

Before that morning coffee...

by Helle Simonsen
for Canadian University Press

The symptoms are not unfamiliar. About three-quarters of an hour ago, you drained the last few life-giving drops of warm, murky coffee from a cardboard cup and it is beginning to take effect. Maybe your hands begin to shake, your heart quickens, and you jump up and scurry off with nowhere to go.

Caffeine directly affects the outer layer of the brain and the spinal cord. It is occasionally used to counteract depressant drugs like alcohol because of its stimulant effect. An average dose can range from 60 to 300 milligrams, and a lethal dose would be equivalent to one hundred cups of coffee drunk at once.

A cup of brewed coffee contains, depending on the strength of the coffee, between 100 and 180 milligrams per cup. Instant coffee is not as hard on your system; it has 70-177 mg per cup. Even a cup of tea has between 50 and 70 mg.

A fix of caffeine does not require swallowing steamy dark liquids. It appears in chocolate at about 25 mg per bar.

And it is a vital ingredient in cola and diet cola drinks, at 25-76 mg per can. But if you do not want to waste time, over-the-counter drugs like No-doz tablets are straight caffeine in a convenient form.



Napoleon...tried smoking once but found it so unpleasant he quickly returned to his habit of inhaling seven pounds of snuff each month.

Five cups of coffee is enough to cause irritable behavior, tremors or insomnia in most people. A high intake of caffeine, about six to eight cups, can produce symptoms almost identical to those of anxiety neurosis. In large doses caffeine can cause insomnia, high blood pressure, headaches, nervousness, delirium, digestive disorders, rapid breathing, twitching of limbs and possibly convulsions.

People who drink five or more cups of coffee a day are twice as likely to have heart attacks as those who do not drink coffee at all, studies have shown.

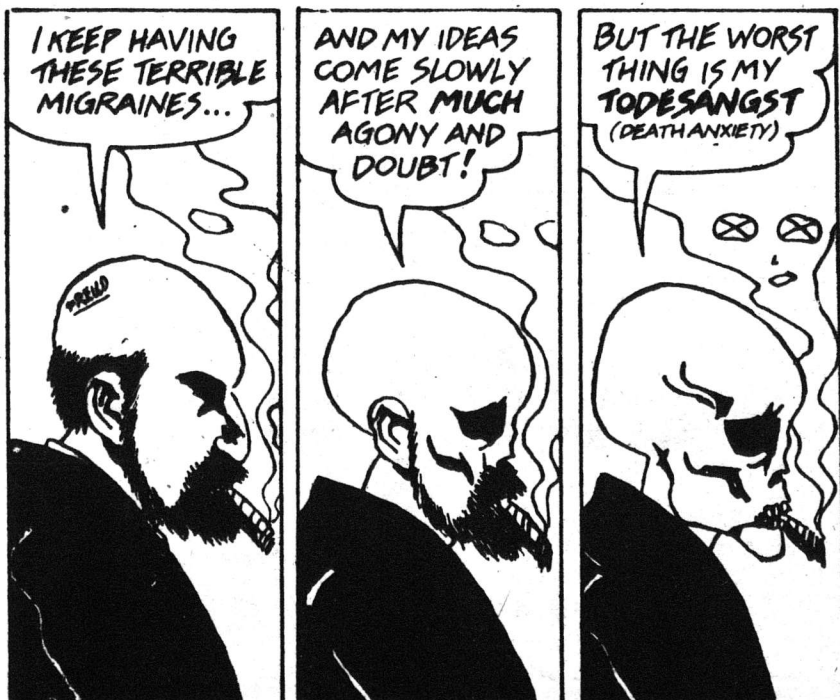
Recent reports that caffeine might be linked to birth defects are as yet unproven. "It should certainly be looked at with suspicion, but they look at any drug as the possible cause of birth defects, and usually recommend

that all these drugs be eliminated during pregnancy," Burton said.

The moderate consumption of caffeine is thought to be safe. The drug increases the ability to do mental and physical work by disguising bodily fatigue.

Sigmund Freud smoked 20 cigars a day. He developed cancer of the palate and jaw. He also suffered from "tobacco angina," a constricting sensation of the throat. Napoleon, on the other hand, tried smoking once but found it so unpleasant, he quickly returned to his habit of inhaling seven pounds of snuff each month.

Nicotine develops in the user both a psychological and physical dependence. Because it can act as both a stimulant and a depressant, the user's psychological state can determine its effect.



To Dr. M. Macconail, a pharmacologist at the University of Ottawa, the nicotine addict is "someone who battles a roaring blizzard or spends the last of his school loan for that package of cigarettes." Only a third of smokers at best are able to quit, Macconail said, and a year after they quit are most susceptible to starting again.

According to the Addiction Research Foundation, 44 percent of all Canadians over the age of 14 smoke. Though this number has decreased in recent years, the number of teenage girls who smoke has increased substantially.

Cigarette tobacco contains about one to two percent nicotine, pipe tobacco about 1.5 to 3 percent, cigars average one to three percent and chewing tobacco contains the highest amount of nicotine at 1.9 to 4.8 percent.

Aspirin can also lead to ulcers and irritations of the stomach's lining, causing it to bleed.

Nicotine is one of the most poisonous substances known to man and has been used as an effective insecticide for many years. Just one drop (about 50 mg) of pure liquid nicotine on the skin could be lethal. The ingestion of two cigarettes can kill a child if the nicotine has enough time to be absorbed through the lining of the stomach.

Along with nicotine, there are 1,350 chemicals which have been identified in burning tobacco.

Besides increasing the probability of lung cancer, smoking can produce coronary heart disease, chronic bronchitis and emphysema (a thinning of lung tissues) as well as tongue and lip cancer.

Nicotine also affects unborn babies of mothers who smoked during pregnancy, according to studies done by Dr. Peter Fried, a psychologist at Carleton. Nicotine crosses the placenta and enters the bloodstream of the fetus and even appears in the

breast milk, said Fried.

Many studies show that "smoking affects the behavior of babies. Newborn babies tend to cry more if their mothers smoked during pregnancy.

Despite these risks, most people remain puppets to their nicotine nerves. One popular but incorrect myth is that switching over to a pipe or cigar will reduce the risk of cancer.

Most cigarettes are made from fluecured tobacco and as a result have acidic smoke. The nicotine from acidic smoke can only be absorbed through the lungs, which is why satisfaction from smoking cigarettes comes with inhaling.

On the other hand, pipe and cigar smokers do not have to inhale to get their fix. Air-cured tobaccos are used for pipe and cigar tobacco and burn with alkaline smoke. Its nicotine can be absorbed directly through the tissue in the mouth.

The risk of smoking, however, is not immediate. Dr. Mary O'Brien of Health Services at Carleton wants students to cut down or quit smoking before the problems begin. Most students are too young for heart or lung problems or high blood pressure due to smoking, said O'Brien.

"If they stop within the next few years, they won't have these problems," she said. "This is why it is so hard for some of them to quit. At this stage they can get away with it."

It's possible that aspirin, the most easily accessible painkiller, shouldn't be. While it can't normally become addictive, it can become habitual, in the psychological sense. Aspirin can also lead to ulcers and irritations of the stomach's lining, causing it to bleed.

Symptoms of over-use are stomach pains, deafness, ringing in the ears or delirium. But that is not all.

One day those two little pills might send you to the hospital instead of curing your headache. Some people suddenly develop aspirin intolerance which makes them extremely sensitive to the drug. The allergic symptoms are hives, difficulty breathing and gastrointestinal bleeding.

Buffering agents in some brands are in minute quantities and do not

provide much protection against stomach irritation. Downing the pills with a glass of milk probably gives the best protection.

Besides killing pain, aspirin has a beneficial side effect. It thins the blood, which can help people who have had or are in danger of having a stroke or heart attack.

"People who have strokes often take one daily, and studies show they tend to have less strokes than the people who don't. There's some speculation that taking aspirin would prevent the first stroke," said Burton.

