

Caffeine in Pregnancy

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Caffeine is a stimulant found in many foods, beverages and some medications. Caffeine is naturally produced by a variety of plants and is added to some foods and beverages for flavor. The main source of caffeine for most adults is coffee.

The March of Dimes recommends that women who are pregnant or trying to become pregnant consume no more than 200 milligrams (mg) of caffeine per day (equal to about one 12-ounce cup of coffee a day). A new study has found that women who consume 200 mg of caffeine or more a day are twice as likely as women who consume no caffeine to have a miscarriage (1).

The source of the caffeine does not matter; the risk appears to be the same for caffeine from coffee, tea, sodas and other foods and beverages. Women should be aware of which beverages and foods contain caffeine so they can limit their intake when they are pregnant or trying to become pregnant.

What foods and beverages contain caffeine?

Caffeine is found in coffee, tea, some soft drinks and chocolate. Coffee-flavored products, such as yogurt and ice cream, contain caffeine, as do products such as chocolate syrup and hot cocoa.

The amount of caffeine in foods and beverages varies widely. The brand of coffee or tea, how it is prepared, the type of beans or leaves used, and the style of serving (espresso, latte and others) also affect caffeine content. In general, brewed coffee contains the highest amounts of caffeine, with an average of 137 mg per 8-ounce cup (2). Instant coffee contains about 76 mg per 8-ounce cup (2). A 12-ounce can of caffeinated soda contains about 37 mg (2). Chocolate generally contains low amounts of caffeine. See the table below for more specific values.

Caffeine Content of Foods and Beverages

Foods and Beverages	Milligrams of caffeine
	(average)
Coffee (8 oz) Brewed, drip	137 mg
Instant	76 mg
Tea (8 oz) Brewed	48 mg
Instant	26-36 mg
Caffeinated soft drinks, such as cola (12 oz)	37 mg
Hot cocoa (12 oz)	8-12 mg
Chocolate milk (8 oz)	5-8 mg

Candy Dark chocolate (1.45 oz bar)	30 mg
Milk chocolate (1.55 oz bar)	11 mg
Semi-sweet chocolate chips (1/4 cup)	26-28 mg
Chocolate syrup (1 tbsp)	3 mg
Coffee ice cream/frozen yogurt (1/2 cup)	2 mg

Source: U.S. Department of Agriculture, 2000

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What medicines contain caffeine?

Some medicines used for pain relief, migraines, colds and delaying sleep contain caffeine. The Food and Drug Administration (FDA) requires that labels of medications list the amount of caffeine that the medications contain. Pregnant women generally should avoid medications containing caffeine and should always check with their health care provider before taking any medication (including over-the-counter medicines) in pregnancy.

Some herbal products, such as guarana, contain caffeine (2). The FDA does not require that herbal products carry a label saying how much caffeine they contain, so amounts can vary greatly. Pregnant women should avoid herbal products because their safety in pregnancy has not been studied.

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How does caffeine affect the body?

Caffeine is a stimulant that increases alertness. It slightly increases blood pressure and heart rate and increases urine production.

Some individuals are more sensitive to caffeine than others. Pregnant women may be especially sensitive to it because they take longer to clear caffeine from the body than individuals who are not pregnant (1). Caffeine may cause some individuals to feel jittery, have indigestion or have trouble sleeping.

During pregnancy, caffeine crosses the placenta and reaches the fetus. Caffeine may decrease blood flow to the placenta, which may harm the baby (1).

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Does caffeine consumption contribute to miscarriage?

There have been many studies on caffeine consumption and miscarriage, but the results have been conflicting. For example, two studies came out in January 2008.

- One found that women who consume 200 mg or more of caffeine daily are twice as likely to have a miscarriage as women who consume no caffeine (25 percent vs. 12.5 percent) (1).
- The other found no increased risk among women who drank modest amounts of coffee daily (between about 200 mg/day and 350 mg/day) (4).

Earlier studies found that only women who consume large amounts of caffeine (500 mg a day or more) are more likely to miscarry (5, 6). Until more is known about the risks of caffeine

consumption in pregnancy, the March of Dimes recommends a cautious approach: Pregnant women should limit caffeine consumption to less than 200 mg a day.

A 2003 Danish study suggested that women who drink four or more cups of coffee a day may be at increased risk of having a stillborn baby (7). Women who drank eight or more cups a day had a 3 times higher risk of stillbirth than women who drank no coffee.

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Does caffeine consumption affect fertility?

Small amounts of caffeine probably don't reduce a woman's chances of becoming pregnant. Most studies have found no effect on fertility when women consume less than 300 mg of caffeine a day. A few studies have found that women who consume more than 300 mg a day may be more likely to have trouble conceiving (8). But, again, this has not been proven.

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Does caffeine affect the newborn?

Some studies suggest that high levels of caffeine consumption may slightly reduce a baby's birthweight (8, 9). However, if caffeine consumption does affect a baby's birthweight, the effect is likely to be very small (8, 9, 10).

Babies of women who consume large amounts of caffeine (more than 500 mg/day) may be more likely to have faster breathing and heart rates and to sleep less in the first few days of life (11).

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Is it safe for a woman to consume caffeine while breastfeeding?

The American Academy of Pediatrics considers it safe for a woman to consume caffeine while breastfeeding (12). However, a small amount of caffeine does get into breastmilk, so breastfeeding women should limit their consumption. Breastfeed babies of women who drink more than two to three cups of coffee a day may become irritable or have difficulty sleeping (12).

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References

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