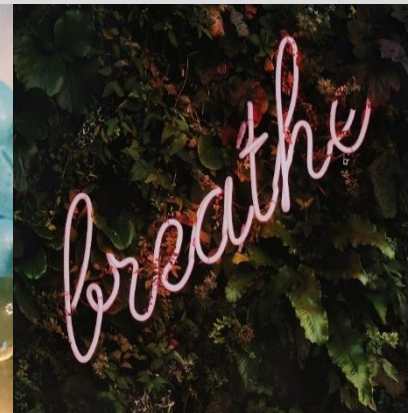


Quick Guide: Preventing and Managing High Blood Pressure



Blood Pressure: The Basics

What is High Blood Pressure?

High blood pressure (hypertension) occurs when **blood pushes too hard against the arteries, causing the arteries to weaken over time**. It is often called the **silent killer**. This is because many people who have it do not know it. You may feel fine, but your arteries can still be damaged.

High blood pressure (HBP) can **raise your risk of heart attack, stroke, and heart failure**. Controlling your blood pressure (BP) can **decrease your risk** of these problems. Know your blood pressure and remember to check it regularly. Doing so can **save your life**.

Blood pressure measurements are given as 2 numbers:

- **Systolic BP** is the *upper number*. This is the pressure when the heart contracts.
- **Diastolic BP** is the *lower number*. This is the pressure when the heart relaxes between beats.

Blood pressure is categorized as **normal, elevated, stage 1, or stage 2**¹.

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

Please talk with your healthcare if your blood pressure is routinely higher than the normal range.

Who Does It Affect?

- **Family history:** If your parents or other close blood relatives have HBP, there's an increased chance that you'll get it too.
- **Age:** The older you are, the more likely you are to get HBP. As we age, our blood vessels gradually lose some of their elastic quality, which can contribute to increased BP.
- **Sex:** Until age 64, men are more likely to get HBP than women are. At 65 and older, women are more likely to get HBP.
- **Race:** African-Americans tend to develop HBP more often and at younger ages than people of other racial backgrounds in the United States. This is accounted for, in large part, by other conditions that African Americans are more likely to experience².
- **Chronic kidney disease:** HBP may occur as a result of kidney disease. And, having HBP may also may also cause further kidney damage.

¹ American Heart Association. (2018, January 29). The Facts About High Blood Pressure. Retrieved from www.heart.org/HEARTORG/Conditions/HighBloodPressure/GettheFactsAboutHighBloodPressure/The-Facts-About-High-Blood-Pressure_UCM_002050_Article.jsp#.WnBjU62WzGE.

² These conditions include: higher rates of poverty; living in neighborhoods with fewer healthy food options, and higher crime rates; and greater exposure to discrimination (regardless of where they live, and how much education and income they have).

How Can I Prevent or Manage High Blood Pressure?

There are a number of ways to *prevent or manage* this common condition to improve your quality of life.

You may be familiar with some or all of these **common recommendations from the American Heart Association (AHA)**³:

- Increase physical activity
- Eat a more nutritious diet
- Limit alcohol
- Quit smoking
- Take your medication(s)

Also, there are **additional potential recommendations** that may be new to you or less familiar than those above.

- Eat a plant-based diet
- Practice relaxation and mindfulness techniques
 - Breathing practices
 - Movement and meditation
 - Acupressure

Exercise for a Healthy Heart

Maintaining a healthy weight* is an important part of overall health and wellbeing.

**Speak with your doctor about the healthy weight range for you and your lifestyle.*

The AHA recommends **aerobic exercise 3 to 4 times a week for an average of 40 minutes at a time**, with your provider's approval.

- Focus on activities that you enjoy.
- Add everyday tasks, such as:
 - Walking, or climbing stairs
 - Wheeling self in wheelchair
 - Raking leaves
 - Gardening



³ American Heart Association. (2018, January 29). Changes You Can Make to Manage High Blood Pressure. Retrieved from www.heart.org/HEARTORG/Conditions/HighBloodPressure/MakeChangesThatMatter/Changes-You-Can-Make-to-Manage-High-Blood-Pressure_UCM_002054_Article.jsp#.Wof8-K2Wvfw.

Healthy Eating

One recommended diet is the **DASH (Dietary Approaches to Stop Hypertension) diet**⁴. This plan recommends vegetables, fruits, whole grains, and other heart healthy foods (recommended by *The National Institutes of Health*).

Cut back on salt:

- Limit canned, dried, packaged, and fast foods.
- Don't add salt to your food at the table.
- Season foods with herbs instead of salt when you cook.
- Request no added salt when you go out to eat.
- The AHA⁵ says the "ideal" amount of sodium is **no more than 1,500mg (less than ¾ teaspoon) a day**. But because Americans eat so much salt, you can make a **positive change by cutting back to even 2,400mg (1 teaspoon) of sodium a day**.



Eat more potassium-rich foods (to reduce the effects of sodium). Foods like **cantaloupe, potatoes, spinach, and mushrooms** can help (recommended by the AHA⁶).

Limit alcohol to no more than **1 drink a day for women** and **2 drinks daily for men**.

Limit caffeinated drinks such as coffee, black or green tea, and cola to **2 per day**.

Besides following the DASH diet, another recommendation is to **eat a plant-based diet**. The *Physicians Committee for Responsible Medicine* recommends eating foods on the “The Power Plate”, including **fruits, grains, legumes, and vegetables**⁷.



Eat foods that are **naturally colorful**, such as **watermelon, oranges, spinach, broccoli, blueberries, and grapes**.

⁴ National Institutes of Health. (n.d.) DASH Eating Plan. Retrieved September 4, 2017, from www.nhlbi.nih.gov/health-topics/dash-eating-plan.

⁵ American Heart Association. (2017, November 13). Shaking the Salt Habit to Lower High Blood Pressure. Retrieved from www.heart.org/HEARTORG/Conditions/HighBloodPressure/PreventionTreatmentofHighBloodPressure/Shaking-the-Salt-Habit_UCM_303241_Article.jsp#.WnBmHK2Wyfx.

⁶ American Heart Association. (2018, January 29). How Potassium Can Help Control High Blood Pressure. Retrieved from www.heart.org/HEARTORG/Conditions/HighBloodPressure/MakeChangesThatMatter/How-Potassium-Can-Help-Control-High-Blood-Pressure_UCM_303243_Article.jsp#.WZxpEK2Wwpc.

⁷ Physicians Committee for Responsible Medicine. (n.d.) The Power Plate. Retrieved from www.pcrm.org/sites/default/files/images/health/pplate/EveryMealPowerPlate.pdf#3.

Quit Smoking

Another way to lower your blood pressure and improve your overall health is to **quit smoking**. Smoking causes both an instant and long-term rise in blood pressure.

- ✓ **Connect with your motivation**. What are your reasons for wanting to quit?
- ✓ **Resources**. 1-800-QUIT-NOW, smokefree.gov, nicotine patches/gum.
Talk with your doctor about support programs that can help.
- ✓ **Set a quit date** when you'd like to stop smoking.
- ✓ **Accountability**. Tell your friends, family, and/or care team that you're quitting smoking. You can ask them to check-in with you about your progress and discuss any challenges.
- ✓ **Remove triggers**. Get rid of anything that reminds you of smoking (cigarettes, ashtrays, etc.). If possible, avoid people who are smoking and places where you used to smoke.
- ✓ **Replace smoking with a healthy habit**, such as deep breathing.



Take Medications as Prescribed

If lifestyle changes alone aren't enough to lower your blood pressure, you will likely be prescribed medication. Because these meds work in different ways, you may be prescribed more than one.

Take your medications as prescribed.



- ✓ **Tell your care team if you experience any symptoms** (dizziness, headaches, etc.).
- ✓ **Create a routine**.
 - You can choose either a *specific time of day* (9am) or when you're doing something that's a *part of your routine* (brushing your teeth).
 - Leave your meds in the same place.
 - Use reminders, pill sorters, or a chart, if helpful.
- ✓ **Contact your care team with any questions or concerns**.

Mindfulness and Relaxation Practices: Breathing

Practicing relaxation and mindfulness techniques may help you manage stress and HBP, sleep better, feel more balanced and connected, and even lower your risk of heart disease.

What is Mindfulness? The act of bringing attention to the present moment.

Breathing exercises are one way to practice being in the present moment. Try the practice below.

Equal Breathing

To prepare: Get in a comfortable position, either lie down or place your feet on the floor while seated. Close your eyes. Notice how you feel before this practice.

(Are you stressed? Breathing shallow?)

1. **Inhale for a count of 4**
2. **Exhale for a count of 4.**
3. Repeat for *10 breaths*.
4. Gently open your eyes, and notice how you feel now.
(Are you feeling more relaxed?)



Mindfulness and Relaxation Practices: Walking

Intentional movement can reduce stress and help you to develop a greater sense of control over your thoughts, feelings, and actions. Try to practice below.

Walking Meditation

1. **Pick a place**, either inside or outside.
(If you have limited space, you may turn around and walk in the opposite direction.)
2. **Walk with purpose**. Do the following for each step:
 - a. Lift one foot and place it a bit forward of where you're standing, heel touching the ground first.
 - b. Slowly shift your weight onto your front leg as your back heel lifts.
 - c. Lift your back foot off of the ground and notice how it feels as you place it in front, heel first.
 - d. Shift your weight onto your front leg.
 - e. **Repeat** this process for **at least 20 steps**.
3. **Focus your attention** on one or more sensation that you may not usually notice.
For example:
 - a. The movement of your legs
 - b. Your breath
 - c. Nearby sounds
 - d. The scene around you
4. **Practice**. The more you practice this walking meditation, the more natural it will feel. You will start to become more aware of the present moment, and feel more relaxed.



Relaxation and Mindfulness Practice: Acupressure

Acupressure is a method of healing that **uses the fingers and thumbs to apply gentle to firm pressure* on specific points, releasing tension and increasing blood flow.**

There are several points that **help manage blood pressure**, as recommended by Dr. Michael Reed Gach, acupressure expert⁸. Two are described below.

To Prepare:

- 1) **Wait** an *hour or so after eating* before doing acupressure. This allows the blood to flow to the specific points (instead of to digesting your food).
- 2) **Sit** with your *feet flat* on the floor. If lying down, keep *feet and legs uncrossed*.
- 3) **Relax**. Take a few *deeps breaths* into your lower belly.

How Do I Apply Pressure?

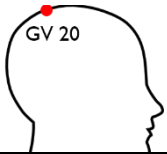
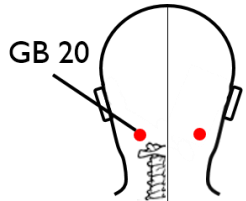
The *middle finger* is best suited for applying pressure since it's the longest and strongest, but you *can use any finger, your thumbs, knuckles, or palms*. **Quick Tip:** If your hand gets tired from applying pressure, pause and *shake out your hand*.

***Precaution:** **Firm pressure shouldn't be applied for those with high blood pressure.**

There are Two Methods of Applying Pressure:

- Apply **steady pressure** (hold until you feel “good pain”)
- Or, **Press down and release** (apply pressure in a **slow, rhythmic manner**)

Breathe deeply as you press on each point for 2-3 minutes with gentle to moderate pressure. You can practice 2-3 times per week, or daily.

Acupressure Point Name	Location Description	Location
GV 20 (Governing Vessel 20)	On the crown of the head in an indentation (or “soft spot”). Follow the line from the back of the ears to the top of the head.	
GB 20 (Gall Bladder 20)	On the back of the neck at the base of the skull, where it sinks down on either side of the protruding bones. Decreases fluctuations between high and low blood pressure.	

⁸ Gach, MR. (1990). Acupressure's Potent Points: A Guide to Self-Care For Common Ailments. Bantam.

How Do I Make Lasting Changes? Ask Questions

How Do I Make Lasting Changes?

Before taking action, ask yourself **why** you want to change. This is an important step, and will help make sure your changes stick.

To get started, ask yourself one or more of the following questions.

- **Why is it important for me to make changes?**
 - Example: Why is it important to decrease my blood pressure?
- **What happens if I don't change?**
 - Example: What happens if I don't get to or maintain a healthy weight?
- **On a scale of 0-10, how committed am I to making changes?**

(0 = the least committed; 10 = the most committed)

 - Example: On a scale of 0-10, how committed am I to reducing my salt intake?
- **What are some obstacles that I may face when trying to change?**
 - Example: What are some obstacles that I may face when trying to lower my blood pressure?
- **Who are the main people I have in my life who will help hold me accountable?** (Family, friends, caregivers, staff, and more)



Quick Tip: Answer these questions by yourself, or review them with your members of your support system.