Caffeine is a substance found mainly in coffee, tea, and kola nuts. It acts as a stimulant and diuretic, increasing urine production. It blocks sleep-inducing chemicals in the brain, keeping the body more alert, and increases the production of adrenaline. Caffeine boosts the effects of neurotransmitters, dopamine and serotonin, which improves mood. It also boosts levels of acetylcholine, a neurotransmitter that improves short-term memory.

### The Facts
- 9 out of 10 Americans consume some type of caffeine regularly, making it the most popular behavior-altering drug.
- 450 million cups of coffee are consumed in the US everyday.
- Only takes about 10 minutes for caffeine to kick in and reaches its maximum effect in about 45min.

### Recommended Amount
- Recommended amount is 200-300 mg a day (Equivalent to 2-3 cups of 8 ounces of coffee)

#### Moderate Intake (200-300mg)
- Increased alertness
- Increased heart rate
- Increased body temperature
- Increased acid in digestive system

#### High Intake (500-800mg)
- Headaches
- Anxiety
- Depression
- Restlessness/nervousness
- Upset stomach
- Increased urination

### Spilling the Beans on Caffeine

#### Weight Loss
The Food and Drug Administration removed caffeine from over-the-counter diet aids in 1991 because research showed it did not have long term effects on weight.

#### Calories Burned
Caffeine is thought to stimulate thermogenesis — one way your body generates heat and energy from digesting food. Caffeine may increase your body's ability to burn calories. However, caffeine's role in thermogenesis probably isn't enough to result in significant weight loss.

#### Appetite Suppressant
Caffeine may act as an appetite suppressant. However, while studies have shown that some people eat less after consuming caffeine, this effect is brief and does not lead to significant weight loss.

#### Athletic Performance
A recent study found that caffeine may actually decrease blood flow to the heart during exercise which can hamper performance. Research has shown that caffeine has been proven to only enhance athletic performance of well trained athletes in a lab.

#### Pregnancy
A few studies have shown that there may be an increase in miscarriages among women who consume more than 200 mg a day. Other outcomes include pre-term labor and low-birth weight babies. As a precaution, it is safer to avoid caffeine altogether while pregnant.

#### Alcoholic Drinks
Caffeine has no effect on the metabolism of alcohol by the liver and thus does not reduce blood alcohol concentrations (it does not “sober you up”) or reduce impairment due to alcohol consumption.
The Buzz on Caffeine

<table>
<thead>
<tr>
<th>Product</th>
<th>Amount</th>
<th>Caffeine</th>
<th>Product</th>
<th>Amount</th>
<th>Caffeine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Espresso Coffee</td>
<td>8 oz</td>
<td>502 mg</td>
<td>Excedrin</td>
<td>Per capsule</td>
<td>65 mg</td>
</tr>
<tr>
<td>Starbucks Grande Coffee</td>
<td>16 oz</td>
<td>400 mg</td>
<td>Mountain Dew</td>
<td>12 oz</td>
<td>55 mg</td>
</tr>
<tr>
<td>Starbucks House Blend Coffee</td>
<td>16 oz</td>
<td>259 mg</td>
<td>Coca-Cola Black</td>
<td>8 oz</td>
<td>46 mg</td>
</tr>
<tr>
<td>Rockstar Zero Carb</td>
<td>16 oz</td>
<td>243 mg</td>
<td>Vitamin Water Energy</td>
<td>20 oz</td>
<td>42 mg</td>
</tr>
<tr>
<td>Starbucks double shot</td>
<td>6.5 oz</td>
<td>130 mg</td>
<td>Green tea</td>
<td>6 oz</td>
<td>40 mg</td>
</tr>
<tr>
<td>7 Eleven Big Gulp Diet Coke</td>
<td>32 oz</td>
<td>124 mg</td>
<td>Snapple, lemon</td>
<td>12 oz</td>
<td>38 mg</td>
</tr>
<tr>
<td>Crystal Light Energy</td>
<td>16 oz</td>
<td>120 mg</td>
<td>Coca-Cola</td>
<td>12 oz</td>
<td>34.5 mg</td>
</tr>
<tr>
<td>Brewed Coffee (Drip)</td>
<td>5 oz</td>
<td>115 mg</td>
<td>Midol</td>
<td>Per capsule</td>
<td>32 mg</td>
</tr>
<tr>
<td>Red Bull</td>
<td>12 oz</td>
<td>115 mg</td>
<td>Dark Chocolate</td>
<td>1 oz</td>
<td>20 mg</td>
</tr>
<tr>
<td>Chai Tea</td>
<td>12 oz</td>
<td>100 mg</td>
<td>Hot Chocolate</td>
<td>8 oz</td>
<td>5 mg</td>
</tr>
<tr>
<td>Starbucks tall latte</td>
<td>12 oz</td>
<td>75 mg</td>
<td>Milk Chocolate</td>
<td>8 oz</td>
<td>4 mg</td>
</tr>
<tr>
<td>Ben &amp; Jerry’s Coffee Buzz Ice Cream</td>
<td>8 oz</td>
<td>72 mg</td>
<td>Decaffeinated Coffee</td>
<td>8 oz</td>
<td>2-4 mg</td>
</tr>
<tr>
<td>Iced Tea</td>
<td>12 oz</td>
<td>70 mg</td>
<td>Sprite</td>
<td>12 oz</td>
<td>0 mg</td>
</tr>
</tbody>
</table>

Killing the Buzz on Caffeine

- **Switch to decaffeinated** beverages or alternate between caffeinated and decaffeinated beverages throughout the day.
- **Reduce the number** of caffeinated drinks you have every day. If you have coffee in the morning and a soda in the afternoon, try skipping the soda and replace it with water or juice.
- **Brew tea** for a shorter time. The less time you brew it, the less caffeine it will contain. Try herbal teas which usually don't contain caffeine.
- **Watch out** for soft drinks and energy drinks which may contain added caffeine. Look to see if the caffeine content is listed on the back of the nutrition label or within the ingredients section.
- If you are trying to **cut out caffeine**, and feel yourself getting a headache, try having a smaller amount of caffeine to alleviate the headache.
- Some over-the-counter medications contain large doses of caffeine so **check the labels** first to see the amount.