- A 1-ounce square of dark chocolate: 12 mg

A good general rule, if making a drink at home, is to use a cup or mug with clearly marked ounces to better estimate caffeine intake. Many energy drinks will now provide suggested serving size and/or caffeine per serving, although it is not required as part of the food label.

WHAT ARE THE SIDE EFFECTS OF BEING OVER-CAFFEINATED?

According to the US Department of Health and Human Services, evidence shows that for most adults, eating or drinking up to 400 milligrams of caffeine per day is not associated with increased risk of major chronic diseases in healthy adults. However, there is wide variation in individual sensitivity to the effects of caffeine and how fast bodies break it down, so it is important to pay attention to body signals. Some signs of having more caffeine than you can tolerate are:

- Restlessness, shakiness, or jitters
- Insomnia
- Anxiousness
- Headaches
- Dizziness
- Rapid heart rate
- Upset stomach
- Dehydration

It may be beneficial to drink or eat caffeine earlier in the day, give the body time to process in between consuming caffeinated products, and have caffeine with food and water in order to reduce the likelihood of experiencing symptoms.

WHO MIGHT NEED TO LIMIT CAFFEINE INTAKE?

MedlinePlus recommends speaking with your healthcare provider about limiting or avoiding caffeine if you:

- Are pregnant or breastfeeding
- Have a sleep disorder
- Have migraines or chronic headaches
- Have anxiety



- Have Gastroesophageal Reflux Disease (GERD) or ulcers
- Have arrhythmia or high blood pressure
- Are taking certain medications or supplements
- Are a child or adolescent

Caffeine can be beneficial for increasing energy levels and can be used as a healthy way to help stay productive throughout the day. However, too much caffeine can make some feel sick or harm people with certain health conditions. Remember to consider the caffeine content in food or drink servings and stay connected to how your body is feeling after having caffeine. Contact a healthcare provider if you have questions about whether it is safe to eat or drink caffeine regularly.

Margaret Elliot is an intern in the MSU Dietetic Systems Leadership program. Reviewed by MSU Extension Food and Family Specialist Brianna Routh, PhD, RDN.

