Caffeine

What is Caffeine?
Caffeine is found naturally in the leaves, seeds, and fruits of more than 60 plant species worldwide. It is added to some beverages and foods for flavor.

People have enjoyed caffeinated beverages since ancient times. Caffeine is a mild central nervous system stimulant that provides the safe kick that some people need to get started. It can help to fight fatigue, boost physical endurance, and enhance mental abilities and mood.

What Products Contain Caffeine & How Much?

<table>
<thead>
<tr>
<th>Milligrams of Caffeine</th>
<th>Typical</th>
<th>Range*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Coffee (8-oz. cup)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brewed, drip method</td>
<td>85</td>
<td>65-120</td>
</tr>
<tr>
<td>Instant</td>
<td>75</td>
<td>60-85</td>
</tr>
<tr>
<td>Decaffeinated</td>
<td>3</td>
<td>2-4</td>
</tr>
<tr>
<td>Espresso (1 oz. cup)</td>
<td>40</td>
<td>30-50</td>
</tr>
<tr>
<td><strong>Teas (8-oz. cup)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brewed, major U.S. brands</td>
<td>40</td>
<td>20-90</td>
</tr>
<tr>
<td>Brewed, imported brands</td>
<td>60</td>
<td>25-110</td>
</tr>
<tr>
<td>Instant</td>
<td>28</td>
<td>24-31</td>
</tr>
<tr>
<td>Iced (8-oz. glass)</td>
<td>25</td>
<td>9-50</td>
</tr>
<tr>
<td><strong>Some soft drinks (8 oz.)</strong></td>
<td>24</td>
<td>20-40</td>
</tr>
<tr>
<td><strong>Cocoa beverage (8 oz.)</strong></td>
<td>6</td>
<td>3-32</td>
</tr>
<tr>
<td><strong>Chocolate milk beverage (8 oz.)</strong></td>
<td>5</td>
<td>2-7</td>
</tr>
<tr>
<td><strong>Milk chocolate (1 oz.)</strong></td>
<td>6</td>
<td>1-15</td>
</tr>
<tr>
<td><strong>Dark chocolate, semi-sweet (1 oz.)</strong></td>
<td>20</td>
<td>5-35</td>
</tr>
<tr>
<td><strong>Baker's chocolate (1 oz.)</strong></td>
<td>26</td>
<td>26</td>
</tr>
<tr>
<td><strong>Chocolate-flavored syrup (1 oz.)</strong></td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

*Due to brewing method, plant variety, brand, etc.

Source: *Everything You Need to Know About Caffeine*, by the International Food Information Council Foundation.

Coffee is the most popular item consumed at breakfast in the United States. It is the main dietary source of caffeine for adults, followed by soft drinks, tea and chocolate. Soft drinks are the primary source of caffeine for children aged 2 to 17 and have overtaken tea as the second source of caffeine for young and middle-age adults.

Read product labels and be aware of caffeine’s numerous sources. It is also found in: non-cola soft drinks like root beer and orange soda; chocolate and coffee-flavored candy; caffeinated water; many over-the-counter and prescription drugs; "energy drinks," which typically contain about 80 mg of caffeine; and a growing number of foods. The amount of caffeine in food products varies depending on serving size, type of product and method of preparation.

Average Consumption
Over the past 50 years, the average coffee consumption of adults has decreased from 16 gallons to 9 gallons per person annually. Recent research shows that almost 90% of adults and male teens, as well as 76% of children consume some caffeine. Currently the average amount of caffeine in an adult’s diet is about 200 milligrams (mg) per day. A child consumes about one-fourth that amount.

According to leading medical and scientific experts, caffeine in moderate amounts is safe for most healthy individuals. The keys to caffeine intake are moderation and common sense. Most healthy adults can enjoy 200-300 mg of caffeine daily without any health problems. This is equal to 2 or 3 cups of coffee or up to 60 ounces of caffeinated cola.
Caffeine & Health

Despite many years of research, caffeine’s effects on health are still unclear. Caffeine does not cause any physical harm to most people who consume moderate amounts.

No scientific evidence has linked caffeine to developing any of the following health risks: cancer (any type); cardiovascular disease; ulcers; inflammatory bowel disease; fibrocystic breast disease (benign fibrous lumps); birth defects; infertility; or osteoporosis* (bone loss).

*Osteoporosis is a disease of the bone that causes a loss in density, making bones weak and brittle.

Diuretic: Caffeine has a diuretic effect on the body, increasing water loss through urination. However, the water consumed in a cup of coffee, a glass of tea or soft drink balances out the diuretic effects.

Blood Pressure/Heart Beat: Caffeine can make the heart beat faster and is a possible contributor to an irregular heart beat. Caffeine does not cause or worsen heart disease. It does not cause high blood pressure. After caffeine intake, some sensitive individuals can experience a temporary rise in blood pressure equal to climbing a flight of stairs. This increase only lasts for a few hours. If you have high blood pressure, ask your doctor about caffeine consumption.

Blood Cholesterol: There is no scientific evidence that caffeine changes blood cholesterol levels. However, always brew coffee through a paper filter. People in other countries who drink boiled, unfiltered coffee do experience a rise in blood cholesterol levels.

Pregnancy/Breastfeeding: Moderate caffeine consumption does not reduce fertility in women, and it does not have adverse effects on pregnancy or outcome. Pregnant women should limit caffeine intake to the equivalent of 1 to 2 cups of coffee daily. When breastfeeding, women should limit coffee consumption to under 3 cups per day. Drinking more than 3 cups per day can lead to increased wakefulness and poor feeding for the baby.

Bone Health: The relationship between caffeine and bone health is a relatively new area of study. It has been shown that caffeine intake can cause a slight and temporary rise in the amount of urinary calcium loss. On the other hand, studies show that getting enough calcium in the diet offsets the potential effect of caffeine on bone density.

An adequate calcium intake, especially during adolescent years, is the best nutritional insurance for strong, healthy bones. Dietary calcium is found in dairy products, deep-green leafy vegetables, and fish with edible bones.

Women should consume caffeine in moderation, while getting at least 3 cups of fat-free or low-fat milk or an equal amount of low-fat yogurt and/or low-fat cheese every day.

A recent study followed 60 to 70-year-old women’s caffeine intake for 3 years and found that those who drank nearly 3 cups of coffee a day could experience spinal bone loss. Researchers believe that older women’s increased bone thinning is due to their inability to offset the natural calcium loss that caffeine causes.

Disease Prevention: More research must be done before caffeine can be considered a "disease preventer." However, caffeine may help protect against gallstones, cavities, type 2 diabetes, and Parkinson’s disease. In addition, it may serve as an analgesic and reduce headache pain, as well as help to decrease asthma attacks.

Caffeine Sensitivity

Some people are more sensitive to caffeine than others. Many individuals can drink several cups of coffee with no effects, while others feel the effects of just one cup.

Caffeine sensitivity is affected by such factors as: the amount you drink; the frequency; your weight; and your physical condition, including pregnancy. Although caffeine does not cause the urinary incontinence that often accompanies aging, adults with this condition may experience a greater degree of "urgency" for a short time after consuming caffeine. In addition, older people generally take longer to clear caffeine from their bloodstreams.
Avoid Caffeine if You:

- Have jitters, nervousness, trembling, irritability, or can’t sleep*
- Have migraine headaches
- Have heartburn** and peptic ulcers
- Have anxiety or panic attacks
- Are prone to depression
- Take antidepressant medications***

*Some people report that caffeine delays or causes poorer quality sleep, yet other individuals’ ability to sleep is not affected.

**It is not the caffeine but other substances in coffee and tea that stimulate digestive acids and cause heartburn. Both regular and decaf coffee can irritate the stomach.

***Caffeine can make some antidepressant medicines less effective.

Keep track of how much caffeine you are consuming. Contact your doctor or a registered dietitian if you are experiencing any of these symptoms and you think caffeine is causing them.

Young children are no more sensitive to caffeine than adults, and they eliminate caffeine from their bodies twice as fast as adults do. Scientific studies show no evidence that caffeine causes children to become hyperactive or to develop attention deficit disorder. Of greater concern is what other nutritious foods that caffeinated beverages may be replacing in children’s diets. For example, many children drink soft drinks at mealtimes rather than nutritious milk or juices.

Caffeine Quick Facts

If caffeine is abruptly discontinued, for a day or two you may experience mild withdrawal symptoms such as a headache, fatigue or drowsiness. To avoid this, slowly cut back on your consumption over several days. Then get in the habit of drinking water instead of some of the coffee in your diet.

A cup of coffee does not help to sober up a person who has been drinking alcoholic beverages.

Gourmet coffee drinks put more into the body than just caffeine. They add almost 200 calories to the daily calorie intake, primarily from whole milk and whipped cream. If you like a latte or café mocha in the morning, reduce your coffee calories by switching to skim milk or by passing on the whipped cream.

Drinking a cup of coffee or tea before exercising may help in weight loss, because it speeds up your metabolism. In addition, caffeine helps to free stored body fat so it can be burned for energy.

Over 1,000 prescription and over-the-counter drugs contain caffeine as an ingredient.

Sources:

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