

Nutrition News

Department of Human Nutrition



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Caffeine Boosts Energy and Sales

Caffeine is naturally occurring in the leaves, seeds or fruits of more than 63 plant species worldwide. Emperors long ago sipped hot tea, and in Africa beans were used as money and consumed as food. Coffee and cocoa beans, kola nuts and tea leaves are the most common sources of caffeine.

Caffeine is added to soft drinks as a flavoring agent. It adds bitterness that modifies the flavors of other components, both sour and sweet, which contributes to the sensory appeal of soft drinks.

Moderate caffeine consumption is about 300 mg per day, or about three cups of coffee or about 60 ounces of caffeinated cola. In late March, the International Food Information Council Foundation released a review on caffeine that stated that moderate amounts of caffeine do not cause adverse health effects in healthy adults, although those with hypertension and the elderly may be more vulnerable. Abruptly discontinuing

consumption of caffeine can lead to mild symptoms of headache, anxiety and insomnia.

Some evidence of health benefits may exist for adults consuming moderate amounts of caffeine. Caffeine consumption may help reduce risk of several chronic diseases such as diabetes, Parkinson's disease, liver disease and some cancers. Caffeine has been reported to improve alertness, aid in concentration and improve energy.

Energy drinks are a growing beverage category popular with many different age groups, especially young adults. The IFIC points out that this is one category to monitor for consumption in coming years. Caffeine-infused drinks represent a 20% dollar sales gain year after year.

Food companies in the United States have introduced over 70 new food products with "energy" in the product description so far this year. Energy snacks are

leading the way, followed by confectionery and breakfast cereals. A New York company introduced caffeine-infused snack chips in two different flavors that contain 140 mg of caffeine in each 1.5-ounce single serving bag. Last year, an Alabama-based food company introduced potato chips with a caution label "not recommended for pregnant or nursing women, young children or anyone who is sensitive to caffeine." The company won't disclose exactly how much caffeine is in the chips, but they say a 3.5-ounce bag is roughly the equivalent of drinking three and a half cups of brewed coffee.

Consumers can get their energy boost from supercharged seeds. Sunflower seeds infused with energy supplements, caffeine, taurine, lysine and ginseng hit the market in 2007 and now come in three new flavors including dill pickle, honey BBQ and salt and pepper. Candy bars have always provided a quick

energy-fix, but one snack food company offers the single-serve “super-charged” candy bar with an added 60 mg of caffeine.

For the healthy adult population, moderate caffeine consumption of 300 mg per day is safe, but are we willing to stop there?

Sources: Supercharged Snacks Energy Trend Moves Beyond Beverages, into Snacks, *Food Business News*, May 13, 2008; Caffeine& Health: Clarifying The Controversies, *IFIC Review*, March 31, 2008; Caffeine & Women’s Health, *IFIC Review*, August 2002, <http://ific.org>.

ITEM	MILLIGRAMS OF CAFFEINE	
	TYPICAL	RANGE*
Coffee (8 oz. cup) Brewed, drip method	85	65-120
Instant	75	60-85
Decaffeinated	3	2-4
Espresso (1 oz. cup)	40	30-50
Teas (8 oz. cup) Brewed, major U.S. brands	40	20-90
Brewed, imported brands	60	25-110
Instant	28	24-31
Iced	25	9-50
Soft drinks (Cola-12 oz. serving)	40	30-60
Energy drinks (Approx 250 ml. - 8.3 oz. serving)	80	50-160
Cocoa beverage (8 oz. serving)	6	3-32
Chocolate milk beverage (8 oz. serving)	5	2-7
Solid Milk chocolate (1 oz. serving)	6	1-15
Solid Dark chocolate, semi-sweet (1 oz. serving)	20	5-35
Baker's chocolate (1 oz. serving)	26	26
Chocolate flavored syrup (1 oz. serving)	4	4
<i>*Due to brewing method, plant variety, brand, formulation etc.</i>		
[IFIC Foundation, 1998; Knight, et al., 2004; Mayo Clinic, 2005]		

For more information about healthy eating, contact your local extension office.

The Food Assistance Program can help people of all ages with low income buy nutritious foods for a better diet.

To find out more, call toll-free 1-888-369-4777.

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