

The Effects of Caffeine on Kids: A Parent's Guide

By: Mark Corkins, MD, FAAP

A cup of coffee or tea in the morning or an afternoon caffeine pick-me-up is usually fine for most adults. But parents might want to take a closer look at caffeine and other ingredients in the drinks their kids love.

Many popular beverages that kids go to for quick energy have a surprising amount of caffeine. Some drinks have other stimulants, too. These energy-boosting ingredients quickly add up in a smaller body.



Caffeine-related visits to U.S. emergency departments nearly **doubled** (<https://www.epicresearch.org/articles/caffeine-related-ed-visits-although-uncommon-doubled-for-middle-school-and-high-school-aged-children-since-2017>) among middle and high school students between 2017 and 2023. In 2023, **poison control centers** (<https://poisoncenters.org/news-alerts/13414265>) recorded a 24% rise in calls about young people with reactions to energy drinks.

Here's what parents and caregivers need to know about caffeine—and how to guide children and teens toward healthy drinks (</English/healthy-living/nutrition/Pages/Choose-Water-for-Healthy-Hydration.aspx>).

What are the effects of caffeine for kids?

There is no biological need for caffeine. Caffeine is a stimulant (<https://www.fda.gov/consumers/consumer-updates/spilling-beans-how-much-caffeine-too-much>) that boosts alertness, energy and brain activity. Coffee and cacao beans, tea leaves, guarana berries and kola nuts are all natural sources of this drug, but it can also be made in the lab and added to foods, drinks and medicines.

A child's growing body and brain are more sensitive to their stimulation by caffeine.

Caffeine side effects can include:

- Fast or irregular heartbeat (</English/health-issues/conditions/heart/Pages/Irregular-Heartbeat-Arrhythmia.aspx>)
- Elevated blood pressure (</English/tips-tools/ask-the-pediatrician/Pages/Presion-arterial-alta-en-ninos-hispanos.aspx>)
- Rapid breathing
- Anxiety
- Nausea
- Restlessness
- Diarrhea

- Sleep (</English/tips-tools/ask-the-pediatrician/Pages/My-teen-is-having-more-trouble-falling-asleep.aspx>) loss [Back to Top](#)

Caffeine can stay in the body for more than 8 hours (</English/tips-tools/ask-the-pediatrician/Pages/My-teen-is-having-more-trouble-falling-asleep.aspx>), depending on a person's metabolism. When the caffeine wears off, children may have a headache and feel irritable or tired.

Does caffeine harm my child's growth and development?

Caffeine can get in the way of other nutrients that help kids grow. They may eat less fruit, vegetables, lean protein and healthy grains after filling up on soda, energy drinks, protein bars and other ultra-processed foods (</English/healthy-living/nutrition/Pages/are-GMO-foods-safe-for-my-child-AAP-policy-explained.aspx>) with caffeine.

Caffeine affects kids' sleep. Not getting enough sleep (</English/healthy-living/sleep/Pages/healthy-sleep-habits-how-many-hours-does-your-child-need.aspx>) or not sleeping well or long enough can affect thinking, mood, digestion and ability to avoid getting sick. Sleep loss leads to school struggles and robs kids of the energy they need for activities they enjoy.

Are some kids more sensitive to caffeine than others?

We need more research to fully answer this question, but studies suggest the answer is yes.

- Males were more likely (<https://www.epicresearch.org/articles/caffeine-related-ed-visits-although-uncommon-doubled-for-middle-school-and-high-school-aged-children-since-2017>) to visit the emergency department for caffeine-related symptoms than females.
- Kids with heart (</English/health-issues/conditions/heart/Pages/Helping-Children-With-Congenital-Heart-Disease-Stay-Healthy,-Active-%26-Fit.aspx>) or lung conditions may be extra-sensitive to the stimulation of caffeine, since it speeds up breathing and heart rate (</English/health-issues/conditions/heart/Pages/Heart-Disease.aspx>).
- Kids who take stimulant medications (</English/health-issues/conditions/adhd/Pages/Determining-ADHD-Medication-Treatments.aspx>) for attention deficit/hyperactivity disorder (ADHD) or to treat other conditions may have sleep problems, irritability and mood shifts when they consume caffeine.

Is there an age when caffeine is safer for kids?

The American Academy of Pediatrics says avoiding caffeine is the best choice for all kids. Families should keep food, drinks and medicines with caffeine out of reach.

For most adults, having under 400 mg of caffeine (<https://www.fda.gov/consumers/consumer-updates/spilling-beans-how-much-caffeine-too-much>) per day is generally not associated with side effects. Talk to your doctor if you are pregnant or breastfeeding. People with some health conditions or who take certain medications may be more sensitive to caffeine.

Caffeine by the numbers

What counts as a "cup" of coffee varies

Classic coffee mugs hold about 10 ounces. Super-sized coffee drinks are often 16 to 20 ounces and can have up to 490 mg of caffeine (already over the 400 mg level for adults).

Both cold and hot drinks count

Iced, chilled and frozen coffee drinks also contain caffeine. For example, a 13.7-ounce bottled Starbucks Frappuccino has 110 mg of caffeine and a Dunkin' Iced Coffee has 197 mg of caffeine.

Energy drinks can pack a dangerous punch

There might be why so many labels carry warnings that the drink is meant for adults only. They come in fruity, candy-flavored flavors that appeal to kids. Some drinks are sugar-free, but others have a high amount of sugar that can amplify the effects of the drink. Energy drinks with caffeine may also have other ingredients like taurine, guarana, ginseng

Contents of a Sampling of Energy Drinks			
Energy Drink	Size	Caffeine	Sugar
Reign Total Energy	16 oz	300 mg	0 g
Bang Energy Sour Heads	16 oz	300 mg	0 g
Ghost Energy Swedish Fish	16 oz	200 mg	0 g
C4 Popsicle	16 oz	200 mg	0 g
Alani Nu Hawaiian Shaved Ice	12 oz	200 mg	0 g
Celsius Sparkling Fantasy Vibe	12 oz	200 mg	0 g
Rockstar Original	16 oz	160 mg	63 g
Monster Green OG	16 oz	160 mg	54 g
Nos Original	16 oz	160 mg	27 g
Red Bull Original	8.4 oz	80 mg	27 g

Some sodas are a source of caffeine

For example (12-oz serving): Pepsi Zero Sugar (38 mg), Diet Coke (46 mg), Mountain Dew (54 mg) and Mountain Zevia (55 mg).

Caffeine can hide out in foods, too

A 3.5-ounce dark chocolate bar might have anywhere from 50 to 150 mg of caffeine. Ice cream, protein bars, chocolate chips, energy bars and even chewing gum can have hidden caffeine. Nutrition labels do not have to list caffeine content.

Prescription and over-the-counter drugs may have caffeine

Examples include medicines for migraine headaches, menstrual (period) discomfort, nasal congestion or muscle pain.

Caffeine pouches work fast

Caffeine pouches are small packets that are placed in the mouth between the gums and cheek or between the lips. They come in a variety of flavors that appeal to teens. The contents dissolve and the caffeine is quickly absorbed into the bloodstream. The effects are felt in minutes, making it easy to get a sudden, large, and potentially dangerous dose of caffeine. Pouches may contain as much as 200 mg of caffeine. They look like nicotine pouches (</English/health-issues/conditions/tobacco/Pages/Alternative-Forms-of-Tobacco.aspx>), which are restricted for sale to people age 21 years and older. However, there are no age restrictions on the sale of caffeine pouches.

In the video below, learn why it's best for kids to avoid caffeine.

From an accredited US healthcare educator



Watch on

How to help kids avoid caffeine

The best way to steer kids away from caffeine is to talk with them about making healthy choices. Here are some tips to share with your child.

Choose water

It's the best way to stay hydrated and it keeps teeth healthy, too.

Get enough sleep

Caffeine isn't a substitute for lost sleep. It might offer a quick burst of energy, but only sleep can repair your body and refresh your mind. Find out how many hours your teen needs here (</English/healthy-living/sleep/Pages/healthy-sleep-habits-how-many-hours-does-your-child-need.aspx>).

Look at the label

Remind your teen that caffeine is an ingredient in drinks like coffee, iced coffee, soda and energy drinks and food like chocolate, too.

Trust your body

Talk about the signals our bodies send after consuming caffeine. Jittery, nervous feelings could be a sign of too much caffeine.

What to do if your child overdoses

A caffeine overdose can be dangerous. Get medical help right away if your child had a large amount of caffeine and symptoms such as:

- Racing or irregular heartbeat
- Fast breathing
- Body shakes your child can't control (tremors)
- Anxious feelings
- Inability to sit still (hyperactivity)

More information

[Choose Water for Healthy Hydration \(/English/healthy-living/nutrition/Pages/Choose-Water-for-Healthy-hydration.aspx\)](/English/healthy-living/nutrition/Pages/Choose-Water-for-Healthy-hydration.aspx)

- [Performance-Enhancing Sports Supplements: Information for Parents \(/English/healthy-living/sports/Pages/Performance-Enhancing-Substances.aspx\)](#)

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- [How to Reduce Added Sugar in Your Child's Diet: AAP Tips \(/English/healthy-living/nutrition/Pages/How-to-Reduce-Added-Sugar-in-Your-Childs-Diet.aspx\)](#)

About Dr. Corkins



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Last Updated 8/11/2025

Source American Academy of Pediatrics Committee on Nutrition (Copyright © 2025)

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