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Reducing Your Risk of Heart Disease

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It has been said that police officers are more prone to coronary heart disease (CHD) than their civilian counterparts. Published research on this topic is scarce, though, and what little is available offers conflicting testimony.

In fact, only one study—published way back in 1978—shows that police officers have higher risk of CHD than the general population. And even this study yields contradictory evidences. The study involved police officers in the Dallas (TX) area. The researches found that police officers of middle age had a higher risk of CHD (and lower levels of physical fitness) than their age-matched cohorts. But police officers younger than 30 had no greater risk of CHD than the general population of the same age.

In a 1983 study, police officers in Boston were compared to the general population in several risk factors for CHD including age, cholesterol, blood pressure, smoking habits and body mass index (a proxy for measuring body composition). The researchers found no significant difference between the two groups with respect to the incidence of CHD.

The most recent study on this topic was published in 1997. In this study, the researchers compared the prevalence of risk factors for CHD in police officers in Iowa to the general population of similar age. Risk factors included age, gender, cholesterol, high density lipoprotein, blood pressure, smoking habits and glucose levels. It was found that police officers had no greater probability of developing CHD than the general population.

However, research has shown that cardiovascular disease events—such as heart attack, heart failure and stroke (a “brain attack”) - account for about 20% of on-duty deaths among police officers. So, a good case could certainly be made that police officers sustain a high percentage of “on-duty deaths” that are related to CHD.

Let’s take a closer look at the risk factors that contribute to CHD. The American Heart Association lists numerous ones including some that can be modified and

others that cannot.

Risk factors that cannot be modified are age, gender and heredity. As you get older, your risk of CHD increases. Men have a higher risk of CHD than women (and have events at a younger age). And if your relatives suffered from CHD, you have a greater risk.

Risk factors that can be modified, at least to some degree, are diabetes, high cholesterol, hypertension (high blood pressure), overweight/obesity, physical inactivity and smoking. Since these risk factors are somewhat changeable—particularly through diet and exercise—they’re worth discussing in greater detail. (Here, the term “diet” simply refers to a normal intake of food, not a specialized regimen of eating.)

Diabetes: The problem with diabetes isn’t so much in the condition itself as it is the diseases that are associated with diabetes such as CHD and overweight/obesity. Making good food choices is critically important in keeping diabetes - and “pre-diabetes” - at bay. The goal is to consume foods with a low glycemic index so that blood sugar levels stay within a safe range. Exercise, in general, has an “insulin-like effect” on blood glucose. Specifically, there’s an increase in the uptake of glucose by the exercising muscles. So, the exercise is a valuable tool in the management of diabetes.

High cholesterol: This risk factor is influenced heavily by your nutritional and exercise habits. The obvious tactic here is to eat foods that are low in cholesterol. A good rule of thumb is to avoid foods that are high in saturated fat and trans fat, two types of fat that decrease high-density lipoproteins (the “good” cholesterol) and increase low-density lipoproteins (the “bad” cholesterol). This clogs arteries and heightens the risk of CHD. It’s known that exercise has the opposite effect: it increases high-density lipoproteins and decreases low-density lipoproteins.

Hypertension: High blood pressure is defined as a systolic pressure of 140 or more and a diastolic pressure of 90 or

more. High blood pressure increases the risk of stroke, heart attack, kidney failure and congestive heart failure. To control blood pressure, it’s important to consume foods that are low in sodium and high in potassium. Studies have shown that exercise can reduce blood pressure. Improvements in blood pressure are most evident from aerobic training but will be even more significant with the addition of strength training.

Overweight/obesity: Being overweight/obese influences other risk factors for CHD. For instance, weighing too much increases blood pressure. Bodyweight increases when caloric intake (eating) is greater than caloric output (exercising). The most effective way to combat overweight/obesity, then, is to eat less and exercise more. In particular, foods that are dense with calories—those in which a large percentage of calories are derived from fat—should be eaten sparingly. And exercise should be done since it increases caloric expenditure.

Physical inactivity: Exercising on a regular basis helps to reduce the risk of CHD. Plus, being active allows you to manage many of the other risk factors. It’s already been noted that exercise decreases blood pressure, increases high-density lipoproteins (the “good” cholesterol), helps prevent or manage diabetes and aids in weight management. There are additional benefits of exercise as well including a reduced risk of osteoporosis and an improved level of confidence.

Smoking: To say “cigarette smoking may be hazardous to your health” is the understatement of the year. Those who smoke have anywhere from two to four times greater risk of CHD than those who don’t smoke. In addition, smoking impairs lung function; increases respiratory symptoms and infections (such as bronchitis); weakens the bones, increases the risk of heart attack and stroke and raises blood pressure and resting heart rate. Smoking is also associated with cancer of the lungs, mouth, throat, larynx, esophagus, stomach, pancreas, kidney, bladder and cervix.

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It's important to note that many of these risk factors co-exist. For example, being overweight increases blood pressure while physical inactivity contributes to overweight/obesity. Also when more than one risk factor is present, the threat of CHD becomes even greater.

The primary way to decrease the risk of CHD is through modifications in behavior and/or lifestyle. In short this means eating better and exercising regularly.



The poster features a stylized American flag with a blue field of white stars at the top and red and white stripes at the bottom. In the upper right corner is the circular logo of the Chiefs of Police Ass'n of N.J., which contains a shield with a scale of justice and a sword. The main text is in bold yellow and black fonts.

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