



High Blood Pressure

What is Blood Pressure?

The force of blood pushing against the walls of your blood vessels. It is measured in millimeters of Mercury (mm Hg).

What is High Blood Pressure?

The pressure in your blood vessels (called arteries) is higher than it should be normally. Another name for high blood pressure is **hypertension**.

The top number of your blood pressure is called the systolic pressure. This number represents the pressure when your heart beats. The bottom number is called the diastolic pressure. This number represents the pressure when your heart is resting in-between beats.

Normal blood pressure is below 120/80 mmHg as seen in the 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
HYPERTENSIVE CRISIS (consult your doctor immediately)	HIGHER THAN 180	and/or	HIGHER THAN 120

High blood pressure (hypertension) is a systolic blood pressure (top number) greater than 130 or a diastolic blood pressure (bottom number) greater than 80.

Factors you can control

- Smoking cigarettes (includes being around smokers – secondhand smoke)
- Having Diabetes (high blood sugar)
- Being overweight or obese
- Having high cholesterol
- Eating an unhealthy diet (high in sodium/salt, low in potassium, drinking too much alcohol)
- Getting little physical activity/not enough exercise

Factors you cannot control

- Family history of high blood pressure
- Race/ethnicity
- Older age
- Male gender
- Chronic kidney disease
- Obstructive sleep apnea

***Stress (financial, social, medical conditions) also increase your risk for high blood pressure.**

Talk to your healthcare team about stress and being able to afford your medications. These things can affect you being able to take your medication properly and can make changing your lifestyle more difficult.

Consequences of High Blood Pressure

High blood pressure is often the first domino in a chain or **"domino effect"** leading to devastating consequences, like:



STROKE

HBP can cause blood vessels in the brain to burst or clog more easily.



VISION LOSS

HBP can strain the vessels in the eyes.



HEART FAILURE

HBP can cause the heart to enlarge and fail to supply blood to the body.



HEART ATTACK

HBP damages arteries that can become blocked.



KIDNEY DISEASE/ FAILURE

HBP can damage the arteries around the kidneys and interfere with their ability to effectively filter blood.



SEXUAL DYSFUNCTION

This can be erectile dysfunction in men or lower libido in women.



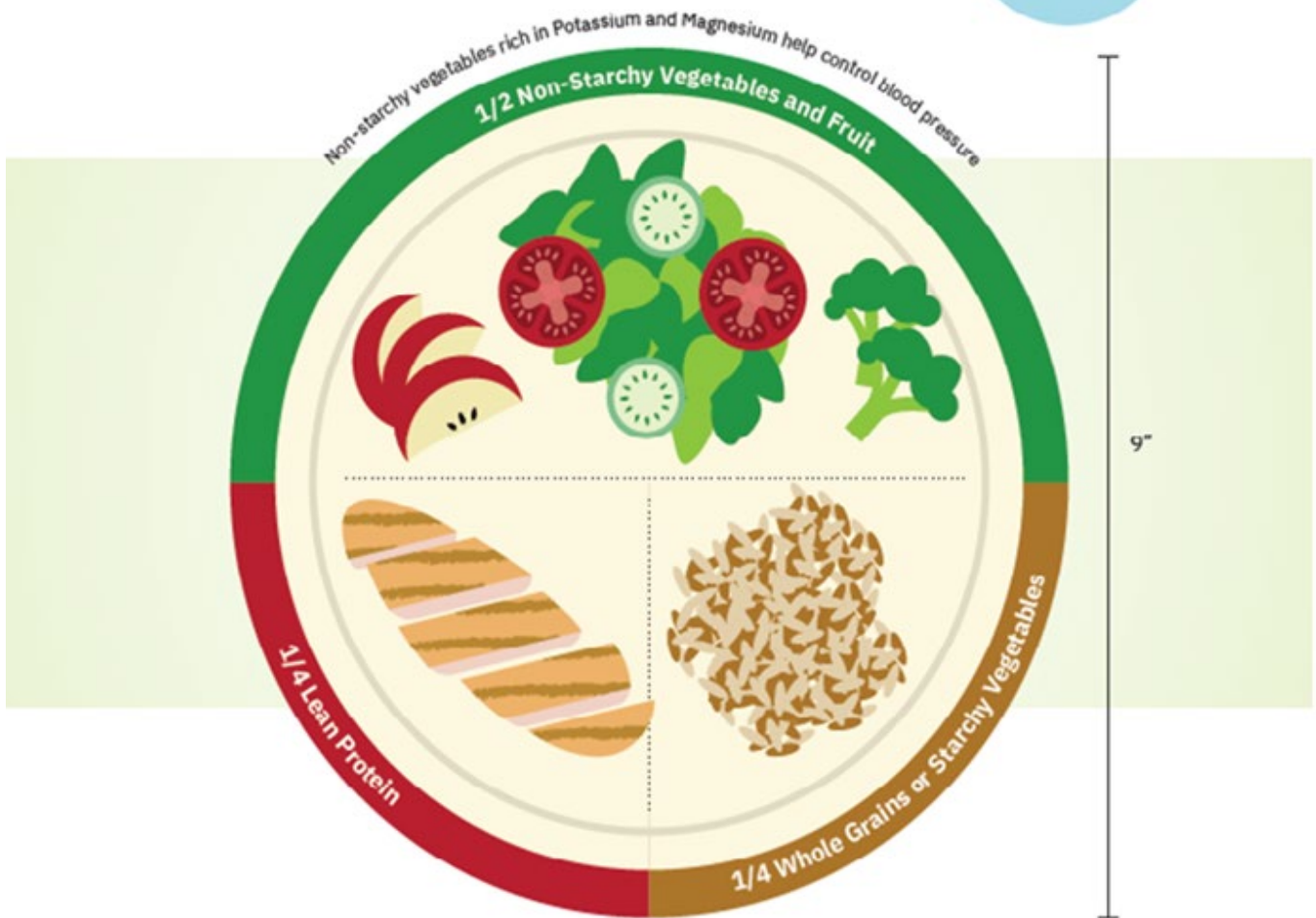
A simple **blood pressure check** is the first step to preventing the "domino effect."

Learn more at heart.org/hbp.



WHAT YOU EAT CAN HELP YOUR BLOOD PRESSURE

Building a DASH Diet Plate



Serving Sizes:

1 cup of leafy or 1/2 cup raw or cooked
per serving of non-starchy vegetables and fruit

1/2 cup, 1 ounce slice, or 1 ounce of cereal
per serving of whole grains or starchy vegetables

1 ounce per serving of lean protein

Add throughout the day:

- 2-3 servings of low-fat dairy
- 2-3 servings of healthy fats and oils
- Water as main beverage

Add throughout the week:

- 4-5 servings a week of nuts, seeds, and legumes

Examples of Food to Fill Your Plate

Non-Starchy Vegetables (unlimited servings)

- Broccoli
- Brussel sprouts
- Cabbage
- Carrots
- Cauliflower
- Cucumber
- Greens (all varieties)
- Lettuce
- Mushrooms
- Onions
- Peppers
- Summer squash
- Tomatoes

Whole Grains or Starches (3-4 servings)

- Beans
- Corn
- Lentils
- Peas
- Potatoes
- Squash (butternut, acorn, pumpkin)
- Bread (whole grain, high fiber)
- Cereal
- Brown rice
- Whole wheat pasta

Protein (3-6 ounces per day)

- Meat
- Eggs
- Fish/seafood
- Beans/lentils
- Soy (edamame, tofu)

Dairy (2-3 servings per day)

- Cheese (low fat)
- Fat free milk
- Yogurt (low fat, low sugar)

Fruit (4-5 servings per day)

- 1 small piece of fruit
- ½ cup sliced fresh, canned, or frozen fruit

Sodium

(limit to 1500mg per day)

Fats

(2-3 servings of healthy fats or oils)

Don't add salt when cooking. Try salt free seasonings.

Foods with hidden salt:

- Canned and packaged foods
- Frozen dinners
- Deli meats
- Restaurant foods
- Condiments (ketchup, ranch, mayo)
- Sauces (BBQ, soy, steak, Worcestershire)

Healthy fat choices

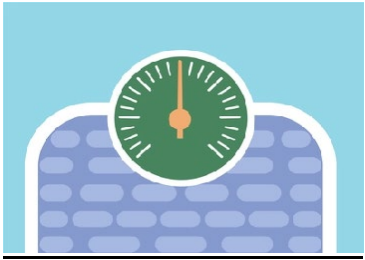

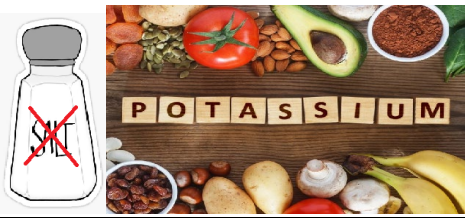


- Avocado
- Oils (avocado, canola, olive, peanut)
- Beans
- Nuts
- Lentils
- Fish

Unhealthy fat choices

- Butter
- Margarine
- Vegetable shortening (Crisco)
- Coconut oil
- Fast food
- Sour cream
- Red meat

Nutrition Facts	
8 servings per container	
Serving size	2/3 cup (55g)
Amount per serving	
Calories	230
<small>% Daily Value*</small>	
Total Fat 8g	10%
Saturated Fat 1g	5%
<i>Trans</i> Fat 0g	
Cholesterol 0mg	0%
Sodium 100mg	4%
Total Carbohydrate 37g	13%

What Can I Do to Improve My Blood Pressure?

	<u>Modification</u>	<u>Recommendation</u>	<u>Approximate BP reduction</u>
	Weight reduction	<p>Maintain normal body weight (BMI = 18.5 – 24.9 kg/m²)</p> <p>For every 2 pounds in weight loss, you can expect about 1 mm Hg reduction in your blood pressure.</p>	5 mm Hg
	DASH eating plan	Eat a diet rich in fruits, vegetables, and low-fat dairy products, with limited saturated and total fat	11 mm Hg
	<p>Restrict sodium/salt intake</p> <p>Increase potassium intake</p>	<p>Goal of <1500 mg (1.5 grams) of sodium per day</p> <p>Goal of 3500 – 5000 mg per day (3.5 – 5 grams) through consumption of a diet rich in potassium</p>	5 – 6 mm Hg
	Physical activity	<p>Be more physically active.</p> <p>Aim for at least 90 to 150 minutes of aerobic exercise, resistance exercise, or isometric resistance exercise every week</p>	5 – 8 mm Hg
 <p>12 oz. beer at 5% alcohol 5 oz. wine at 12% alcohol 1.5 oz. hard liquor at 40% alcohol</p>	Moderation of alcohol consumption	<p>For individuals who drink alcohol:</p> <p>No more than 2 drinks/day for men and 1 drink/day for women</p>	4 mm Hg

Getting Started!



You may not know where to start. There are many things you can do to get your blood pressure down. Let's work together to set a goal!

1. WHY do you want to get your blood pressure down? Think about what is important to you! How would life be better if your blood pressure was down?

2. Circle 1 modification (described above) that you want to work on?

- a. **Weight reduction**
- b. **DASH eating plan**
- c. **Restrict sodium/salt intake, Increase potassium intake**
- d. **Physical activity**
- e. **Moderation of alcohol consumption**



3. Fill in the blanks to set a goal related to modification that you circled above.

- a. I will _____ (e.g, increase, decrease, add, remove) my _____
- b. (number) _____ of _____ (e.g., steps, vegetables, drinks)
- c. Per _____ (day, week, meal)

Examples: I will INCREASE my steps to 5,000 steps per day.

I will DECREASE my sodium to less than 1500 mg per day.

I will DECREASE my alcohol use to 5 drinks per week

4. What is ONE thing that you want to change THIS WEEK to get closer to the goal that you set.

Examples: I will walk around the block 1x per day

I will take the saltshaker off the kitchen table and replace it with Ms. Dash

I will only put 5 beers a week in my refrigerator

