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REPORT

Can We End The Heart Disease Epidemic?

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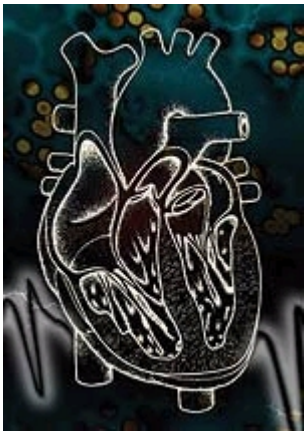

More than 61 million Americans suffer from cardiovascular disease, primarily high blood pressure, coronary heart disease, stroke and congestive heart failure, according to the Centers for Disease Control and Prevention. Each day, more than 2,600 Americans die from heart disease, making it the leading cause of death in the United States.

The public and medical community, however, have the opportunity to end this epidemic through improved nutrition, exercise and smoking cessation, according to renowned cardiovascular disease expert Jeremiah Stamler, M.D., former chair of the Department of Preventive Medicine at Northwestern University Feinberg School of Medicine in Chicago, where he is now professor emeritus.

In this interview with Life Extension magazine, Dr. Stamler discusses conventional medicine's approach to reducing heart attack risk. While the preventive strategies advocated by Dr. Stamler have scientific merit, they pale in comparison to the aggressive approaches Life Extension members take to guard against cardiovascular disease.

Dr. Stamler recently spoke with Life Extension magazine about how to prevent heart disease.

Life Extension: When you mention that we can end heart disease, is this a radical idea or does the medical community tend to agree?

Jeremiah Stamler: When I talk about the end of heart disease, I talk about coronary heart disease and cardiovascular disease as an epidemic problem—as a mass onslaught in the population. It would be incredulous to say there will be no more heart attacks, stroke, etc. The epidemic was first confronted as rising coronary death rates after World War II, peaking in the mid-1960s, then declining thanks to the first preventive efforts and improved medical care. These achievements set the stage for ending the epidemic.

The coronary death rate is down more than 50% since its 1960s peak, and the stroke death rate is down even more. But since the early 1990s, the declines have slowed or stopped, creating an urgent challenge. What I'm talking about is how to get back fully on track.

The National Heart, Lung and Blood Institute, the Office of the Surgeon General and health goals of the nation have acknowledged the concept that there can be progressive decreases in the incidence of and mortality from heart disease. So the concept of ending the heart disease epidemic is a generally accepted one.

LE: What factors help to decrease heart disease incidence and mortality?

JS: First and foremost, primary prevention of the major risk factors producing the epidemic—high blood pressure, high blood cholesterol, adverse eating patterns and smoking—is key to accomplishing this. Most major risk factors are amenable to influence by dietary means. We have known this for decades about blood cholesterol. What is new is that recent research has proved this to be true also for high blood pressure. So we can now move toward the end of the epidemic. There needs to be major emphasis on a strategy of giving high priority to the application of this knowledge to ensure that the declines continue. It's a matter primarily of improving lifestyles.

LE: How many people have favorable levels of all the major risk factors for heart disease?

JS: If we all had favorable risk factors, the epidemic would cease. Overall, less than 10% of the general population has favorable levels of all major risk factors. When their blood pressure, cholesterol and smoking rates are jointly addressed, most middle- aged men and women have one or more unfavorable risk factors. A majority has two or three of these major risk factors, making them highly prone to heart attack. Adverse eating patterns plus sedentary habits are big in producing this.

LE: Recent guidelines from the NHLBI state that people with systolic blood pressure of 120-139 mm Hg or a diastolic blood pressure of 80-89 mm Hg should be considered as prehypertensive. A reading of 124/84, which previously was considered "normal," may not be favorable for preventing heart disease. What do you make of this statement?

JS: The word "normal" is assessed in epidemiological circles as belonging in the museums of history. Normal has all too often been equated with what is common in the population. Blood pressure levels that are common in the general population—as well as cholesterol levels, saturated fat and cholesterol intakes, and smoking rates—are not normal. Common is what prevails in a society at a given point in time. Common is often a measure of high-risk status of the whole population. In the 1960s, serum cholesterol of 245 was common. Today we know a favorable cholesterol level is less than 200 and an optimal level is under 180. The focus needs to be on favorable and optimal and making that common in the population.

LE: What should people do to help end the heart disease epidemic?

JS: We need first and foremost to improve nutrition. Nutrition is key for preventing rise of blood cholesterol and blood pressure to adverse levels—the common pattern from youth through middle age at present. Eating right, along with exercise, can prevent obesity and along with not smoking can help to prevent heart disease.

LE: How does eating right help?

JS: Eating right can serve to maintain favorable levels of blood total cholesterol, LDL-cholesterol (which is harmful for the arteries), blood sugar, blood pressure and weight. Also, eating right may raise "protective" high-density lipo-protein (HDL), have anti-clotting effects and overall have positive effects on the heart. We have moved somewhat in that direction. Total fat intake is down. It was 40-45% of calories in the 1950s, and is now 32-33%. It needs to be lower—20-27% as in the DASH [Dietary Approaches to Stop Hypertension] diet, which is about as good a diet recommendation as we can make. Sixteen to 17% of calorie intake in the 1950s consisted of saturated fat; it's now 12% and needs to be below 10%. Cholesterol intake used to average 700 milligrams per day, and now is about 300-350 milligrams, but needs to be 250 milligrams or less.

LE: What foods are in the DASH diet that makes it heart healthy?

JS: The DASH combination diet includes high intake of fruits, vegetables, whole grains, beans, low-fat and fat-free dairy products, lean poultry, fish and very little red meat so that it is lower in total fats, saturated fats and cholesterol. It is also reduced in sweets (sugars) and salt. It markedly lowers adverse blood pressure levels. Generally, protective nutrients come from vegetables, fruits, whole grains and beans. Fiber may be protective in a variety of ways, but the whole story is not in yet. There's a possible benefit from long-chain polyunsaturated fats such as the omega-3 found in fish. Omega-3 may have beneficial effects on blood pressure and risk of heart arrhythmia.

LE: Despite the importance of nutrition for heart health, the United States is experiencing an obesity epidemic, and obesity contributes to high cholesterol, high blood pressure, diabetes and other cardiovascular problems. How should the medical community handle this?

JS: Unfortunately, even though nutrition should be a high priority, obesity is waxing not waning. Less privileged and lower-income population groups of all ethnicities seem to be at even higher risk than the upper strata. The problem reflects cultural and socioeconomic issues. Advertising, television and radio don't push good nutrition and often contribute to a sedentary lifestyle.

It's ironic that while total fat intake has gone down over the years, reflecting public response to repeated recommendations, the epidemic of obesity has increased during those years. There's too much high-calorie food out there. Everywhere we turn—on the street there are sellers of goodies, from bakeshops to fast-food institutions to vending machines. At the ball game, we are used to eating. When we sit in front of television, we eat. When we go over to a friend's house, we eat.

My advice to people is to get on the scale every morning, and with the first one or two pounds of weight gain, get it under control and keep it under control. Let us condition ourselves to enjoy the pleasure of eating foods of low caloric density—few calories per fork or spoonful—so we can enjoy lots of good and nutrient-rich food without caloric excess.

LE: Much attention has been given to the problem of carbohydrates contributing to weight gain. How do you view carbohydrates and heart health?

JS: The fact is, the food industry has often had the approach of, if you can't beat 'em, join 'em. As scientific evidence increasingly showed that foods high in saturated fats and cholesterol weren't healthy, the food industry altered its marketing tactics. They made substitute foods like fat-free cake and cookies that contain concentrated calories from carbohydrates or sugars. So the public was substituting one type of calorie-dense food for another and making it hard to achieve a total decrease in calorie intake.

As you cut fat, calories still need to come from somewhere. You can increase your protein intake from 15% to 25% without fat increase, using beans, fat-free dairy products, egg whites, seafood, lean poultry and lean red meat. You can also replace fat calories with carbohydrates from fruits, vegetables and whole-grain products. But refined and concentrated carbohydrates do not supply a lot of nutrients and are calorie-dense, causing ready weight gain.

Soft drinks and alcohol are another problem. Many people consume soft drinks with a lot of calories from sugar, or lots of alcohol, which is also caloric. Heavy drinking of alcoholic beverages can cause high blood pressure and many other problems. Drinking should be done in moderation if one wishes to consume alcoholic beverages.

LE: Do you recommend that people diet to achieve heart health goals?

JS: I don't emphasize going on a diet. Diets are all too often seen as punishment for sin and by definition are pejorative. Going off a diet is seen as returning to the pleasures of eating. All of that is a disaster.

Instead, we need to improve the pleasure of eating and eat in a wiser way, picking up the best from cultures around the world, while throwing out the worst. For example, we need to eat foods low in fat as in East Asian cultures, but avoid the high salt intake.

LE: How important is exercise? What sort of recommendations should people follow?

JS: Exercise is very important. I recommend 30 minutes of moderate non-weight bearing activity daily. This includes vigorous calisthenics, walking, biking and swimming. I don't emphasize jogging, because of potential problems over the years with damage to feet, ankles, knee and hip joints. Human beings exercised at work up until the Industrial Revolution. Since then, physical activity at work has steadily declined and we've developed recreational activities that are sedentary. We became a sedentary species. If you take in only 50 calories a day in excess, that's 350 calories a week, 3,500 calories in 10 weeks, which equals a pound of fat. Moderate exercise every day can create a 50-calorie deficit, helping to control and correct weight gain.

LE: How likely is it that Americans will respond to the need for dietary changes and increasing exercise?

JS: It's not like putting fluoride in the water, where the government takes care of it and our teeth are okay. Now we're talking about how we all behave. Health care professionals need to communicate with people and give them practical details. Also, the public needs to receive a continuous, steady and effective public education message.

Once people are motivated and motivation is reinforced by sustained, frequent effective messages and the "how-to" details are made known, they tend to adhere to nutrition recom-mendations. For example, much progress has been made in the area of fat and cholesterol intake due to public education. The American public is interested in health.

However, people still need to learn a lot of details, such as how to read labels when they go shopping, how to find and use proper recipes and how to know what to order when they eat out in restaurants. Salt is ubiquitous in the food supply. Sixty-five to 85 percent of salt we get is from salt added to foods in the process of bringing them to market. Cooperation from the food industry is needed to end that big problem.

We need a simple public education plan that can impact not only what we do at home but also in the supermarkets and restaurants. The American people will respond. I'm hopeful we will make continued progress.