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Heart Healthy Aging 5 Successful Strategies

By Sharon Palmer, RD

Heart disease is a killer among the aging population. But lifestyle can provide the first line of defense against this debilitating disease.

As people age, they typically share two overarching goals: to live a long life and to live a high-quality life. A winning strategy for achieving these goals is to defeat heart disease before it develops.

"Heart disease is the No. 1 killer in America, but it is also a major cause of disability. When you get older, you don't want to die, but you also don't want to live in a disabled condition. It's important to not only prevent death from heart disease but prevent a miserable life that is limited in every way. When you have heart disease, you can be short of breath or you may not be able to walk or transfer from the bed or to a chair. How sad is that?" asks Jeanne Wei, MD, PhD, interim chair of the department of geriatrics at the University of Arkansas for Medical Sciences and president of the Society of Geriatric Cardiology.

Age is a major risk factor for developing cardiovascular disease (CVD) for both men and women. According to the American Federation for Aging Research, before reaching the age of 60, one in three men and one in 10 women have heart disease. After menopause, the prevalence of heart disease in women matches the rate of heart disease in men.

As we age, changes occur in the heart that set the backdrop for heart disease. The heart walls thicken and stiffen, preventing the muscle from relaxing and filling adequately between beats. Thus, inefficient pumping during periods of exertion can contribute to fatigue and exercise intolerance. In addition, the left atrium may become enlarged, leading to a disorganized heart rhythm originating from the upper heart chambers, which is known as atrial fibrillation. Slowing of the pacemaker cells in the atria can result in rhythm problems. And the arteries that become stiffer with thicker walls create a reduced ability to expand as blood pumps through the heart. High blood pressure can also occur, further increasing the risk of heart disease and stroke.

While scientists understand that age-related changes occurring in the heart can lead to heart disease, it is becoming clear that many of these changes are influenced as much by lifestyle as by age. We've known for years that many lifestyle factors such as diet, exercise, and smoking are related to heart disease risk. But recent research underscores just how important these lifestyle strategies can be for lowering the risk of heart disease as we age.

In a 2007 study published in the *Archives of Internal Medicine*, Swedish researchers found that women who eat a healthy diet, drink moderate amounts of alcohol, are physically active, maintain a healthy weight, and do not smoke have

a significantly reduced risk of heart attack. Evaluation of the dietary patterns of 24,444 postmenopausal women revealed that a low-risk diet characterized by a high intake of vegetables, fruit, whole grains, fish, and legumes in combination with moderate alcohol consumption (5 grams of alcohol per day or less), along with the three low-risk lifestyle behaviors, including not smoking, a waist-hip ratio of 0.7 or less, and being physically active, was associated with 92% decreased risk compared with findings in women without any low-risk diet and lifestyle factors.

"Healthcare professionals are focused on crisis and intervention treatment rather than prevention treatment. Diet and exercise are the most important things you can do aside from choosing who your parents are. There is a whole lot we can do to prevent the disability associated with heart disease," says Wei. "It's important to incorporate prevention in treatment with patients."

Think you know all there is about approaches to prevent heart disease in older adults? Current research offers a new vision for a heart healthy lifestyle. We share five important strategies that can help your patients mount a defense against this debilitating killer.

1. Promote a Healthy Weight

You'd have to live under a rock to be in the dark about the nation's obesity epidemic. About two thirds of adults in the United States are overweight and nearly one third are obese, according to data from the 2001 to 2004 National Health and Nutrition Examination Survey. In fact, all age categories are experiencing an increase in obesity rates, including those over the age of 65. This weighty problem poses a major risk factor for developing CVD.

According to the American Heart Association, people with excess body fat, especially if it is accumulated around the waist, are more likely to develop heart disease and stroke, even if they have no other risk factors. The extra weight increases the workload on the heart; raises blood pressure, blood cholesterol, and triglyceride levels; lowers high-density lipoprotein (good) cholesterol levels; and increases the risk for developing diabetes (which carries its own increased risk for heart disease).

Losing as little as 10 pounds can lower heart disease risk. Weight loss hinges on simple math: Take in fewer calories than the body requires to produce an energy deficit. Yet weight loss remains elusive for many people battling their scales.

"Maintenance is key in weight loss. Just about any diet can produce short-term weight loss, but the long term is the problem," said Meir Stampfer, MD, DrPH, a professor of

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Ornish's Heart Disease Reversal Program

Dean Ornish, MD, has achieved much acclaim for his successful lifestyle program. He has demonstrated through research findings published in leading scientific journals that his holistic program, including diet, exercise, stress reduction, and social support, can not only prevent heart disease but also reverse it. Here's a look at how his program works.

- **Diet:** Focus on lowering the intake of high-fat animal proteins, including red meat, pork, and full-fat dairy products; increase the consumption of complex carbohydrates such as fruits, vegetables, whole grains, legumes, nonfat dairy products, soy products, and egg whites; consume moderate amounts of fish, skinless chicken, avocados, nuts, and seeds.
- **Exercise:** Minimize the amount of inactivity, increase the general level of activity, and make exercise an integral part of daily life. Include at least 20 minutes of daily aerobic exercise.
- **Stress management:** Practice daily stress management techniques, including stretching, relaxation, breathing, imagery, and meditation.
- **Social support:** Emphasize one hour of social support each week with goals that include improving communication skills and becoming more aware of one's feelings.

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epidemiology and nutrition at the Harvard School of Public Health, who spoke in Boston at the Oldways International Conference about the Mediterranean diet in November.

Stampfer shared research findings that were published in a 2008 issue of *The New England Journal of Medicine*. Researchers from Israel and the Harvard School of Public Health assigned 322 individuals who were obese to one of three diets: low fat, restricted calorie; Mediterranean, restricted calorie (high in vegetables, legumes, fruits, whole grains, fish, nuts, and seeds; high ratio of monounsaturated to saturated fats; moderate alcohol consumption; and low in meat and dairy); or low carbohydrate, nonrestricted calorie.

After two years, the women following the Mediterranean diet lost more than twice as much weight as those on the low-carb diet, while women on the low-fat diet lost less than 1 pound on average. A greater percentage of the participants on the Mediterranean diet were able to adhere to it for the full two-year study duration vs. those on the low-fat and low-carb diets. Experts believe that the Mediterranean diet, with its emphasis on whole plant foods and moderate olive oil intake, offers more satisfaction and satiety, creating an easier lifestyle to maintain over a longer period of time.

2. A New Look at Healthy Fats

If you think heart healthy eating means a low-fat diet, you're behind the times. New recommendations for heart disease prevention include a focus on healthy monounsaturated fats and omega-3 fatty acids. Monounsaturated fats are found in canola, olive, peanut, and sunflower oils, as well as avocados, seeds, and nuts. The omega-3 fatty acid alpha-linolenic acid is found in plant sources such as flax and walnuts, while the long-chain omega-3 fatty acids docosahexaenoic acid and eicosapentaenoic acid are found in fatty fish. At the same time, it's important to limit saturated fats found in meats, dairy products, and tropical oils and to avoid trans fats primarily found in processed and fast foods.

"Extra-virgin olive oil should be the main fat. The beauty of olive oil is that it not only contains monounsaturated fats, it increases the good cholesterol, decreases the bad cholesterol, strengthens LDL [low-density lipoprotein] particles to protect against oxidation, and it contains polyphenols, antioxidants that fight free radicals that contribute to disease and premature aging," says Janet Bond Brill, PhD, RD, LDN, a nutrition and fitness consultant and the author of *Cholesterol Down: 10 Simple Steps to Lower Your Cholesterol in 4 Weeks — Without Prescription Drugs*.

Brill also urges a shift from omega-6 fatty acids to omega-3 fatty acids. The Western diet is flooded with the omega-6 fatty acid linoleic acid and is low in omega-3 fatty acids, a condition that appears to be proinflammatory and conducive to chronic disease. Decades ago, health experts urged the public to switch to vegetable oils to reduce blood cholesterol levels, resulting in a vast increase in the agricultural production of oil seed crops, primarily soybean. It is estimated that 20% of the calories in the American diet comes from soybean oil alone. Many liquid vegetable oils, including soybean, corn, and safflower, are high in omega-6 fatty acids.

"Eat less omega-6 fatty acids and, at the same time, eat more omega-3 fatty acids. Replace corn and vegetable oils with olive oil and add omega-3 fatty acids to the diet. Have plant sources of omega-3 fatty acids every day and two to three servings of fatty cold water fish per week," says Brill.

3. The Power of Plants

For too long, we considered a heart healthy diet to be one with a long list of what not to eat. But today's emphasis is on pushing nutrient-dense, fiber-rich, antioxidant-boosting plant foods. A broad body of evidence indicates that a diet rich in unrefined plant foods such as whole grains, legumes, vegetables, fruits, seeds, and nuts can protect against chronic disease. According to the 2005 Dietary Guidelines for Americans, compared with the many people who consume a dietary pattern with only small amounts of fruits and vegetables, those who eat more are likely to have reduced risk of chronic diseases, including stroke and cardiovascular diseases.

"The best diet for good health, longevity, and disease prevention is a plant-based diet. We are centered on protein; we ask what's for dinner and we think of meat. We should have a plant-fish philosophy. Most of the plate should be filled with plant foods. Cut way back on animal sources of proteins that contain the three dietary evils: saturated fat, dietary cholesterol, and trans fat," says Brill, who recommends the strategy of introducing more plant proteins such as soy, legumes, and nuts in lieu of animal proteins.

What's so special about including a variety of plant foods in the diet as we age? They provide a rich landscape of cardio-protective vitamins, minerals, fiber, and plant compounds. "Vegetables are the biggest antioxidant bang for the buck. Focus on the deeply colored ones such as spinach, arugula, and radicchio. The rich color palette indicates the color of health. You also get fiber from plant foods. We only get about half the recommended amount of fiber. Whole plant foods such as whole grains are loaded with fiber, vitamins, and minerals. And eat plenty of fresh fruits," suggests Brill.

4. Exercise Essentials

Current research findings reinforce the value of incorporating exercise and physical activity for heart health as we age. According to a 2007 article in *Clinical and Experimental Pharmacology and Physiology*, regular aerobic exercise causes cardiovascular, neural, humoral, and metabolic changes that likely influence cardiovascular risk. Sedentary subjects have about double the risk of CVD of active individuals. The benefits of regular exercise may also influence CVD risk factors, such as effects on atheromatous vessels, improvement in survivability in established coronary heart disease by reducing arrhythmias, or increasing tolerance of ischemia. Direct effects of regular exercise include benefits on blood pressure, lipid profiles, increased insulin sensitivity, reduced sympathetic activity, increased gain of the baroreceptor-heart rate reflex, and increased arterial compliance. Unfortunately, as people age, their activity levels decline. By the age of 75, about one in three men and one in two women engage in little or no physical activity.

In older adults, physical activity need not be strenuous to gain heart health benefits. Benefits occur with regular, moderate physical activity. For those who have previously been sedentary, physical activity can begin with short intervals of moderate activity such as walking or gardening for five to 10 minutes. This can gradually increase, as tolerated, to greater amounts of physical activity by increasing the duration, intensity, or frequency.

Wei stresses the importance of encouraging exercise for the aging, suggesting a goal of 30 minutes per day at least five days each week. Data suggest that social support from family and friends is linked with regular physical activity in older adults. But due to the higher risk of injury in older adults, it is important to monitor safe, appropriate levels of exercise.

5. Curbing Stress

Managing stress and providing social support appears to hold astonishing power for the prevention of heart disease in older adults. As people age and face a number of emotional and psychological challenges, from social isolation to depression, it appears to take its toll on the cardiovascular system. Data suggest that stress, the condition caused by one's reaction to physical, chemical, emotional, or environmental factors, is linked with the risk of CVD. Researchers don't fully understand the role stress plays in heart disease, but it may be due in part to the negative effects of acute and chronic stress on heart disease risk behaviors such as overeating, smoking, and physical inactivity.

A study published in *Psychology, Health & Medicine* in 2008 examined changes in coronary risk factors, health behaviors, and health-related quality of life in relationship to support group attendance for one year in 440 patients with coronary artery disease in the Multicenter Lifestyle Demonstration Project, an insurance-covered, multicomponent cardiac prevention program. Researchers observed significant improvements in coronary risk factors, health behaviors, and health-related quality of life relating to social support group attendance. The study results suggest an independent relationship of social support group attendance to systolic blood pressure and improvements in quality of life may be due in part to improved health behaviors facilitated by increased social support attendance.

"Stress management is important. We've asked people, 'Why do you smoke, overeat, drink too much, or abuse yourself?' And they say, 'It helps me get through the day.' What's the No. 1 prescribed medication last year? It's antidepressants, more even so than statin drugs, because one of the real epidemics of our culture isn't just heart disease; it's depression. It's important that we really give our patients not just information and not just prescriptions but a few minutes with them. Help them understand that we care about what's going on in their lives," says Dean Ornish, MD, author of six bestselling books that focus on lifestyle approaches to preventing and reversing heart disease. Ornish's multifaceted lifestyle approach that includes both diet and exercise also emphasizes stress reduction techniques such as stretching, relaxation, breathing, imagery and meditation, and social support, such as improving communication skills and becoming more aware of one's feelings.

Mounting a defense against heart disease to promote a long, rich life is a worthwhile endeavor for older adults. Ornish says, "The simple choices that we make in our lives each day like what we eat, how we respond to stress, how much exercise we get, whether or not we smoke, and how much social support we have in our lives can prevent or even reverse this disease."

— Sharon Palmer, RD, is a freelance food and nutrition writer in southern California.