

## HEART ATTACKS

Heart attacks are the leading cause of death in the United States. Everyday approximately 1,500 people die from heart attacks. Thousands more suffer crippling effects of some form, and remain disabled for the rest of their lives. A simple definition of a heart attack is a sudden failure of the heart resulting from an occlusion or obstruction of a coronary artery. Basically, this means the heart is no longer receiving the blood supply it needs to function properly. A person having a heart attack experiences severe pain in the chest extending to the left shoulder and arm. Heart attacks occur for a variety of reasons. Diet, genetics, obesity, and lack of exercise are all contributors to heart attacks. Smoking and stress are the most widespread causes however, affecting 2.5 million people every year. Therefore, smoking and stress are two major causes of heart attacks.

Smoking causes heart attacks. The tobacco in cigarettes and cigars contain a chemical called nicotine. When inhaled into the lungs, nicotine causes the release of hormones in the body. These hormones raise the blood pressure. Consequently, a person's heart rate increases 15 to 25 beats per minute. Nicotine also causes the blood vessels to contract. People who smoke have a harder time keeping their hands and feet warm because their blood does not circulate as well as it does in non-smokers. When the heart rate increases and the blood vessels remain constricted for an extended period of time, ten or more years, arteries begin to close up. When an artery feeding blood to the heart closes up, the heart can no longer function. This results in a heart attack.

Stress is another cause of heart attacks. The causes of stress vary from person to person, although there are many stressors. Anger, fear, deadlines, work, conflict, and school can all be stressors. When an individual perceives a situation to be stressful, it is stressful. The body physically reacts to stress by activating the flight or fight response. In other words, the body physically prepares to run or fight. Hormones called adrenaline and noradrenaline are released into the blood stream. These hormones cause the metabolism, heart rate, blood pressure, breathing, and muscle tension to increase. In today's world, stress very seldom calls for an actual flight or fight response, but the body does not know the difference. Therefore, the physical release of all the energy built up in the body does not actually take place. This causes hypertension, otherwise known as high blood pressure. Secondly, hypertension creates strain on the arteries and contributes to the build-up of plaque in the arteries. Plaque is a sticky substance that sticks to the artery walls. Too much build up in the arteries causes them to close up, therefore not allowing blood to reach the heart. Finally, the heart collapses, and a heart attack has transpired.

Smoking and stress are two major causes of heart attacks. However, avoiding heart attacks is actually quite simple. The American Medical Foundation has determined that if a person smokes 20 cigarettes a day for 20 years and they quit for a period of 3 years, the risk of having a heart attack decreases by 25%. When this person quits for 10 years the risk decreases to the likes of someone who has never smoked. Controlling the amount of stress in your life is also possible. Physical exercise, consciously confronting anger, and relaxation techniques, are all ways to manage stress and, therefore, reduce energy built up in the body. Meditation and yoga are two examples of relaxation. Given this information, people who smoke should quit and everyone should learn stress management techniques. This would reduce heart attacks in the United States by 67%.

