



Pick Your Path to Health

Decoding Caffeine

It's a morning ritual for millions of Americans. A cup of coffee to help launch us on our day with eyes wide open. Many of us have come to depend on this morning dose of caffeine; David Letterman has even remarked, "If it weren't for the coffee, I'd have no identifiable personality whatsoever."

Jokes aside, caffeine can be serious business, and health experts continue to debate the effects of caffeine on the body.

What is caffeine? Where is it found?

Caffeine is a substance that is extracted from plants or produced synthetically for use as an additive in certain food products. It is a stimulant to the central nervous system and acts as a diuretic.

Caffeine is found naturally in the leaves, seeds, and fruits of more than 60 plants. In addition to making its way into coffee, caffeine is a common ingredient in tea, chocolate, cocoa, and many colas. Caffeine may also be found in over-the-counter medications, such as pain relievers, appetite suppressants, and cold medicines.

Individual Differences

One cup of coffee contains about 100 milligrams of caffeine, a significant dose for infrequent coffee drinkers, and enough to produce identifiable effects on the body. Thirty minutes after a cup of coffee, drinkers' metabolism increases, blood pressure climbs, and heart rate accelerates.

There is some debate about whether or not caffeine should be avoided. Some say that regular coffee drinkers quickly develop a tolerance to caffeine, and effects to the body are diminished or even eliminated. Others point out that caffeine can cause difficulty sleeping, irritability, and nervousness.

In short, different people can tolerate different amounts of caffeine before they feel effects. For some, the caffeine in a milk chocolate bar will go unnoticed. For others, who are extremely sensitive, caffeine may bring about an elevated heart rate, nausea and vomiting, insomnia, and other

negative effects. Consumed in very large quantities, caffeine's effects are intensified.

A Warning

Caffeine is also known to enhance alertness, concentration, and memory. However, according to "Brewing Trouble," an article published on WebMD Health by Rebecca A. Clay, caffeine can trigger an assortment of other effects, including sweaty palms, a pounding heart, and ringing in the ears for people predisposed to anxiety disorders. These effects, in turn, can bring about a full-blown panic attack.

"If you tend to be a high-strung, anxious person, using a lot of caffeine can be risky," stresses Norman B. Schmidt, PhD, associate professor of psychology at Ohio State University. Roland Griffiths, PhD, a professor of psychiatry and neuroscience at Johns Hopkins University School of Medicine, agrees: "People often see coffee, tea, and soft drinks simply as beverages rather than vehicles for a psychoactive drug. But caffeine can exacerbate anxiety and panic disorders."

The American Psychiatric Association joined the caffeine debate when it added three related disorders to its list of official diagnoses: caffeine intoxication, caffeine-related anxiety, and caffeine-related sleep disorders.

Special Populations

In general, children should stay away from too much caffeine. Fruit juices and milk are always healthier alternatives to sodas for children, and over active youngsters should certainly steer clear of caffeinated drinks, as caffeine is a central nervous system stimulant.

Other populations who should restrict caffeine use include people with coronary heart disease, peptic ulcers, anxiety, or depression. Caffeine has been known to exacerbate symptoms for individuals with these conditions.

Women who are pregnant or considering the possibility of becoming pregnant should keep caffeine use to a minimum, if they consume it at all. The Food and Drug Administration (FDA) reports that mothers who drink significant amounts of coffee during pregnancy have a higher risk of delivering low birth weight babies. In addition, FDA cites studies in which maternal coffee intake may contribute to anemia for moms and infants. Separately, Yale-New Haven Hospital references a study in which a link

was found between high caffeine intake during pregnancy and sudden infant death syndrome.

Whether you drink one cup of coffee or soda a day or several cups, try to monitor your caffeine intake and its effects on your body. If you have concerns or questions, talk to your health care provider. A nutritious diet-whether or not it includes caffeine-is a "must have" if you are committed to following a path to better health.

Pick Your Path to Health is a national public health campaign sponsored by the Office on Women's Health within the U.S. Department of Health and Human Services. For other tips on improving your health, or for more information on the Pick Your Path to Health campaign, call 1-800-994-WOMAN or visit the National Women's Health Information Center at www.4woman.gov.