

What's in a Cigarette?

Nicotine is the most widely known chemical in tobacco smoke, but many people are amazed to discover that there are over 4,500 other chemicals produced when tobacco burns. Most of these have incomprehensible names and are really known only to scientists and chemical analysts. Listed below, though, are some of the more well known ones.

Nicotine - a highly toxic nerve poison. It constricts the arteries and at the same time increases adrenaline production. It raises the blood pressure, in order to overcome the extra constriction in the narrowed arteries, and stimulates the entire nerve system. It is a powerful stimulant and does not relax you. In some areas of the world it is used by veterinarians to destroy sick animals, and is highly efficient at this task. A dosage of one fifty-thousandth of a gram is ample to kill an adult, and there is more than that in any cigarette. It is the oxygen-blood transfer that blocks most of it from entering the system.

Less than a thimbleful will kill an elephant. If the arteries are already narrowed as a result of aging or a build-up of cholesterol, then the extra constriction can be very serious and may result in amputation or even sudden death – stroke.

Hydrogen Sulphide – a poisonous chemical with the characteristic smell of rotten eggs.

Methanol – A fatal poison. Small internal doses, prolonged exposure of the skin to the liquid or continued inhalation of the vapor may cause blindness.

Acetone - nail polish remover.

Ammonia – Ammonia solutions are used to clean (Windex), bleach, and deodorize, to etch aluminum, and to saponify oils and fats (convert to soap), and in chemical manufacture. Ammonia and ammonia vapors are irritating, prolonged exposure and inhalation cause serious injury and may be fatal.

DDT - Once considered a wonder pesticide, now banned from commercial use because of its lethal side effects.

Benzene – An aromatic chemical proven to be a major carcinogen.

Hydrogen Cyanide - Used in the gas chamber.

Carbon Monoxide – Present in car exhaust. Causes death if inhaled for a relative short time, because it inhibits oxygen from entering the bloodstream.

Pyridine – A solvent and waterproofing agent.

Formaldehyde – Better known as embalming fluid.

Sugar - sugar is also added to cigarettes to increase cravings

Benefits received by quitting smoking:

Low risk	High risk	
20 minutes	20 minutes	Blood pressure drops to normal Pulse rate drops to normal Temperature of hands and feet returns to normal
8 hours	8 hours	Carbon monoxide level in blood drops to normal Oxygen level in blood increases
24 hours	24 hours	Chance of heart attack decreased
48 hours	48 hours	Nerve endings start to regrow Smell and taste improved
2 weeks	3 months	Circulation improves Exercise, including walking, becomes easier Lung function increased by up to one-third
1 month	9 months	Cilia regrow in lungs and airways, increasing lung's self maintenance Energy level increased overall Coughing, sinus problems, tiredness, shortness of breath all decrease
1 year	1-1½ years	Excess risk of heart disease is halved. Recovery rate from heart/bypass surgery almost doubled
2½ years	5 years	Lung cancer death rate for average former smoker almost halved Risk of mouth and throat cancer halved
5 years	10 years	Risk of stroke similar to non-smoker
10 years	10 years	Lung cancer death rate the same as for non-smokers Pre-cancerous cells have been replaced Risk of cancer of mouth, throat, bladder, kidneys, pancreas decreases
10 years	15 years	Risk of heart disease is that of a non-smoker.

Low risk indicators: Under 35 years old; smoking 15 a day or less, good level of fitness; regular exercise taken; no persistent cough, low total consumption since starting.

High risk indicators: Over 50 years old; smoking 30 a day or more; poor fitness level; no regular exercise taken; persistent cough; high total consumption since starting.

These figures are based on research by more than one cancer society and do not represent guaranteed clinical or physical improvements to any one particular individual. It is widely accepted that non-smokers, even those who have smoked at sometime in their lives, live longer and with a higher quality of life than those who smoke or continue to smoke.