Introduction

Cardiovascular disease (CVD), or heart disease, is the leading cause of death in the United States and around the world. By 2030, more than 1 million people in the U.S. could die from CVD each year. Kansas does not escape the problem — heart disease leads all causes of death in the state. Because this chronic disease is so prevalent, research is ongoing and much is known about the causes of heart disease. It is no mystery — poor dietary quality is the top risk factor, accounting for approximately half of CVD deaths globally. There are proven, effective steps individuals can take to lower their risk of CVD. This lesson is designed to help participants improve health and lower risk by learning and adopting those steps.

Educational Goals

As a result of participating in this educational program, the learner will be able to:

• Describe several chronic health conditions that may contribute to heart disease;
• Identify lifestyle approaches to lower risk of heart disease;
• Recognize health benefits related to Mediterranean and DASH eating patterns; and
• Understand health improvements possible from small changes in lifestyle factors.

Intended Audiences

Adult groups of any age; adults with specific interest in chronic disease prevention and control; adolescents or teens interested in health and nutrition topics; Family Community Education groups.

Before leading the lesson, prepare by taking these steps:

• Read the Make a Med DASH to a Healthy Heart Fact Sheet (MF3566) and Leader’s Guide (MF3567). Familiarize yourself with content and terms contained in both pieces.
• Study the linked resources discussing and supporting the Mediterranean and DASH eating patterns.
• Consider how program delivery could look for your audience and event. This lesson has many related sub-topics (for example, Type 2 diabetes, the Mediterranean lifestyle, the DASH eating pattern, physical activity guidelines and examples, healthful cooking practices) in addition to heart disease that could stand alone as topics in a lesson series. Are there related topics you would like to expand on for your group? Could the multiple topics be shared among various presenters at a day-long event?

Leading the Lesson

The Make a Med DASH to a Healthy Heart fact sheet is designed and written to serve as a script or outline for this lesson. The introduction anchors the reason for the lesson, and the statistics and issues cited reinforce the urgency and relevance of the topic. The
suggested interventions provide clear, attainable goals that individuals can learn more about and adopt as part of a healthy lifestyle shown to reduce the risks of chronic disease. Supporting one or more of the related community activities provides action steps and broader outcomes and impact for your lesson.

**Additional resources to support leading this lesson:**

In addition to the Facts Page, you may want to provide learners with these additional pieces:


- Downloadable handouts on several aspects of the Mediterranean pattern: [https://medinsteadofmeds.com/tips-and-tools/](https://medinsteadofmeds.com/tips-and-tools/)

**Possible community awareness activities to support this lesson:**

- Healthy Heart Month — February is often thought of as a heart-focused month that could showcase several programs or events highlighting heart health, local resources, health care speakers, and cooking/tasting events focused on healthy foods and cooking methods. An example might be a local physician, nurse, or dietitian talking about an aspect of heart health, followed by an olive oil tasting and recipe sharing, or learning about unfamiliar whole grains.

- Sponsor or participate in a “Go Red for Women” event that highlights women and heart disease. For more information, see this American Heart Association site: [https://www.goredforwomen.org/en](https://www.goredforwomen.org/en)

- Move more! Is there a way to participate in, or start up, a new physical activity class or exercise opportunity? Check with your local K-State Research and Extension office for possible classes and activities (for example, Walk Kansas in March, or Stay Strong, Stay Healthy classes) and help spread the word. If no class is available, can you help bring an activity to you? Ideas might include starting a Zumba class at a local school gym or church hall, establishing a water aerobics class for adults or seniors at the local recreation center, or creating a combo cooking-walking group that meets each week to learn about new healthful cooking ideas and connect over a fitness walk. Is there a fitness facility or personal trainer that might welcome the involvement in creating a fun group activity?

- Consider changing the culture. Could your county fair have a “heart-healthy” foods class in addition to (or in place of) traditional fare? Instead of a pie judging, what about a Healthy Heart Salad competition? There could be “celebrity” judges who have an interest in heart health, local press coverage, and perhaps the winning recipe and cook are featured in a local news story, a community dinner, and they have the honor of the traveling trophy until next year!

**Glossary of terms**

**Body Mass Index (BMI)** — A person's weight in kilograms divided by the square of height in meters. A high BMI can be an indicator of high body fatness. BMI can be used to screen for weight categories that may lead to health problems, including heart disease and some cancers, but it is not diagnostic of body fatness or health of an individual.

**Cardiovascular disease** — A group of conditions that involve the heart or blood vessels. Common complications include heart attack, chest pains (angina), or stroke.

**Atherosclerotic cardiovascular disease (ASCVD)** — a type of cardiovascular disease caused by high levels of bad cholesterol (LDL) in the blood. This leads to the buildup of plaque on the walls of the arteries, which over time can lead to heart attack or stroke.

**Dyslipidemia** — An abnormal level of blood fats (cholesterol, triglycerides, or both).

**Hyperlipidemia** — One type of dyslipidemia, when blood fats (cholesterol, triglycerides, or both) are too high.

**Hypertension** — Also called high blood pressure; occurs when blood pressure, the force of the blood pushing against the walls of the blood vessels, is consistently too high.

**Cholesterol** — A waxy substance needed in the body to build cells and make vitamins and other hormones. It is made in the liver and also comes from animal-based foods eaten in the diet.
High cholesterol contributes to a higher risk of cardiovascular disease.

The two types of cholesterol are **LDL cholesterol (LDL)**, which is bad, and **HDL cholesterol (HDL)**, which is good. Too much of the bad kind, or not enough of the good kind, increases the risk cholesterol will slowly build up in the inner walls of the arteries that feed the heart and brain.

Trans fats — A type of fat found either naturally or man-made in foods. Trans fats raise your bad (LDL) cholesterol levels and lower your good (HDL) cholesterol levels. Eating trans fats increases your risk of developing heart disease and stroke and is also associated with a higher risk of developing type 2 diabetes mellitus (T2D). Products can be listed as “0 grams of trans fats” on their Nutrition Facts label if they contain 0 grams to less than 0.5 grams of trans fat per serving. You can also spot trans fats by reading ingredient lists and looking for ingredients referred to as “partially hydrogenated oils.”

**Triglycerides** — The most common type of fat in the body, triglycerides store excess energy from the diet in fat tissue. Above-normal triglyceride levels can raise the risk of cardiovascular disease independent of cholesterol levels. Eating a diet high in sugar and refined carbohydrates, being overweight or obese, and heavy alcohol intake can all affect triglyceride levels.

Find contact information for your local extension office at: [https://www.ksre.k-state.edu/about/stateandareamaps.html](https://www.ksre.k-state.edu/about/stateandareamaps.html)

**References:**

Centers for Disease Control and Prevention. Heart Disease Facts. [https://www.cdc.gov/heartdisease/facts.htm](https://www.cdc.gov/heartdisease/facts.htm)


**Additional research-based resources:**

For more info about heart disease: [https://www.cdc.gov/heartdisease/about.htm](https://www.cdc.gov/heartdisease/about.htm)

For more info about the Mediterranean plan, including recipes: [https://medinsteadofmeds.com/](https://medinsteadofmeds.com/)

For more info about the DASH diet: [https://www.nhlbi.nih.gov/health-topics/dash-eating-plan](https://www.nhlbi.nih.gov/health-topics/dash-eating-plan)


For more info about physical activity, including guidelines for older adults, and for those with chronic health conditions: [https://www.health.gov/PAGuidelines](https://www.health.gov/PAGuidelines)