

# The Role of Food and Your Health: Blood Pressure



**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<sup>®</sup> Initiative.**



# Agenda

- Introduction
- Blood Pressure
- Health Care Discussion
- Goal Setting



# Learning Objectives

- Meet with a health professional to obtain a personal blood pressure reading.
- Understand how food affects your blood pressure.
- Describe what causes high blood pressure.
- Identify at least two strategies for controlling blood pressure.



# Ice Breaker

# BLOOD PRESSURE MONITOR

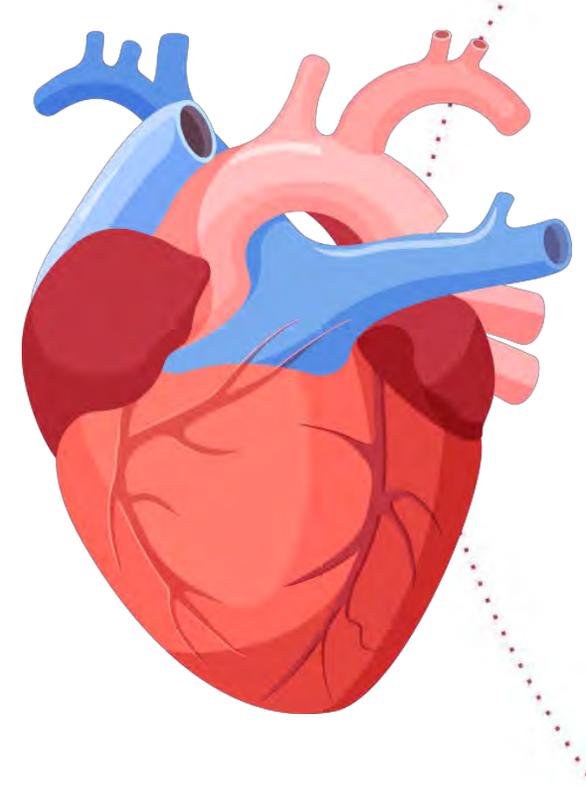
- SYSTOLIC  
UPPER NUMBER
- DIASTOLIC  
LOWER NUMBER



# Blood Pressure

## How does blood pressure work?

- Heart pumps blood through blood vessels
- Blood pushes against vessel walls
  - This pushing is your blood pressure



## What is blood pressure?

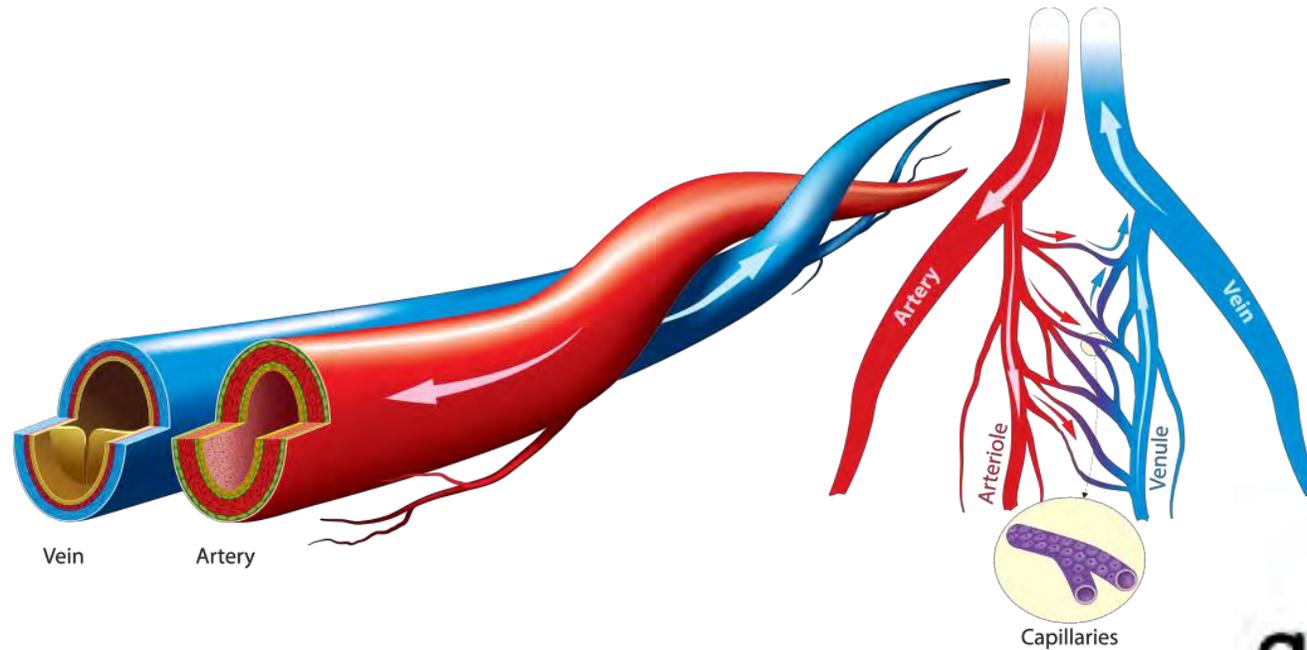
- Blood pressure moves blood throughout our bodies
- Provides organs and tissues needed oxygen



# Blood Pressure

## Arteries vs Veins

- Arteries move blood away from heart
  - Elastic and can stretch
- Veins move blood back towards heart



# Blood Pressure Numbers

Blood Pressure is measured by 2 numbers

## Systolic Pressure

- Top number
- Measures pressure in arteries when blood is **pumping**

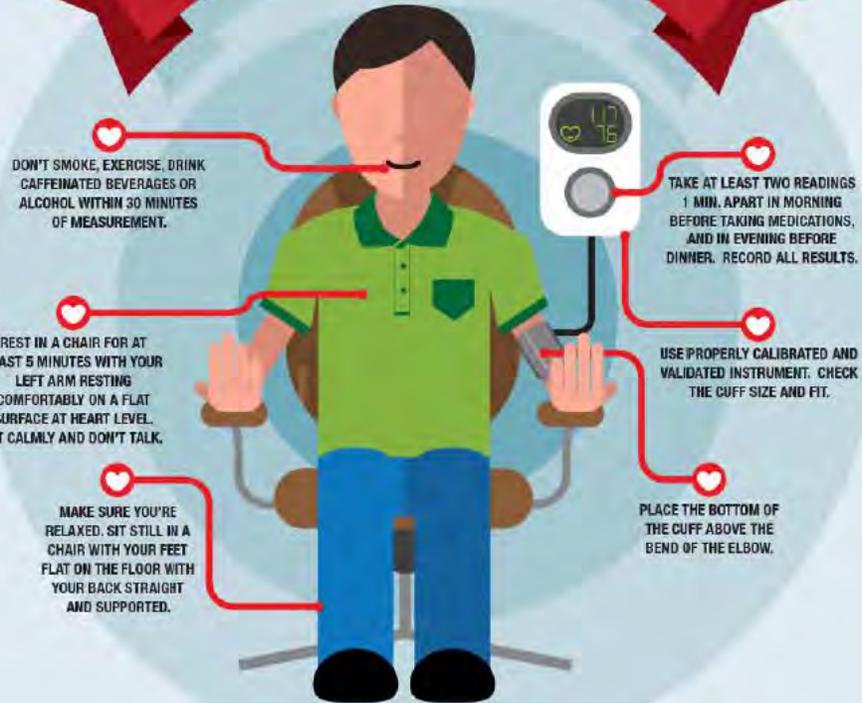
## Diastolic Pressure

- Bottom number
- Measures pressure in arteries when heart is at **rest**





# BLOOD PRESSURE MEASUREMENT INSTRUCTIONS



## American Heart Association recommended blood pressure levels

BLOOD PRESSURE CATEGORY	SYSTOLIC mm Hg (upper number)		DIASTOLIC mm Hg (lower number)
NORMAL	LESS THAN 120	and	LESS THAN 80
ELEVATED	120-129	and	LESS THAN 80
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 1	130-139	or	80-89
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 2	140 OR HIGHER	or	90 OR HIGHER
HYPERTENSIVE CRISIS (consult your doctor immediately)	HIGHER THAN 180	and/or	HIGHER THAN 120



\*With a few minutes of take blood pressure again. If it's still high, contact your doctor immediately.

LEARN MORE AT [HEART.ORG/HBP](http://HEART.ORG/HBP)

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## Blood Pressure Chart

BLOOD PRESSURE CATEGORY	SYSTOLIC mm Hg (upper number)		DIASTOLIC mm Hg (lower number)
NORMAL	LESS THAN 120	and	LESS THAN 80
ELEVATED	120 - 129	and	LESS THAN 80
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 1	130 - 139	or	80 - 89
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 2	140 OR HIGHER	or	90 OR HIGHER
HYPERTENSION CRISIS (consult your doctor immediately)	HIGHER THAN 180	and/or	HIGHER THAN 120

Two numbers are recorded when measuring your blood pressure. The top, or upper, number (called **systolic** pressure) measures the pressure in your arteries when your heart beats. The bottom, or lower, number (called **diastolic** pressure) measures the pressure while your heart rests between beats. Blood pressure is measured in millimeters of mercury (mm Hg).

The five blood pressure ranges as recognized by the American Heart Association are:

### Normal

Blood pressure numbers of less than 120/80 mm Hg are considered within the normal range. If your results fall in this category, stick with heart-healthy habits like following a balanced diet and getting regular exercise.

### Elevated

Elevated blood pressure readings consistently range from 120-129 systolic and less than 80 mm Hg diastolic. People with elevated blood pressure are likely to develop high blood pressure unless steps are taken to control the condition.

### Hypertension Stage 1

Blood pressure consistently ranges from 130-139 systolic or 80-89 mm Hg diastolic. Health care providers are likely to prescribe lifestyle changes and may consider adding blood pressure medication based on your risk of atherosclerotic cardiovascular disease (ASCVD), such as heart attack or stroke.

### Hypertension Stage 2

Blood pressure consistently ranges at 140 systolic or 90 mm Hg diastolic or higher. Health care providers are likely to prescribe blood pressure medications and lifestyle changes.

### Hypertensive Crisis

This stage requires medical attention. If your blood pressure readings suddenly exceed 180/120 mm Hg, wait five minutes and then test again. If your readings are still unusually high, contact your health care provider immediately.

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# Blood Pressure Range

BLOOD PRESSURE CATEGORY	SYSTOLIC mm Hg (upper number)		DIASTOLIC mm Hg (lower number)	
NORMAL	LESS THAN 120	and	LESS THAN 80	
ELEVATED	120-129	and	LESS THAN 80	
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 1	130-139	or	80-89	
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 2	140 OR HIGHER	or	90 OR HIGHER	
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 3	HIGHER THAN 180	and/or	HIGHER THAN 120	

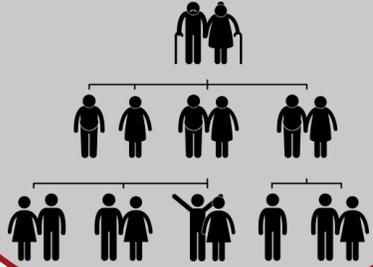
# High Blood Pressure (Hypertension)

- Doesn't always have a cause or symptoms
- "Silent killer"



# Risk Factors

family history



gender



no physical activity



stress



poor diet



smoking

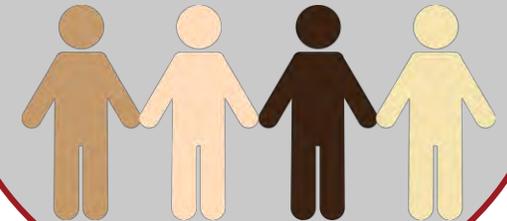


drinking too much alcohol

age



race



Key:

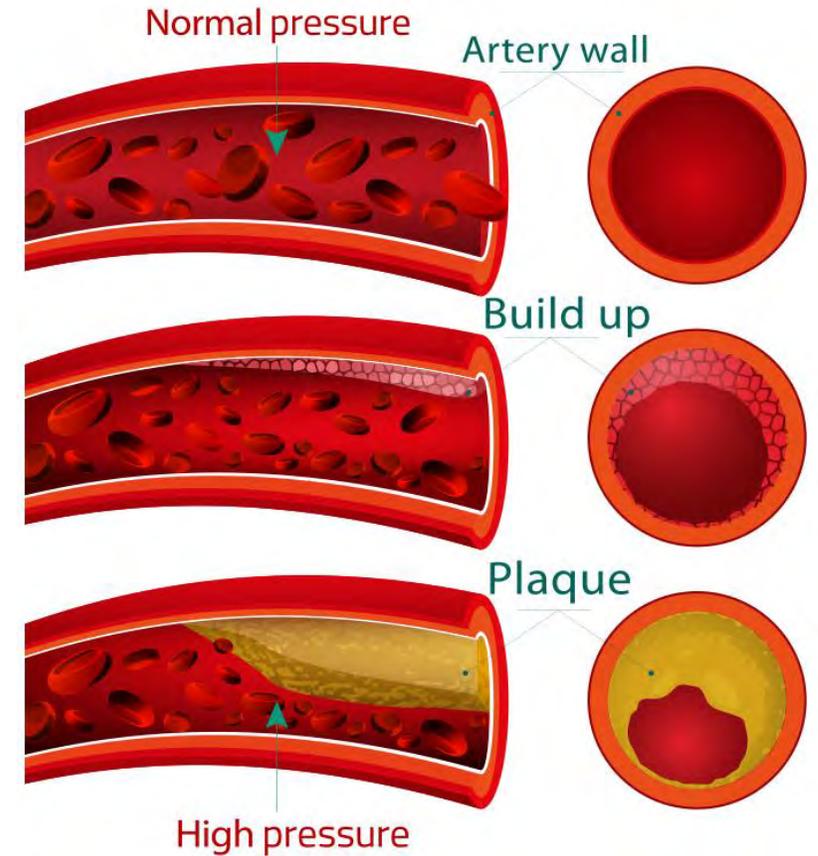
○ out of our control

○ in our control



# What Happens?

- Makes our hearts work harder
- Damages inner lining of arteries
- May increase risk of heart disease



# Healthy Blood Pressure: 2 Tips

## 1. Heart healthy diet includes:

- Fruits
- Vegetables
- Whole grains
- Lean meat

## 2. Limit sodium



# Sodium

- Most comes from eating packaged and prepared foods
- Limiting sodium keeps blood pressure in check



# Popular High Sodium Foods

## Bread and rolls

- Check nutrition labels for lowest sodium

## Pizza

- Add veggie toppings

## Sandwiches

- Eat half or add a side salad

### Nutrition Facts

Serving Size 1 can (183 mL)

Servings per Container 3.5

Amount per serving

Calories 30 Calories from Fat 0

Total Fat 0g 0%

Saturated Fat 0g 0%

Cholesterol 0mg 0%

Sodium 520mg 22%

Total Carbohydrate 6g 2%

Dietary Fiber 1g 4%

Sugars 5g

Protein 1g



# Popular High Sodium Foods

## Cold cuts and cured meats

- Look for brands with lower sodium



## Soup

- Check nutrition labels for lowest sodium



## Burritos and tacos

- Make your own taco seasoning:
  - Half a teaspoon of cumin, oregano, chili powder, garlic powder



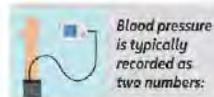
# Health Care Discussion

Learn About Your  
Blood Pressure

## HOW TO MANAGE BLOOD PRESSURE

### 1 UNDERSTAND READINGS

The first step to managing blood pressure is to understand what the levels mean and what is considered normal, elevated, high blood pressure (hypertension) and hypertensive crisis. [heart.org/BPLlevels](http://heart.org/BPLlevels)



Blood pressure is typically recorded as two numbers:

**117**  
**76**

#### Systolic

The top number, the higher of the two numbers, measures the pressure in the arteries when the heart beats (when the heart muscle contracts).

#### Diastolic

The bottom number, the lower of the two numbers, measures the pressure in the arteries when the heart is resting between heart beats.

Read as "117 over 76 millimeters of mercury."

BLOOD PRESSURE CATEGORY	SYSTOLIC mm Hg (top number)	and	DIASTOLIC mm Hg (bottom number)
Normal	less than 120	and	less than 80
Elevated Blood Pressure	120 to 129	and	less than 80
High Blood Pressure (Hypertension) Stage 1	130 to 139	or	80 to 89
High Blood Pressure (Hypertension) Stage 2	140 or higher	or	90 or higher
Hypertensive Crisis (Call your doctor immediately)	higher than 180	and/or	higher than 120

### 2 TRACK LEVELS

 American Heart Association  
**Check. Change. Control.**



Check. Change. Control.

Health care providers can take blood pressure readings and provide recommendations.

Check. Change. Control. helps you track your progress in reducing blood pressure.

Track online at [ccctracker.com/AHA](http://ccctracker.com/AHA)

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

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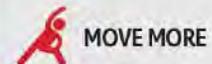
### 3 TIPS FOR SUCCESS



#### EAT SMART

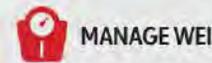
Eat a healthy diet of vegetables, fruits, whole grains, beans, legumes, nuts, plant-based proteins, lean animal proteins and fish. Limit sodium, saturated fats and added sugars. Limit sugary foods and drinks, fatty or processed meats, salty foods, refined carbohydrates and highly processed foods.

[heart.org/EatSmart](http://heart.org/EatSmart)



#### MOVE MORE

Physical activity helps control blood pressure, weight and stress levels. [heart.org/MoveMore](http://heart.org/MoveMore)



#### MANAGE WEIGHT

If you're overweight, even a slight weight loss can reduce high blood pressure. [heart.org/Weight](http://heart.org/Weight)



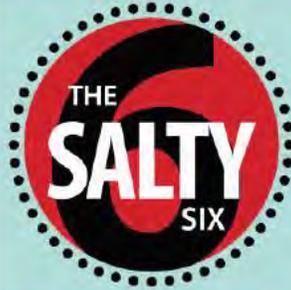
#### DON'T SMOKE

Every time you smoke, vape or use tobacco, the nicotine can cause a temporary increase in blood pressure. [heart.org/Tobacco](http://heart.org/Tobacco)



#### SLEEP WELL

Short sleep (less than 6 hours) and poor-quality sleep are associated with high blood pressure.

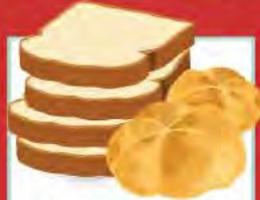


**DID YOU KNOW?**  American Heart Association.

**THESE SIX POPULAR FOODS CAN ADD HIGH LEVELS OF SODIUM TO YOUR DIET\***

The American Heart Association recommends no more than 2,300 milligrams (mgs) a day and an ideal limit of no more than 1,500 mg per day for most adults.

When you see the Heart-Check mark on a product, you know the food has been certified to meet nutritional criteria for heart-healthy foods, including sodium.



**BREADS & ROLLS**

Some foods that you eat several times a day, such as bread, add up to a lot of sodium even though each serving may not seem high in sodium. Check the labels to find lower-sodium varieties.

**1**



**PIZZA**

A slice of pizza with several toppings can contain more than half of your daily recommended dietary sodium. Limit the cheese and add more veggies to your next slice.

**2**



**SANDWICHES**

A sandwich or burger from a fast food restaurant can contain more than 100 percent of your daily suggested dietary sodium. Try half sandwich with a side salad (with low-sodium dressing) instead.

**3**



**COLD CUTS & CURED MEATS**

One 2 oz. serving, or 6 thin slices, of deli meat can contain as much as half of your daily recommended dietary sodium. Look for lower-sodium varieties of your favorite lunch meats.

**4**



**SOUP**

Sodium in one cup of canned soup can range from 100 to as much as 940 milligrams—more than half of your daily recommended intake. Check the labels to find lower sodium varieties.

**5**



**BURRITOS & TACOS**

Taco toppings and burrito fillings can pack a big sodium punch. Choose burritos and tacos that are full of veggies and have less meat and cheese.

**6**

\*Quader 26, Zhao L, Gillespie C, et al. Sodium Intake Among Persons Aged 21 Years—United States, 2011–2014. MMWR Morbidity and Mortality Weekly Report 2017;66:226–230. DOI: <http://dx.doi.org/10.5555/mmwr.mm6612a2>

# Tomato Basil Soup



# SMART

What are your **SMART** goals?

<b>Specific</b>	<b>Measurable</b>	<b>Attainable</b>	<b>Relevant</b>	<b>Time-Based</b>
				



# SMART Goal Example



## Goal:

I will check my blood pressure weekly.

## SMART Goal:

I will check my blood pressure every Wednesday morning.





# SMART Goals

**My Goal**


**Step 5**

**Time-Based**

When will this goal be met?




**Step 4**

**Relevant**

Will this goal help me reach my long-term goals?


**Step 3**

**Attainable**

How can this goal be met?


**Step 2**

**Measurable**

How will I know when I reach my goal?




**Step 1**

**Specific**

What do I want to accomplish?


**Questions?**

# Thank You!

