



SMOKING AND TRAINING

Everyone knows the harmful effects of smoking (don't they?), but how does it affect physical training? The information below has been compiled from various sources.

Apart from the obvious hazards like cigarette burns while grappling, smoking causes several detrimental effects to training. One of the by-products of smoking is Carbon Monoxide (CO). Carbon monoxide affects gas transfer into and out of the blood stream. Hemoglobin bonds with carbon monoxide more than 200 times more easily than with oxygen (O₂). Hemoglobin is a protein containing iron found in red blood cells, which deliver oxygen to the muscles and transports carbon dioxide (CO₂) away from the muscles. As well as hemoglobin the carbon monoxide bond to enzymes in the blood. The effect of this is to lower the efficiency of the cardiovascular system. The carbon monoxide ties up the hemoglobin sites on the red blood cells, thereby decreasing the number of available sites that oxygen can bond to - this is how carbon monoxide kills.

Carbon monoxide poisoning literally suffocates the victim because the hemoglobin has bonded to the carbon monoxide, preventing the transfer of oxygen into the blood from the lungs. Carbon monoxide also bonds more readily to hemoglobin than carbon dioxide does, impairing the elimination of carbon dioxide from the body through the lungs. It can take from nine to twelve hours for the circulatory system to eliminate carbon monoxide once inhaled.

Smoking also causes a loss of up to 20 percent of night vision capability. This loss results in decreased perception abilities, decreased depth perception and a decreased sense of balance.

Smoking raises normal carbon monoxide levels in the blood stream by three to twelve times, which causes the rate of circulation to increase so that the uncontaminated red blood cells can meet tissue gas-exchange requirements. In other words, since the blood no longer carries oxygen as efficiently, the rate of circulation must increase to make up for the decreased efficiency of the red blood cells. This obviously causes an increase in heart rate and blood pressure. This is why smoking stimulates the heart.

Aerobic capacity is obviously diminished after smoking because the heart is already somewhat stressed as a result of the carbon monoxide intake. This reduced aerobic capacity affects speed by causing the fighter to tire more quickly, slowing the speed of muscle contractions and mental processing due to fatigue.

The heart rate is also increased because of increased peripheral resistance. Nicotine causes the small arteries to contract, causing an increase in the resistance of blood flow. This increased peripheral resistance causes a lowering of temperature in the extremities. There have not been any studies on the effects of this on athletic performance, but it certainly is not going to help and it may decrease speed and dexterity. Remember how much slower your fist clenches when cold and how much harder it is to tie or untie a knot with cold hands. Although smoking does not lower the temperature to this degree, the degree to which these effects are realized after smoking are unknown. These temporal effects last for approximately 30 minutes after smoking.



Effects of Tobacco Smoke

Smoking KILLS

Cigarettes contain more than 4000 chemical compounds and at least 400 toxic substances.

One in two lifetime smokers will die from their habit. Half of these deaths will occur in middle age.

Smoking kills around 114,000 people in the UK each year. Of these deaths, about 42,800 are from smoking-related cancers, 30,600 from cardiovascular disease and 29,100 die slowly from emphysema and other chronic lung diseases.

The mixture of nicotine and carbon monoxide in each cigarette you smoke temporarily increases your heart rate and blood pressure, straining your heart and blood vessels. This can cause heart attacks and stroke. It slows your blood flow, cutting off oxygen to your feet and hands. Some smokers end up having their limbs amputated.

Smoking causes disease and is a slow way to die. The strain put on your body by smoking often causes years of suffering. Emphysema is an illness that slowly rots your lungs. People with emphysema often get bronchitis again and again, and suffer lung and heart failure.

Lung cancer from smoking is caused by the tar in tobacco smoke. Men who smoke are ten times more likely to die from lung cancer than non-smokers.

Heart disease and strokes are also more common among smokers than non-smokers.

Smoking causes fat deposits to narrow and block blood vessels which leads to heart attack.

Smoking causes around one in five deaths from heart disease.

In younger people, three out of four deaths from heart disease are due to smoking.

You can eat five portions of fruit and veg a day and exercise regularly, but healthy behavior means little if you continue to smoke.

Couples who smoke are more likely to have fertility problems than couples who are non-smokers.

The blood vessels in the eye are sensitive and can be easily damaged by smoke, causing a bloodshot appearance and itchiness.

Heavy smokers are twice as likely to get macular degeneration, resulting in the gradual loss of eyesight.

Smokers run an increased risk of cataracts.

Smokers take 25 per cent more sick days year than non-smokers.

<http://phoenixmartialarts.org.uk>



Smoking stains your teeth and gums.

Smoking increases your risk of periodontal disease, which causes swollen gums, bad breath and teeth to fall out.

Smoking causes an acid taste in the mouth and contributes to the development of ulcers.

Smoking also affects your looks: smokers have paler skin and more wrinkles. This is because smoking reduces the blood supply to the skin and lowers levels of vitamin A.

Smoking affects your sense of taste and smell.

Children who grow up in a home where one or both of their parents smoke have twice the risk of getting asthma and asthmatic bronchitis. They also have a higher risk of developing allergies.

Infants under two years old are more prone to severe respiratory infections and cot death.

WHAT MORE NEEDS TO BE SAID GIVE UP SMOKING NOW!