AHA/ACC joint clinical practice guideline

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Eating an overall heart-healthy diet and being physically active is critical for preventing heart attacks, strokes and other cardiovascular diseases according to a new lifestyle guideline.

The joint clinical practice guideline from the American Heart Association and the American College of Cardiology was published online today in the American Heart Association journal *Circulation*, and the *Journal of the American College of Cardiology*. The new guideline report is based on a systematic evidence review that summarizes key nutrition and physical activity topics for the management of blood pressure and blood cholesterol.

"Living a lifestyle that can reduce the risk of heart attacks, strokes and other cardiovascular diseases includes both healthy eating habits and regular physical activity," said Robert Eckel, M.D., co-chair of the guideline writing committee and professor of medicine at the University of Colorado Anschutz Medical Campus in Aurora. "Eating a heart-healthy diet is not about good foods and bad foods in isolation from the rest of your diet – it's about the overall diet." The recommendations do not directly address adaptations for a weight loss diet, which are included in a separate report on management of overweight and obesity, but are compatible with reducing overall calorie intake.

To lower the blood cholesterol, and particularly the LDL or "bad" cholesterol, the guidelines strongly recommend limiting saturated fat and trans fat. Saturated fat is found mainly in foods derived from animals, such as fatty cuts of meat and poultry with skin, and full-fat dairy

products, tropical oils, such as coconut and palm oil, and trans fat contained in products made with partially-hydrogenated fat such as many commercially prepared baked and fried foods.

To lower blood pressure, the guideline emphasizes the importance of sodium restriction down from the current excessive average in US adults of about 3,600 milligrams (mg)/day.

Adults who would benefit from a lower blood pressure should consume no more than 2,400 milligrams a day of sodium; further reduction of sodium to no more than 1,500 milligrams a day is desirable since it is associated with greater reductions in blood pressure. Reducing sodium intake by at least 1,000 milligrams a day from the US average will lower blood pressure, even if the desired sodium intake is not yet achieved. Sodium is found mainly in salt.

The guideline recommends eating a heart-healthy diet that emphasizes fruits, vegetables, and whole grains, while including low-fat dairy products, poultry, fish and nuts, and limiting red meat, sweets and sugar-sweetened beverages. Following this pattern should help people limit their saturated fat, trans fat and sodium to the recommended levels even if they do not count grams.

Based on a 2,000 calorie per day diet, a heart-healthy eating pattern should include:

- Fruits: 4-5 servings a day
- Vegetables: 4-5 servings a day
- Whole grains, preferably high fiber: 6-8 servings a day
- Fat-free or low-fat milk and milk products: 2-3 servings a day
- Lean meats, poultry and fish: 6 or fewer ounces a day
- Nuts, legumes and seeds: 4-5 servings a week
- Fats and oils: 2-3 servings of healthy oils per day, limit trans and

saturated fat
- Limit sweets and added sugars

This eating pattern is compatible with nutrition therapy for other medical conditions. Primary care physicians should adapt the heart-healthy dietary plan to an individual's caloric requirements, personal and cultural food preferences and nutrition therapy for other medical conditions such as diabetes, the guideline states.

Physical activity is also an important part of lowering the risk of cardiovascular diseases—the guideline advises moderate- to vigorous-intensity aerobic exercise, such as brisk walking, for an average of 40 minutes three to four times a week.

While some patients will still need medications to manage blood pressure and cholesterol, doctors should always prescribe the lifestyle management strategies advised in the new guideline at the same time, Eckel said.

"Lifestyle modification should be incorporated throughout the therapeutic window," Eckel said. "These recommendations should be a part of every physician's practice who is concerned with prevention."

The recommendations, which are intended for primary healthcare providers, cardiologists, and all providers working with their patients to prevent cardiovascular diseases, are based on scientific evidence from research studies published between 1990 and 2012, and were developed for adults who would benefit from lowering their blood cholesterol and blood pressure. About one-third of U.S. adults have elevated levels of bad cholesterol, while one-third have high blood pressure, and another 30 percent are at high risk for developing high blood pressure (pre-hypertensive).

"These guidelines address important questions. Trials of behavioral interventions with mortality outcomes are rare, because the positive impact of a healthy diet takes place over many years," said Eckel. Subsequent collaborative joint guidelines in this area will broaden the search to include mortality outcomes for all questions.

The lifestyle management guideline is one of four cardiovascular disease prevention guidelines being released today by the American Heart Association and American College of Cardiology. Other guidelines address blood cholesterol, risk assessment, and the management of overweight and obesity.

The expert panel that wrote the report was convened by the National Heart, Lung, and Blood Institute of the National Institutes of Health. At the invitation of the NHLBI, the American Heart Association and American College of Cardiology assumed the joint governance, management and publication of the guideline in June. Committee members volunteered their time and were required to disclose all healthcare-related relationships, including those existing one year before the initiation of the writing project.

More information: The full report, "2013 ACC/AHA Guideline on the Assessment of Cardiovascular Risk" will be published online today on the websites of the ACC and the AHA,as well as in future print issues of the *Journal of the American College of Cardiology* and the American Heart Association journal, *Circulation*.

Provided by American College of Cardiology