



Why is caffeine
added to
some drinks?

Manufacturers
add caffeine
because adults
like the alertness
it gives them.
Few of us can
detect any
flavour difference
between
decaffeinated
and regular colas
or drinks.

Caffeine and the Student Body

WHY SHOULD SCHOOLS CARE ABOUT CAFFEINE?

Caffeine has the same stimulant effects in children and teens as it does in adults. It also causes side effects like:

- ✓ Irritability and restlessness
- ✓ Difficulty concentrating
- ✓ Increased need to urinate
- ✓ Afternoon sleepiness

These affects are stronger in children because their bodies are smaller, and the effects can make it harder for them to do well in school. For preteens and teenagers, caffeine combined with up-and-down hormone changes can be particularly difficult for them (and teachers!) to deal with.

WHERE DO STUDENTS GET CAFFEINE FROM?

Caffeine is made in the leaves and seeds of many plants. It's also made in labs. Students get caffeine in some soft drinks and in chocolate, coffee, tea, iced mocha drinks, and some other drinks (look for names such as "energy," "rush," "adrenaline," "bull"). The amount of caffeine is rarely listed on a product label, but the ingredient list will tell you if it has caffeine sources. Some of the natural sources you might see in an ingredient list are:

- ✓ Coffee or coffee beans (not coffee flavouring)
- ✓ Green or black tea leaves
- ✓ Guarana
- ✓ Yerba (also called yerba mate)
- ✓ Cocoa beans

HOW MUCH CAFFEINE COULD KIDS HAVE AT SCHOOL AND BE SAFE?

Health Canada says children may be at greater risk from caffeine than adults, and recommends the following as maximum amounts for safety: Children 7-9 years: 62.5 mg/day, 10-12 years: 85 mg/day. There are no set guidelines for teens, but some sources calculate the safe mark at 2 mg/kg of body weight. However, even low levels of caffeine can affect most students' behaviour. The *Guidelines for Food and Beverage Sales in BC Schools* (2010, BC Ministry of Education & Ministry of Health) recommend that schools only offer choices with less than 15 mg.

WHAT ARE THE SYMPTOMS OF CAFFEINE WITHDRAWAL?

Withdrawal symptoms are typically headaches, irritability and restlessness. Due to changes in hormone levels middle and secondary students can go in and out of caffeine withdrawal without being aware of it - even though the symptoms make it harder for them to do well with school work, friendships and home life. Adults consuming as little as 100 mg of caffeine can experience withdrawal symptoms, so it is likely that children experience withdrawal with much smaller amounts.



Does caffeine affect calcium?

The effect of caffeine on children's calcium health is minimal.

However, studies show that children who drink pop are more likely to consume fewer milk products and have low calcium intakes.

WHAT CAN SCHOOLS DO?

The most important things that schools can do are make sure they offer affordable, healthy beverages and food choices. The *Guidelines for Food and Beverage Sales in BC Schools* (2010, BC Ministry of Education & Ministry of Health) recommend against the sale of any drink or food with more than 15 mg of caffeine per serving.

Sources of Caffeine		
Food or Beverage	Serving Size	Caffeine (mg)*
Colas and some root beers (regular or diet)	355 mL	(1 can) 36-46
Colas (caffeine free) and other soft drinks	355 mL	0
Espresso (from arabica beans)	30 mL	40
Espresso (robusta beans)	30 mL	100
Coffee, variety of brews	350 mL	177-268
Coffee, decaffeinated	350 mL	4
Espresso, decaffeinated	30 mL	5
Frozen mochas ('fast food' versions)	300 mL	35-70
Tea, black or green	240 mL	8-55
Tea, decaffeinated	240 mL	1-4
Iced Tea	varies	15-100
'Energy' Drinks	varies	70-170, may be more
Guarana drinks	355 mL	30-800
Yerba drinks	355 mL	100-200
Chocolate Milk	500 mL	14
Coffee Milk (not coffee-flavoured)	500 mL	50
Hot Chocolate from powdered mix	1 envelope	5
Milk Chocolate	30 g	7
Dark Chocolate	30 g	19-58
Chocolate pudding	145 g	9
Brownies	42 g	10
Coffee Ice Cream	250 mL	0-85
Coffee Yogurt	175 mL	0-33
Chocolate covered coffee beans	3 beans	36

* approximate – for brand name products, check exact amount with manufacturer.



Secondary students cutting back on their caffeine could still enjoy the flavour of coffee in calcium rich drinks like coffee-flavoured milk or decaf lattes...

Secondary students cutting back on their caffeine could still enjoy the flavour of coffee in calcium rich drinks like coffee-flavoured milk or decaf lattes; the caffeine is removed by a variety of approved methods.

FOR MORE INFORMATION

- ✓ Health Canada, "It's Your Health: Caffeine" and "It's Your Health: Safe Use of Energy Drinks."
www.hc-sc.gc.ca/hl-vs/iyh-vsv/food-aliment/index2-eng.php
- ✓ Dietitian Services at HealthLink BC (8-1-1)
www.healthlinkbc.ca
- ✓ Guidelines for Food and Beverage Sales in BC Schools (2010, Ministry of Education and Ministry of Health)
www.bced.gov.bc.ca/health/healthy_eating/food_guidelines/