

Managing Hypertension

- **Normal blood pressure** is below 120/80 mmHg.
- **Prehypertension** is the range of 120/80 to 139/89. This means that you don't have high blood pressure now but are likely to develop it in the future. You can take steps to prevent high blood pressure by adopting a healthy lifestyle.
- **Hypertension** or **high blood pressure** is a blood pressure reading of 140/90 or higher. Nearly **one in three American adults** has high blood pressure. Once high blood pressure develops, it usually lasts a lifetime. The good news is that it can be treated and controlled.

Not all incidents of hypertension have a known cause, but some **factors** have been shown to increase blood pressure:

STRESS

SODIUM

TOBACCO

OVERWEIGHT

High blood pressure is sometimes called "**the silent killer**" because it usually has no symptoms. Some people may not find out they have it until they have trouble with their heart, brain, or kidneys. When high blood pressure is not found and treated, it can cause:

1. The heart to enlarge, which can lead to **heart failure**.
2. Small bulges (**aneurysms**) to form in blood vessels. Common locations are the main artery from the heart (aorta), arteries in the brain, legs, and intestines, and the artery leading to the spleen.
3. Blood vessels in the kidney to narrow, which may cause **kidney failure**.
4. Arteries throughout the body to "harden" faster, especially those in the heart, brain, kidneys, and legs. This can cause a **heart attack, stroke, kidney failure, or amputation** of part of the leg.
5. Blood vessels in the eyes to burst or bleed, which may cause vision changes and can result in **blindness**.

So, how can you manage hypertension?

Fortunately, research has shown there are a number of things **you can do** to manage your hypertension and keep those blood pressure numbers down!

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Exercise

Regular exercise has been shown to significantly decrease blood pressure. If you don't normally exercise, you can start with something as simple as walking and work your way up to a daily exercise routine that is right for you.

Diet Modification

A number of studies have shown that a diet ***low in sodium, and rich in fruits, vegetables, lean meats and low-fat dairy foods*** is highly effective in lowering blood pressure. The American Heart Association and the National Institute of Health endorse a specific diet for individuals with high blood pressure, called the **DASH (Dietary Approaches to Stop Hypertension) diet**. The DASH diet is based on about 2,000 calories and 1,500 milligrams of sodium a day. For more details about the DASH diet, you can go to either of these websites:

- <http://www.nhlbi.nih.gov/health/public/heart/hbp/dash/>
- <http://www.dashforhealth.com/>
- Or ask the Primary Care Behaviorist for a copy of the DASH eating plan.

Weight Loss

Many studies have shown that being overweight is a very important risk factor for hypertension. Managing your weight through eating a balanced diet and engaging in regular exercise can help you maintain a healthy weight.

Managing Stress

Medical studies have shown that the way we react to stress can greatly impact hypertension. You can learn to manage stress by engaging in **relaxation techniques** that help to reduce blood pressure. One great relaxation technique that is easy to do and takes very little time is diaphragmatic or deep breathing.

Deep Breathing Exercise

1. Sit in a comfortable position.
2. Take 3 deep cleansing breaths.
3. Place one hand on your stomach and the other on your chest.
4. Try to breathe so that only your stomach rises and falls.
 - a) As you inhale, concentrate on your chest remaining relatively still while your stomach rises. It may be helpful to imagine that your pants are too big and you need to push your stomach out to hold them up.
 - b) When exhaling, allow your stomach to fall in and the air to fully escape.
5. Take some deep breaths, concentrating on only moving your stomach.

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6. Return to regular breathing, continuing to breathe so that only your stomach moves. Focus on an easy, regular breathing pattern.

Note: It is normal for this healthy breathing to feel a little awkward at first. With practice, it will become more natural to you.

The CALM Reminder

Chest: Breathing slower and deeper

Arms: Shoulders sag

Legs: Loose and flexible

Mouth: Jaw drop