

What's in a Cigarette?

Although cigarettes look incredibly simple (chopped up tobacco wrapped in paper, with a filter at one end) they are actually specifically designed to provide a steady dose of nicotine to the smoker. There may be more in a cigarette than you might expect.

Additives are often added in order to make tobacco products easier to consume. They can prolong shelf life; make the smoke seem milder and easier to inhale; and give the tobacco better flavoring (chocolate, vanilla, fruit, sugar, etc). While some of these additives may appear to be quite harmless and are often found in food, when these chemicals are burned, new products of combustion are formed and these may be toxic.

Filters weren't introduced to cigarettes until the 1950s. Once medical studies began linking smoking with lung cancer, the cigarettes companies came out with filtered cigarettes to give the idea that these would make the cigarettes less harmful. Pretty soon "light" and "ultra light" cigarettes began popping up, stating that they delivered lower amounts of tar and nicotine.

Why low tar cigarettes are no safer than higher tar cigarettes

Although there is a small reduction in lung cancer risk associated with lower tar cigarettes, research suggests that any health advantages of switching to lower tar would be largely offset by the tendency of smokers to compensate for the reduction in nicotine by smoking more or inhaling more deeply¹. Also, a study by the American Cancer Society found that the use of filtered, lower tar cigarettes may actually increase the chances of a specific kind of lung cancer (adenocarcinoma)².

Tobacco Smoke

Tobacco smoke contains more than 4,000 chemicals. Out of these, at least 50 are known to cause cancer. Here's a list of just a few of the chemicals found in cigarette smoke:

Acetone – found in nail polish remover Acetic Acid – an ingredient in hair dye Ammonia – household cleaner Arsenic – used in rat poison Benzene – found in rubber cement Butane – used in lighter fluid Cadmium – an active compound in battery acid Carbon Monoxide – released in car exhaust fumes Formaldehyde – embalming fluid Hexamine – found in barbecue lighter fluid Lead – used in batteries Methanol – a main component in rocket fuel Nicotine – used as insecticide Tar – material for paving roads

Toluene – used to manufacture paint³

¹ Jarvis, M and Bates, B. Why low tar cigarettes don't work. ASH, 1999.

² Thun, M; et al. Cigarette smoking and changes in the histopathology of lung cancer. Journal of the National Cancer Institute, 1997; 89 (21): 1580-86.

³ American Lung Association. What's in a Cigarette? <u>http://www.lungusa.org/stop-smoking/about-smoking/facts-figures/whats-in-a-cigarette.html.</u> Retrieved November 15, 2010.



Nicotine

Nicotine is an extremely powerful chemical found in tobacco. The 1988 Surgeon General's Report, "Nicotine Addiction" concluded that nicotine is the drug that causes tobacco addition, and that the pharmacologic and behavioral characteristics that determine tobacco addiction are similar to those that determine addition to drugs such as heroin and cocaine⁴. Nicotine only takes approximately 7 to 20 seconds to reach the brain, so it is very fast-acting. However it is important to realize that although nicotine is what causes the addiction, by itself it is relatively harmless. Although it does affect your blood pressure, arteries, and heart rate, compared with the effects of the other chemicals found in cigarettes and tobacco, it is a much safer substance. This is why people can safely and effectively use products such as nicotine patches, gum, lozenges, inhalers, and nasal sprays to help them when they are guitting smoking.

Five tips for quitting

Studies have shown that these five steps will help you quit and quit for good. You have the best chances of quitting if you use these five steps to develop and maintain your own quit plan.

- 1. Get ready.
- 2. Get Support
- 3. Learn new skills and behaviors.
- 4. Get medication and use it correctly.
- 5. Be prepared for difficult situations.

Talk to your health care provider, they can help. If you do not have insurance, or just need to talk to someone, call the Washington Tobacco Quitline.



⁴ US Department of Health and Human Services. The health consequences of smoking: nicotine addiction. A report of the Surgeon General, 1988. Rockville, Maryland: Public Health Service, Centers for Disease Control, Office on Smoking and Health, 1988.

