



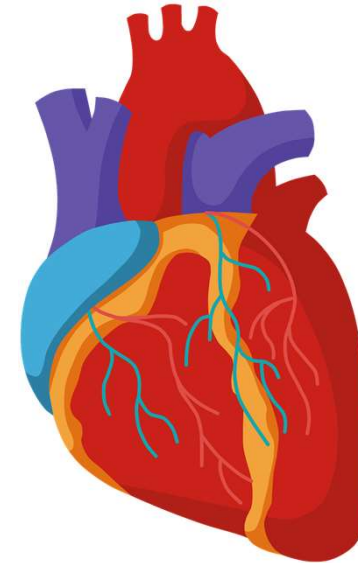
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# Fighting Back Against the Silent Killer

Hypertension Awareness, Prevention, and Management Strategies

# What is Blood Pressure?

- When your heart beats, it pumps blood into your blood vessels (arteries and veins).
- This creates pressure against the blood vessel walls.
- This blood pressure causes oxygenated blood to flow to all parts of your body.



(AHA, [ETS Health Lesson - Control Your Blood Pressure \(empoweredtoserve.org\)](https://empoweredtoserve.org))

# How is Blood Pressure Measured?

Your BP is recorded as two numbers:

Top Number = Systolic Pressure

- Indicates how much pressure your blood is exerting against your artery walls when the heart beats.
- In this example, systolic pressure is 110 millimeters of mercury (mm Hg).

Bottom Number = Diastolic Pressure

- Indicates how much pressure your blood is exerting against your artery walls while the heart is resting between beats.
- In this example, diastolic pressure is 67 millimeters of mercury (mm Hg).



(AHA, [ETS Health Lesson - Control Your Blood Pressure \(empoweredtoserve.org\)](https://www.ets.edu/health/lesson/control-your-blood-pressure))



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# What is a Normal Blood Pressure Reading?

## Blood Pressure Categories



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

AHA - <https://www.heart.org/en/health-topics/high-blood-pressure/understanding-blood-pressure-readings>



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# When Does High Blood Pressure Become Hypertension?

- Changes throughout the day based on your activities.
- Readings consistently above normal may result in a diagnosis of hypertension.
- Only a health care team can diagnose high blood pressure and make treatment decisions.
- Guidelines used to diagnose hypertension may differ from health care professional to health care professional.



(CDC, 2021, <https://www.cdc.gov/bloodpressure/about.htm> )



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# What Are the Symptoms of High Blood Pressure?

- Usually develops over time and has no warning signs or symptoms (silent killer). Many people do not know they have it.
- Measuring your blood pressure is the only way to know whether you have high blood pressure.



Symptoms of severe hypertension or hypertensive crisis can include: Flushing, blood spots in the eyes, nosebleeds, headaches and dizziness (Rishe & Holland, 2021)

(AHA, [ETS Health Lesson - Control Your Blood Pressure \(empoweredtoserve.org\)](https://empoweredtoserve.org))

# Risk Factors for Developing High Blood Pressure

## Non-Modifiable Risk Factors

- Family history
- Increased Age
- Male Gender
- Race
- Chronic Kidney Disease (CKD)



Understanding these risk factors can help you be more aware of how likely you are to develop high blood pressure.

(AHA, [ETS Health Lesson - Control Your Blood Pressure \(empoweredtoserve.org\)](https://empoweredtoserve.org))

# Risk Factors for Developing Hypertension

## Modifiable Risk Factors

- Lack of physical activity
- Unhealthy diet, especially one high in sodium and cholesterol
- Being overweight or obese
- Drinking too much alcohol
- High cholesterol
- Diabetes
- Smoking and tobacco use
- Stress

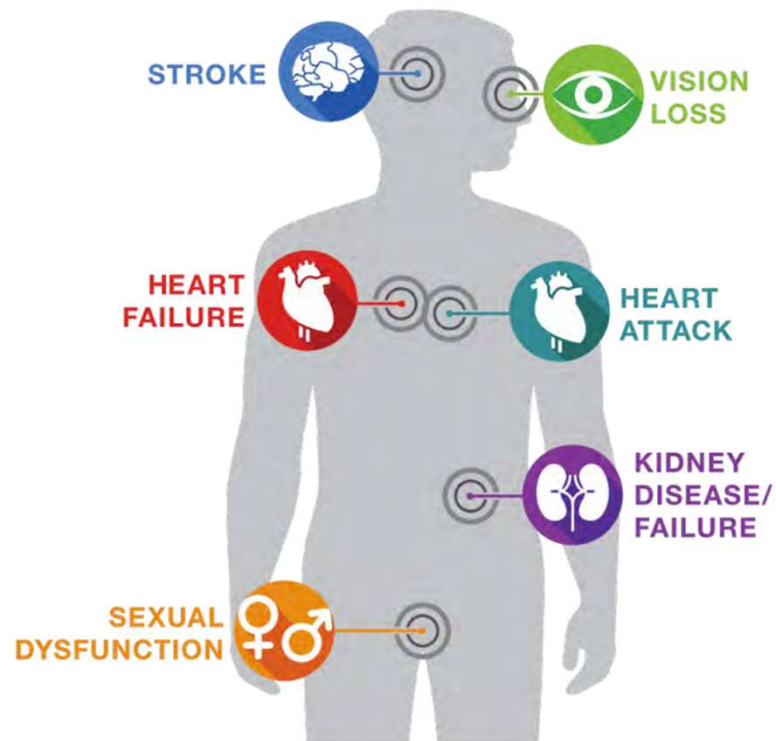


You can change these risk factors to help prevent and manage high blood pressure.

(AHA, [ETS Health Lesson - Control Your Blood Pressure \(empoweredtoserve.org\)](https://empoweredtoserve.org))



# Consequences of Hypertension



<https://www.heart.org/-/media/files/health-topics/high-blood-pressure/consequences-of-high-blood-pressure-infographic.pdf>

## Did you know?

- When your blood pressure is too high for too long, it damages your blood vessels .
- When left untreated, the damage that high blood pressure does to your circulatory system is a significant contributing factor to heart attack, stroke and other health threats.
- High Blood Pressure increases the workload of your circulatory system while decreasing its efficiency.

# Prevalence in Kansas Communities

- In 2021, 34.3% of adult Kansans reported being told by a health professional that they had high blood pressure (compared to 32.4% of adults nationwide).
- Most prevalent in:
  - populations who have less than a high school education.
  - Black Men.
  - Individuals over the age of 65 years.
  - Individuals who have incomes below \$25,000 per year.



(CDC, 2021 Behavioral Risk Factor Surveillance System, <https://www.americashealthrankings.org/explore/annual/measure/Hypertension/state/KS> )



# Prevalence in Communities Nationwide



Over 1 in 2  
African-Americans



Over 1 in 3  
Asians, Pacific  
Islanders



Over 1 in 3  
Hispanics, Latinos



Over 1 in 4\*  
American Indians,  
Alaska Natives

**Nearly half of people with high blood pressure do not have it under control.**

\*AHA- Data for this population is from 2017 and may not reflect current prevalence.

(AHA, [ETS Health Lesson - Control Your Blood Pressure \(empoweredtoserve.org\)](https://empoweredtoserve.org))

# Managing Blood Pressure

## Making Changes that Matter:

- **Eat more nutrient-dense foods & reduce sodium intake.**
- Limit alcohol intake
- **Enjoy consistent physical activity**
- **Manage stress**
- Maintain a healthy weight
- Quit smoking
- Take your medications as prescribed
- Work together with your doctor
- **Consider self-monitoring your blood pressure.**



Even small changes will make a big difference.

(AHA, [ETS Health Lesson - Control Your Blood Pressure \(empoweredtoserve.org\)](https://www.etshealth.com/lesson/control-your-blood-pressure))

# Eat More Nutrient Dense Foods

Let's focus on what you can add to your diet!

- Eat a variety of fruits & vegetables
- Whole grains – ½ of your daily intake should be high-fiber options
- Lean meats and proteins
- Eat a variety of nuts, seeds, & legumes
- Low fat dairy foods
- Focus on heart healthy fats
- Increase fluids as fiber consumption increases



( National Heart Lung and Blood Institute, 2021 <https://www.nhlbi.nih.gov/education/dash-eating-plan> )

# Reduce Sodium Intake



## Excess levels of sodium: How too much sodium affects your health



**9 out of 10** Americans consume too much sodium.

### — Where does sodium come from? —



More than **70%** comes from processed and restaurant foods



About **11%** is added while cooking or eating



More than **14%** occurs naturally

**3,400** milligrams  
Amount of sodium an American consumes on average in a day

**1,500** milligrams  
Recommended by the AHA for ideal heart health

(AHA, 2021 <https://www.heart.org/en/healthy-living/healthy-eating/eat-smart/sodium/effects-of-excess-sodium-infographic> )



# Reduce Sodium Intake

## Check the Package for Nutrient Claims

You can also check for nutrient claims on food and beverage packages to quickly identify those that may contain less sodium. Here's a guide to common claims and what they mean:

What It Says	What It Means
Salt/Sodium-Free	Less than 5 mg of sodium per serving
Very Low Sodium	35 mg of sodium or less per serving
Low Sodium	140 mg of sodium or less per serving
Reduced Sodium	At least 25% less sodium than the regular product
Light in Sodium or Lightly Salted	At least 50% less sodium than the regular product
No-Salt-Added or Unsalted	No salt is added during processing – but these products may not be salt/sodium-free unless stated

1 tsp salt  
≈  
2,300 mg  
sodium



(FDA, 2022 <https://www.fda.gov/food/nutrition-education-resources-materials/sodium-your-diet> )

# Reduce Sodium Intake

Nutrition Facts	
8 servings per container	
<b>Serving size</b>	<b>2/3 cup (55g)</b>
<b>Amount per serving</b>	
<b>Calories</b>	<b>230</b>
<b>% Daily Value*</b>	
<b>Total Fat</b> 8g	<b>10%</b>
Saturated Fat 1g	<b>5%</b>
<i>Trans Fat</i> 0g	
<b>Cholesterol</b> 0mg	<b>0%</b>
<b>Sodium</b> 160mg	<b>7%</b>
<b>Total Carbohydrate</b> 37g	<b>13%</b>
Dietary Fiber 4g	<b>14%</b>
Total Sugars 12g	
Includes 10g Added Sugars	<b>20%</b>
<b>Protein</b> 3g	
Vitamin D 2mcg	10%
Calcium 260mg	20%
Iron 8mg	45%
Potassium 235mg	6%

\* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

**Start with serving information.**  
This will tell you the size of a single serving and how many servings are in the package.

**Check total calories.**  
Do the math to know how many calories you're really getting if you eat the whole package.

**Limit certain nutrients.**  
Compare labels when possible and choose options with lower amounts of added sugars, sodium and saturated fat and no trans fat.

**Get enough of beneficial nutrients.**  
Eat foods with nutrients your body needs, like calcium, dietary fiber, iron, potassium and Vitamin D.

**Understand % Daily Value.**

- The % Daily Value (DV) tells you the percentage of each nutrient in a single serving in terms of the daily recommended amount.
- To consume less of a nutrient (such as saturated fat or sodium), choose foods with a lower % DV (5% or less).
- To consume more of a nutrient (such as fiber or potassium), choose foods with a higher % DV (20% or more).

(AHA, 2021 <https://www.heart.org/en/healthy-living/healthy-eating/eat-smart/nutrition-basics/making-the-most-of-the-nutrition-facts-label>)



# Enjoy Consistent Physical Activity

## Benefits:

- Improve blood lipid levels (decreases the risk for heart disease & stroke)
- Weight loss & maintenance
- Improve blood pressure
- Increase confidence & mood
- Reduce depression
- Help alleviate stress
- Increase energy
- Improve sleep



(NIH, 2021 <https://www.nia.nih.gov/health/four-types-exercise-can-improve-your-health-and-physical-ability> )

# Enjoy Consistent Physical Activity

## Recommendation for Adults – 150 minutes per week (cardiovascular/endurance)

- Break it up into smaller amounts
- Go for a walk, walk your dog
- Brisk walking or jogging
- Yard work (mowing, raking)
- Dancing
- Swimming
- Biking
- Climbing stairs or hills
- Playing tennis or basketball



(DGA, <https://www.dietaryguidelines.gov/> )



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# Enjoy Consistent Physical Activity

## Recommendation for Adults – 2 times per week (strength)

- Lifting weights
- Carrying groceries
- Gripping a tennis ball
- Overhead arm curl
- Arm curls
- Wall push-ups
- Lifting your body weight
- Using a resistance band



(NIH, 2021 <https://www.nia.nih.gov/health/four-types-exercise-can-improve-your-health-and-physical-ability> )

# Manage Stress

Long-term activation of your body's stress response system, may put you at risk for health issues such as:

- Digestive problems
- Anxiety/depression
- Headaches
- Sleep problems
- Weight gain
- Memory/concentration issues
- High blood pressure
- Heart disease and stroke



(AHA, 2021, <https://www.heart.org/en/healthy-living/healthy-lifestyle/stress-management/lower-stress-how-does-stress-affect-the-body> )

# Manage Stress

## What can you do?

- Find a friend, don't self-isolate
- Move more
- Focus on sleep hygiene
- Consider meditation
- Make an appointment to speak with a therapist



(AHA, 2021, <https://www.heart.org/en/healthy-living/healthy-lifestyle/stress-management/lower-stress-how-does-stress-affect-the-body> )

# MONITOR YOUR BLOOD PRESSURE AT HOME

If you have high blood pressure, home monitoring may help your health care provider determine whether treatments are working.

## Before Taking Your Blood Pressure:

- Avoid exercise, caffeine, smoking, and alcohol for at least 30 mins.
- Empty your bladder.
- Wear light or thin clothing so the cuff can get an accurate read.
- Find a quiet place to sit and relax for 5 minutes.



(AHA, [ETS Health Lesson - Control Your Blood Pressure \(empoweredtoserve.org\)](https://empoweredtoserve.org))



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# MONITOR YOUR BLOOD PRESSURE AT HOME

## While Taking Your Blood Pressure:

- Position feet flat on the floor and sit up straight with your back against the chair.
- Rest your BP arm on something so your arm is heart level.
- Use the same arm every time.
- Avoid looking at the numbers/monitor while taking your BP.
- Log your numbers when done.
- Share your numbers with your provider.



(AHA, [ETS Health Lesson - Control Your Blood Pressure \(empoweredtoserve.org\)](https://empoweredtoserve.org))

# MONITOR YOUR BLOOD PRESSURE AT HOME



(AHA, [How To Monitor Your Blood Pressure at Home – YouTube](#))



# QUESTIONS AND CONTACT INFORMATION

Stephanie Gutierrez  
Extension Program Coordinator  
717-353-3195  
[smgutier@ksu.edu](mailto:smgutier@ksu.edu)

Sara Sawyer, MPH, RD, LD  
Registered Dietitian/Extension Agent  
316.660.0118  
[sarasawer@ksu.edu](mailto:sarasawer@ksu.edu)

