Smoking and The Heart

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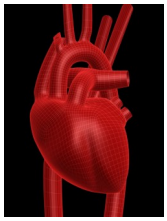
Introduction

The Heart is one of the most vital organs in the human body. It regulates all blood flow in the body. Without it, we would not get adequate oxygen and blood to the tissues.



There are multiple factors that can effect the performance of the heart. One of the actions that can hinder heart health and performance is smoking.

The Surgeon General has named smoking the "leading preventable cause of disease and deaths in the United States." In addition, if you smoke, you have a two to three times greater chance of developing heart disease or having a heart attack than non-smokers.

Even secondhand smoke is dangerous. Studies show that people who are consistently exposed to secondhand smoke tend to have have an increased risk for cardiovascular diseases.

According to the Surgeon General, smoking harms almost every organ in the body, and reduces the overall health of smokers.

Smoking contributes to many diseases and disorders. Smoking increases the risk for atherosclerosis, coronary heart disease, multiple cancers, heart attacks, stroke, and vascular diseases.

Smoking creates free radicals in the body that cause oxidative damage in the bloodstream and in the organs. The oxidative damage can cause emphysema and lung cancer.

Smoking causes coronary heart disease, the leading cause of death in the United States*. Cigarette smokers are 2–4 times more likely to develop coronary heart disease than nonsmokers.

* CDC

Top 5 Reasons Why You Should Not Smoke

1. Smoking can lead to lung and other cancers. The more you smoke, the greater the risk of disease.
2. Smoking contributes to the development of Coronary Heart Disease and Stroke, the first and third leading cause of death in the United States.
3. Secondhand smoking is harmful. Of the more than 4,000 chemicals that have been identified in secondhand tobacco smoke, at least 250 are known to be harmful, and 50 of these are known to cause cancer.
4. Cigarettes lower the levels of good cholesterol (HDL), which help to clear out bad cholesterol (LDL) in the bloodstream.
5. Smoking harms nearly every organ of the body and diminishes a person's overall health.

Reducing Tobacco Use: A Report of the Surgeon General. U.S. DHHS, PHS, CDC, NCCDPHP, Office on Smoking and Health, 2000.

Inside this issue:

Smoking and The Heart

The Facts About What Smoking Does To Your Heart

Carbon monoxide, a product of tobacco smoke (as well as chemical plant smoke and car exhaust), tends to boost LDL cholesterol levels, as well as levels of white blood cells and other risks for heart disease; not to mention, it also reduces the hearts ability to carry oxygen to the tissues and other organs.

- According to research, if you smoke, have high cholesterol, and high blood pressure, your risk of having a heart attack is eight times more than that of a nonsmoker.
- The toxins produced by cigarettes are carried throughout the body.
- Tobacco has a major role in the development of preventable cardio-vascular disease.
- Smoking pipes or cigars increases the risk of death from coronary heart disease and stroke, but to a lesser extent than that of cigarette smokers.
- Cigarette smoking is an important risk factor that leads to coronary heart disease.
- Cigarette smoking has been connected to all types of sudden cardiac death in both men and women.
- Switching to low tar nicotine cigarettes rather than normal cigarettes, does not reduce the risk of coronary heart disease.
- The nicotine in cigarettes promotes insulin resistance, a pre-diabetic condition identified by high blood sugar and insulin.
- Smoking can promote the development of atherosclerosis, or hardening of arteries. Over time, this causes coronary heart disease, stroke, and artery disease.
- Carbon monoxide, a product of tobacco smoke, tends to increase LDL cholesterol and white blood cells levels and increase other risks for heart disease, while also reducing the hearts ability to carry oxygen to the tissues and organs.
- A single cigarette can impair circulation for up to forty-five minutes by constricting small blood vessels.
- Smoking can cause abdominal aortic aneurysms, which are bulges in the wall of the aorta near the stomach. It is the thirteenth leading cause of death in he United States*.
- Smokers are ten times more likely than non-smokers to develop peripheral vascular disease.
- Cigarette smokers have raised fibrinogen levels and platelet counts. This causes the blood to be more sticky, promoting plaque buildup in the arteries. This will eventually lead to atherosclerosis.
- Smokers have a greater risk of being diagnosed with peripheral vascular disease, which causes the blood vessels in both the legs or feet to become blocked.
- Smokers have an increased risk for various types of cancer, such as colorectal and ovarian cancer.
- Many smokers feel that smoking relaxes them. The feeling of relaxation may be due to deep breathing from inhaling. However, nicotine is a stimulant which increases heart rate, respiration and metabolism.
- Nicotine stimulates the release of many chemical messengers in the brain including acetylcholine, norepinephrine, epinephrine, vasopressin, arginine, dopamine, autocrine agents, and beta-endorphin, which are responsible for nicotine's effects.

*O'Connor, RE. eMedicine, 2009

The Benefits of Quitting Smoking

Nicotine is an extremely addictive chemical which makes it very difficult to stop smoking. Studies show that nicotine activates the circuits in the brain that regulate pleasurable feelings. This is done by a chemical called dopamine, which is increased by nicotine. When smokers inhale, the nicotine reaches the brain faster than drugs that enter the body intravenously.

Stopping smoking is not easy, but there are many aides such as gums, patches, pills and shots that reduce the desire for cigarettes.

There are many benefits to quitting smoking. Some of these include a reduced chance of being diagnosed with diabetes, cancer, or heart disease.

Nicotine, one of thousands of chemicals found in cigarettes, causes the blood vessels to constrict. This narrowing of the vessels increases blood pressure.

Within twenty-four hours of stopping smoking, blood pressure and pulse rate will drop to normal. This decreases the workload on the heart, and eventually will decrease the risk of having a heart attack.

The cessation of smoking greatly reduces the risk of death or a second heart attack in adults who have coronary heart disease.

According to American Heart Association, individuals will have heightened sense of smell and taste, and an improved digestive system after stopping smoking.

Stopping smoking will cause improved well being, lung function and immune system.

Within two to three years after stopping smoking, the risk of having a heart attack will be the same as a person who has never smoked.

There is a decrease in the risk for stroke after smoking cessation. After 5 to15 years, former smokers have the same risk of having a stroke as a nonsmoker would.

According to research, after five years of not smoking, patients have a 21 percent reduction in the risk for lung cancer, when compared with current smokers. Those who have not smoked for 20 to 30 years or more, have an 87 percent reduction in the risk of being diagnosed with lung cancer.

There is a decrease in blood pressure and heart rate after stopping smoking. This improves heart health and productivity.

A study on men smokers shows an improvement in exercise tolerance and increased pressure in the extremities in the group that stopped smoking compared to the group that continued to smoke.

There are other benefits from stopping smoking. These are: cleaner environment, improved personal hygiene, decreased sinus problems, less heartburn or acid indigestion, better circulation, and increased energy!

After you stop smoking *:

1 Year After Quitting
Your added risk of coronary heart disease is half that of a smoker's.

5 Years After Quitting
Your stroke risk is reduced to that of a nonsmoker's 5-15 years after quitting.

10 Years After Quitting
Your lung cancer death rate is about half that of a smoker's. Your risk of cancers of the mouth, throat, esophagus, bladder, kidney, and pancreas decreases.

15 Years After Quitting
Your risk of coronary heart disease is back to that of a nonsmoker's.

* CDC

After one year of being "smoke free", the risk of coronary artery disease will have decreased by half!

After 15 years of abstinence, the risk is similar to that for people who've never smoked.

AHA

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Experimental Obesity
Functional Foods
Health and Performance Enhancement
Nutrition and Chronic Diseases
Nutrition and the Brain
Dementia, Alzheimer's and healthy aging
Diet, exercise, weight loss and weight loss maintenance

The research fostered in these areas can have a profound impact on healthy living and on the prevention of common chronic diseases, such as heart .disease, cancer, diabetes, hypertension and osteoporosis.

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