

# The Role of Food and Your Health: Cholesterol and Blood Sugar

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How to use these slides – “read the notes in quotation marks”, **the notes in bold are actions facilitators should take**, and *italicized notes are suggestions to make your session as accessible and inclusive as possible!*

- “Join us to discover how nutritious and tasty foods can positively impact your health, in particular your cholesterol and blood sugar. Receive guidance on how to set personal goals and determine simple, actionable steps you can add to your everyday routine.
- The information is to support lifestyle risk modification only. Please consult with your health care provider if you have specific questions.”
- *Supplemental resource: My Cholesterol Guide*
  - <https://www.heart.org/-/media/files/health-topics/cholesterol/my-cholesterol-guide-english.pdf?la=en>

**These slides were created by the  
Kentucky Inclusive Health Collaborative at the  
University of Kentucky Human Development  
Institute in collaboration with Aramark and the  
American Heart Association as part of the  
Healthy for Life® Initiative.**



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## Agenda

- Introduction
- Role of Food
  - Cholesterol
  - Blood Sugar
- Facts on Fats
- Health Care Discussions
- Goal Setting



- **Welcome participants and allow all facilitators to introduce themselves. You should also take care of any housekeeping items (closest bathroom, water fountain, etc.) at this time. Give a brief description of today's educational experience (objectives on next slide)**
- *To go above and beyond, you can create a schedule breakdown with time stamps and pictures. It is helpful to hang copies of the schedule in the learning space. This helps you keep on track and helps participants know what to expect. For example:*
  - *1:00-1:10 Introduction*
  - *1:10-1:20 Demonstrate Content (i.e. Role of Food, Facts on Fats)*
  - *1:20-1:40 Activity (i.e. Health Care Discussions)*
  - *1:40-1:50 Recap/ Handout Review*
    - *If needed, 1:40-1:45 Break*
  - *1:50-2:10 Goal Setting*

## Learning Objectives

- Understand how food affects your body's cholesterol and blood sugar levels.
- Identify at least two strategies each for controlling cholesterol and blood sugar.
- Meet with a health care professional to discuss personal cholesterol and blood sugar measurements.



- **Explain the expected outcomes**

# Ice Breaker

- **Engage in an icebreaker to gauge topic knowledge from the bank of options provided in the Welcome Toolkit or choose your own!**
  - <https://www.heart.org/-/media/files/healthy-living/company-collaboration/welcome-toolkit.pdf>
- *When choosing an ice breaker, the activity should allow multiple ways to participate and be included.*
- *Allow individuals to write/draw/verbally communicate their responses.*
- *For example, an activity that requires lots of physical movement might not be inclusive for people with physical disabilities.*

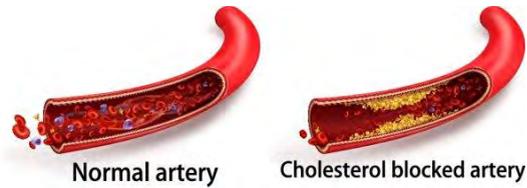
# THE ROLE OF FOOD AND YOUR HEALTH: CHOLESTEROL



- **Optional: Play video for the Role of Food and your Health: Cholesterol (1:28)**
  - *The video script is the same as the script in the lesson plan/ PowerPoint notes.*
  - <https://www.youtube.com/watch?v=szv9SHtLeNU>
  - *Ensure that closed captioning is on for the video as it plays.*
- *This video discusses the process of how cholesterol is formed (in the body) and the common causes and consequences of high cholesterol. It will describe High Density Lipoprotein (HDL) vs. Low Density Lipoprotein (LDL) and share how nutritious and tasty foods can positively impact your health to successfully lower cholesterol levels to a healthy range.*

# Cholesterol

- Cholesterol is made and used by our bodies
- Fat-like substance in blood and body's cells



- “So what is cholesterol exactly and where does it come from? Cholesterol is a soft, fatlike substance found in the bloodstream and in all your body’s cells. Your body makes all the cholesterol it needs.”

# Cholesterol

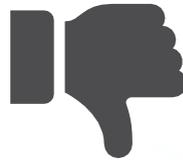
## HDL – Good

- carries bad cholesterol out of arteries
- protects from heart attack and stroke



## LDL – Bad

- builds up on artery walls
- arteries get clogged and narrow
- reduces blood flow to your heart and brain



- “There are two types of cholesterol: High Density Lipoprotein (HDL), or good cholesterol, and Low Density Lipoprotein (LDL), or bad cholesterol. HDL cholesterol is good because it carries harmful cholesterol out of the arteries and helps protect you from heart attack and stroke. LDL cholesterol is bad because if you have too much, it can begin to build up in the inner walls of your arteries. They can become clogged and narrow, reducing blood flow to your heart and brain.”

## Keep Cholesterol In Check!

- Eat a healthy **diet**
- Engage in **physical activity**

### Remember the 3 C's!

- **Check** – and know your numbers
- **Change** – diet and lifestyle
- **Control** – your levels



- “To keep your cholesterol in check, make healthy lifestyle choices at all stages of your life. Eating a healthy diet and engaging in regular physical activity are both very important. With cholesterol, remember to check and know your numbers, change your diet and lifestyle and control your levels with your health care provider's help, if needed.”

## Tips for Good Cholesterol

### Eat More:

- Fruits
- Vegetables
- Whole Grains
- Nuts
- Legumes
- Fish

### Eat Less:

- Saturated Fats
- Fatty or Processed Meats
- Refined Carbohydrates
- Sugary Drinks



- “Here are some key tips for success to help keep your cholesterol levels in check.
- Eat a diet rich in fruits, vegetables, whole grains, nuts, legumes and fish while reducing your intake of saturated fat, processed meats, refined carbohydrates and sugar-sweetened beverages.”



- **Optional video: *Play video on Facts on Fat (0:56)***
  - *The video script is the same as the script in the lesson plan/ PowerPoint notes.*
  - <https://www.youtube.com/watch?v=INqdzCZzQ0k>
  - *Ensure that closed captioning is on for the video as it plays.*
- *This video will teach participants about eating a healthy dietary pattern that includes good fats, limits saturated fats, and keeps trans fat as low as possible. It will show the sources and effects of the various fats: monounsaturated & polyunsaturated fats, saturated fats and hydrogenated oils & trans fats.*

## Tips for Good Cholesterol

### Good Fats

- Monounsaturated and Polyunsaturated
- Lowers bad cholesterol and risk of heart disease and stroke
- Body does not make

### Bad Fats

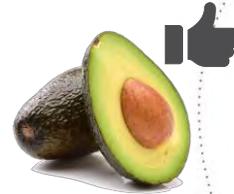
- Saturated fats and hydrogenated oils and trans fat
- Increase risk of heart disease and stroke



- “Understanding all types of fat will also help you choose which to include or eliminate from your healthy diet.
- Monounsaturated and polyunsaturated fats are the “good fats” that can help lower bad cholesterol levels and your risk of heart disease and stroke. They provide essential fats that your body needs but can’t produce itself.
- Saturated fats can increase your risk of heart disease and stroke. Replace saturated fats in your diet with good fats when possible.
- Hydrogenated oils and trans fats negatively affect cholesterol levels and increase the risk of heart disease, stroke and Type 2 diabetes.”

## The AHA Recommends Eating a Healthy Diet That . . .

- Includes good, unsaturated fats
  - Avocados, olive oil, nuts
- Limits saturated fats
  - Cheese, butter, bacon
- Keep trans fats as low as possible
  - Pizza and baked goods



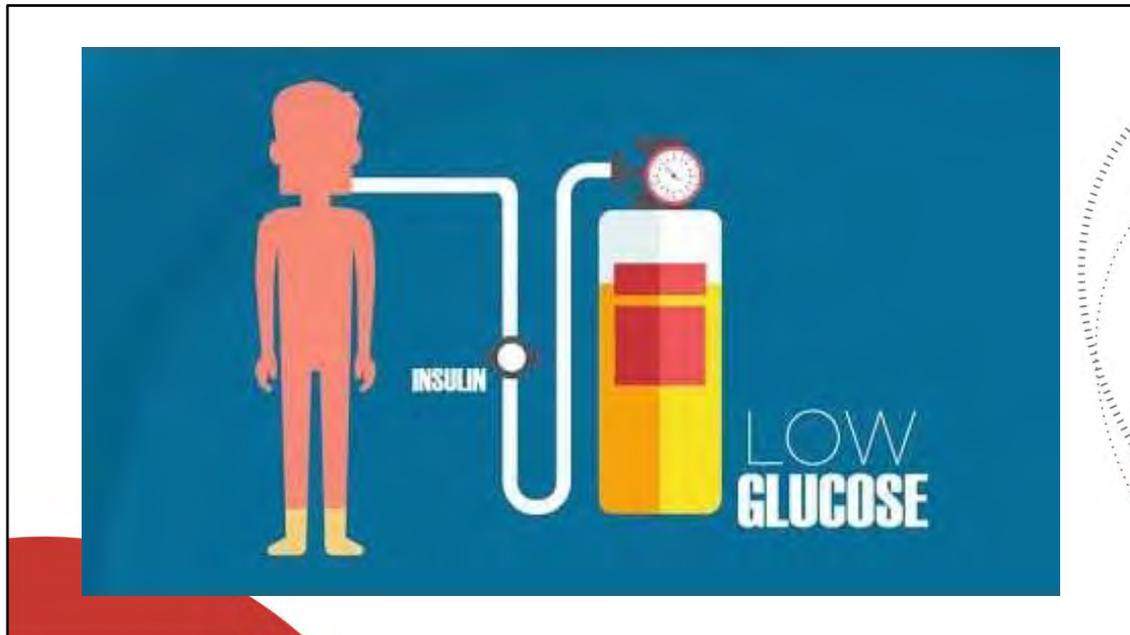
- “The AHA recommends eating a healthy dietary pattern that:
  - Includes good, unsaturated fats
  - Limits saturated fats
  - And keeps trans fats as low as possible”

## Get Active

- **Aerobic (Heart Pumping)**
  - Moderate Activity
    - 150 minutes per week
  - Vigorous Activity
    - 75 minutes per week
  - You can also mix and match or do both throughout the week!
- **Muscle Strength Training**
  - Moderate-High
    - 2 days a week



- “Get at least 150 minutes per week of moderate-intensity aerobic activity or 75 minutes per week of vigorous aerobic activity, or a combination of both, preferably spread throughout the week.
- Add moderate- to high-intensity muscle-strengthening activity (such as resistance or weights) on at least 2 days per week.”



- **Optional video: *Play video for The Role of Food and Your Health: Blood Sugar (1:22)***
  - *The video script is the same as the script in the lesson plan/ PowerPoint notes*
  - <https://www.youtube.com/watch?v=ISTNcVRft9A>
  - *Ensure that closed captioning is on for the video as it plays.*
- *This video discusses the process of how diabetes is developed (in the body) and the common causes and consequences of high blood sugar. It will share how nutritious and tasty foods can positively impact your health to successfully reduce blood sugar levels.*

## Blood Sugar Definitions and Concerns

### Definitions:

- Diabetes – condition where you have too much sugar in your blood
- Insulin – a hormone that controls blood sugar levels
- Glucose – the sugar that fuels your body

If untreated, high blood sugar can damage parts of your body including:

Eyes



Kidneys



Nerves



Heart



- “Did you know you can lower the risk of both diabetes and heart disease by controlling your blood sugar? Heart disease and stroke are the No. 1 killers among people with Type 2 diabetes.
- Blood sugar (glucose) is an important fuel for your body. Diabetes is a condition that makes your blood sugar level rise. The hormone insulin helps control blood sugar levels. If the level becomes too high or drops too low, your body can have trouble producing the insulin it needs to stay healthy. When your body doesn’t produce enough insulin or doesn’t efficiently use the insulin it makes, your blood sugar may become too high. Your body’s cells won’t be able to use the sugar in your blood and they may become starved for energy. Over time, high blood sugar levels can damage your eyes, kidneys, nerves or heart.”
- *If participants have questions about sugar, reference the "Added Sugar is Not So Sweet" educational experience.*

## Blood Sugar: Healthy Tip

- Lower risk of diabetes and heart disease!
- TIP: Replace sugary drinks with sparkling water
- Sugary Beverages:
  - Full of calories
  - #1 source of added sugar in our diet
  - 12 ounces of soda = about 10 teaspoons of sugar



- “You can lower your blood sugar by making better beverage and food choices. For example, replace sugary beverages, such as full-calorie sodas, with plain, sparkling or infused water. Sugar-sweetened beverages (like sodas, energy drinks and sweetened tea) are the number one source of added sugars in our diet. Just one can of a regular soda (12 ounces) has around 10 teaspoons of added sugar! Try to make healthy beverage and food choices, control your portion sizes and read nutrition facts labels carefully (look for the amount of added sugar in foods).”
- *If participants have questions about sugar, reference the "Added Sugar is Not So Sweet" educational experience.*

# Health Care Discussions

## Learn About Your Cholesterol and Blood Sugar

- “Today, you’re going to meet with a health care professional to learn your cholesterol and blood sugar levels. To ensure your privacy, the professional will write down your measurements. You’ll also learn the AHA’s recommendations for both cholesterol and blood sugar levels. However, we recommend you visit with your own health care provider for more guidance.”



- This slide is meant to provide a visual cue. To review the handout with participants, open the PDF or link in a separate window and share your screen. If participants have a printed copy, have them follow along.
- *Supplemental handout: “How To Control Cholesterol” on page 5 of The Role of Food and Your Health: Cholesterol and Blood Sugar lesson plan.*
  - <https://www.heart.org/en/healthy-living/healthy-lifestyle/my-life-check--lifes-simple-7/l7-cholesterol-infographic>

**1 UNDERSTAND BLOOD GLUCOSE**

The first step to managing your blood sugar is to understand what makes blood sugar levels rise. [heart.org/diabetes](http://heart.org/diabetes)

**GLUCOSE** The carbohydrates and sugars in what you eat and drink turn into glucose (sugar) in the stomach and digestive system. Glucose can then enter the bloodstream.

**INSULIN** Insulin is a hormone made in the pancreas that helps the body's cells take up glucose from blood and lower blood sugar levels.

In type 2 diabetes, glucose builds up in the blood instead of going into cells because:

- The body develops "insulin resistance" and can't use the insulin it makes efficiently.
- The pancreas gradually loses its ability to produce insulin.

The result can be a high blood glucose level.

**2 TRACK LEVELS**

Health care providers can take blood glucose readings and provide recommendations. If you're diagnosed with type 2 diabetes, you will need to monitor your blood sugar level regularly. Know Diabetes by Heart can help you manage type 2 diabetes. [knowdiabetesbyheart.org](http://knowdiabetesbyheart.org)

Target blood glucose levels	Diagnosis	What to know
Lower than 100 mg/dL	Normal	Healthy range
100 to 125 mg/dL	Pre-diabetic (Impaired Fasting Glucose)	An increased risk of developing diabetes
126 mg/dL or higher	Diabetic (Type 2 Diabetes)	A increased risk of heart disease or stroke

**3 TIPS FOR SUCCESS**

**EAT SMART**  
Eat a healthy diet of vegetables, fruits, whole grains, beans, legumes, nuts, lean proteins and fish. Limit sweetened drinks, sodium, sugars, fatty foods, processed meats and sodium. [heart.org/EatSmart](http://heart.org/EatSmart)

**MOVE MORE**  
Being physically active can lower your risk of developing diabetes and help you manage the disease if you already have it. [heart.org/MoveMore](http://heart.org/MoveMore)

**MANAGE WEIGHT**  
Stay at a healthy weight to help prevent, delay or manage diabetes. [heart.org/Weight](http://heart.org/Weight)

**DON'T SMOKE**  
Smoking, vaping or using tobacco can increase your risk of heart disease, stroke, many cancers and other chronic diseases. It may also make prediabetes and diabetes harder to manage. [heart.org/Tobacco](http://heart.org/Tobacco)

LEARN MORE AT [HEART.ORG/MYLIFECHECK](http://HEART.ORG/MYLIFECHECK) AND [HEART.ORG/DIABETES](http://HEART.ORG/DIABETES)

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- *Supplemental handout: “How To Manage Blood Sugar” on page 6 of The Role of Food and Your Health: Cholesterol and Blood Sugar lesson plan.*
  - <https://www.heart.org/en/healthy-living/healthy-lifestyle/my-life-check--lifes-simple-7/lis7-blood-sugar-infographic>



- This slide is meant to provide a visual cue. To review the handout with participants, open the PDF or link in a separate window and share your screen. If participants have a printed copy, have them follow along.
- *Supplemental handout: “Sip Smarter” on page 7 of The Role of Food and Your Health: Cholesterol and Blood Sugar lesson plan.*
  - <https://www.heart.org/en/healthy-living/healthy-eating/eat-smart/sugar/sip-smarter-infographic>

# Creamy Chicken Curry



- *Optional activity: Creamy Chicken Curry*
  - <https://recipes.heart.org/en/recipes/creamy-chicken-curry---delicious-decisions>



- **Discuss what a “SMART” goal is.**
  - Specific -- clearly defined
  - Measurable -- able to be measured (numbers!)
  - Attainable -- achievable or within reach
  - Relevant -- appropriate or applicable
  - Time-Based -- given a due date
- *Supplemental video:*
  - *Achieve More by Setting SMART Goals (1:15)-*  
<https://youtu.be/yA53yhiOe04>

## SMART Goal Example

### Goal:

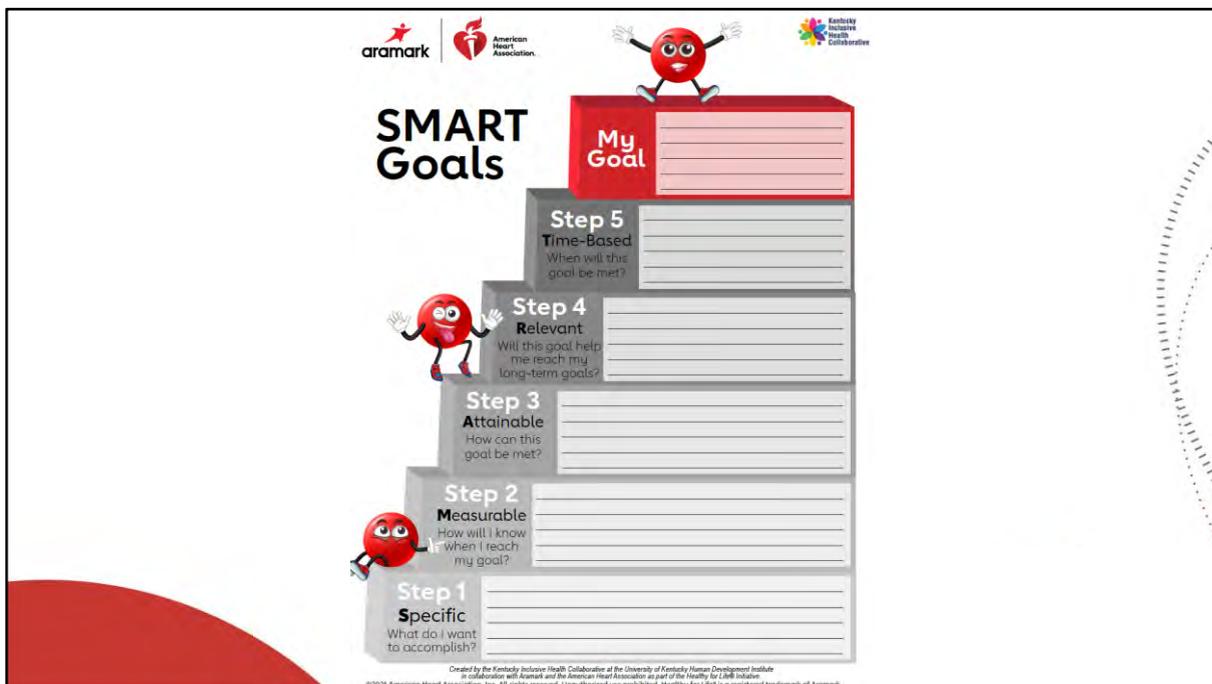
I will check my cholesterol and blood sugar levels regularly.

### SMART Goal:

I will ask my doctor about my cholesterol and blood sugar levels at every visit and at least once a year.



- Engage in a goal setting activity.
- Provide an example of a non-SMART goal.
- Invite the group to discuss how to make it SMART.



- This slide is meant to provide a visual cue. To review the handout with participants, open the PDF or link in a separate window and share your screen. If participants have a printed copy, have them follow along.
- **Pass out “SMART Goal” handout to participants. If time allows, have participants fill out the handout and come up with their own SMART goal.**
  - <https://www.heart.org/-/media/healthy-living-files/healthy-for-life/kentucky-inclusive-health-collaborative-pdfs/smartgoals.pdf?la=en>



# Questions?

- **Invite participants to ask questions.**

# Thank You!



- **Thank participants**
- **If applicable, encourage them to join the next activity**
  - **Provide date/time/location if known**