

How to Manage Your

# Blood Pressure



*Is your BP  
where you  
want it to be?*



# How to Manage Your **BLOOD PRESSURE**

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## Table of Contents

What is Blood Pressure?	3
Blood Pressure Basics	5
Causes of High Blood Pressure	9
Measuring & Monitoring Blood Pressure	11
Lowering Your Blood Pressure Naturally	15



## What is Blood Pressure?

Blood pressure is the force your blood exerts against the insides of your arteries and veins—and a powerful indicator of overall health.



## What is Blood Pressure?

Blood pressure is the force your blood exerts against the insides of your arteries and veins. The healthier your blood pressure, the better your health will be.

That's why your doctor measures your BP at every single check-up—this number is one of the single greatest tools for quantifying your health status.

If you have “good” or healthy blood pressure, congratulations! Keep on living a heart-healthy lifestyle and collecting those high-fives at your annual physical.

If you don't, though, then it's time to take action: elevated blood pressure can damage the delicate lining of the blood vessels that transport blood throughout your body.<sup>1</sup>

High blood pressure also negatively affects organs like your brain, your heart, your kidneys and even your eyes. That makes controlling your blood pressure critical to maintaining your overall health.

Good news: you can lower your blood pressure and maintain a healthy blood pressure level through diet, exercise, nutrition and more.

So pull up a chair—you're about to learn everything you need to know about blood pressure, cardiovascular health & you!





## Blood Pressure Basics

Blood pressure is measured in two numbers: diastolic and systolic blood pressure. Don't worry, we'll tell you what that means!



## Blood Pressure Basics

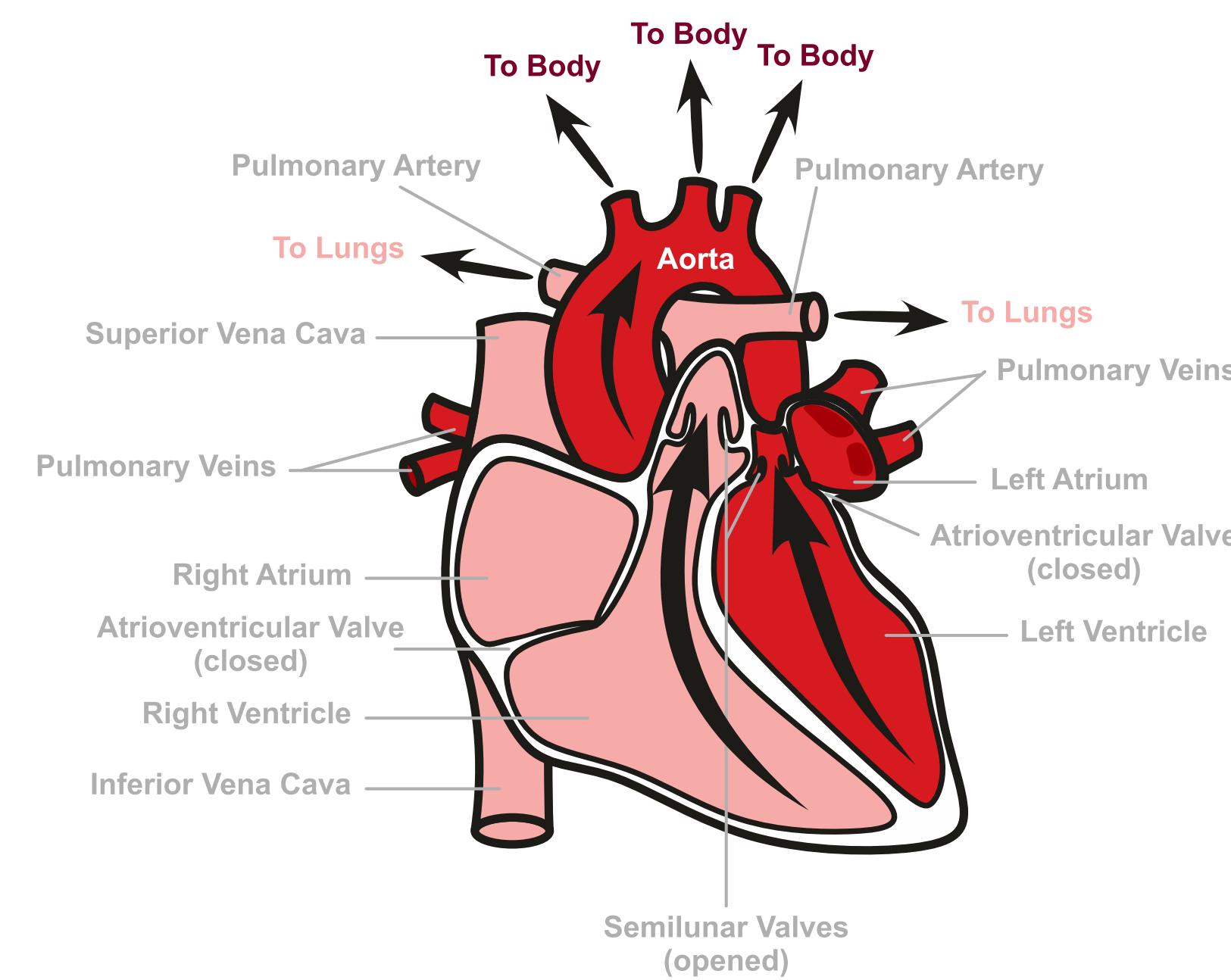
Have you ever wondered exactly what is being assessed when that cuff is tightened around your bicep? A blood pressure reading calculates the force of blood moving through your arteries.

**It is measured in two numbers:**

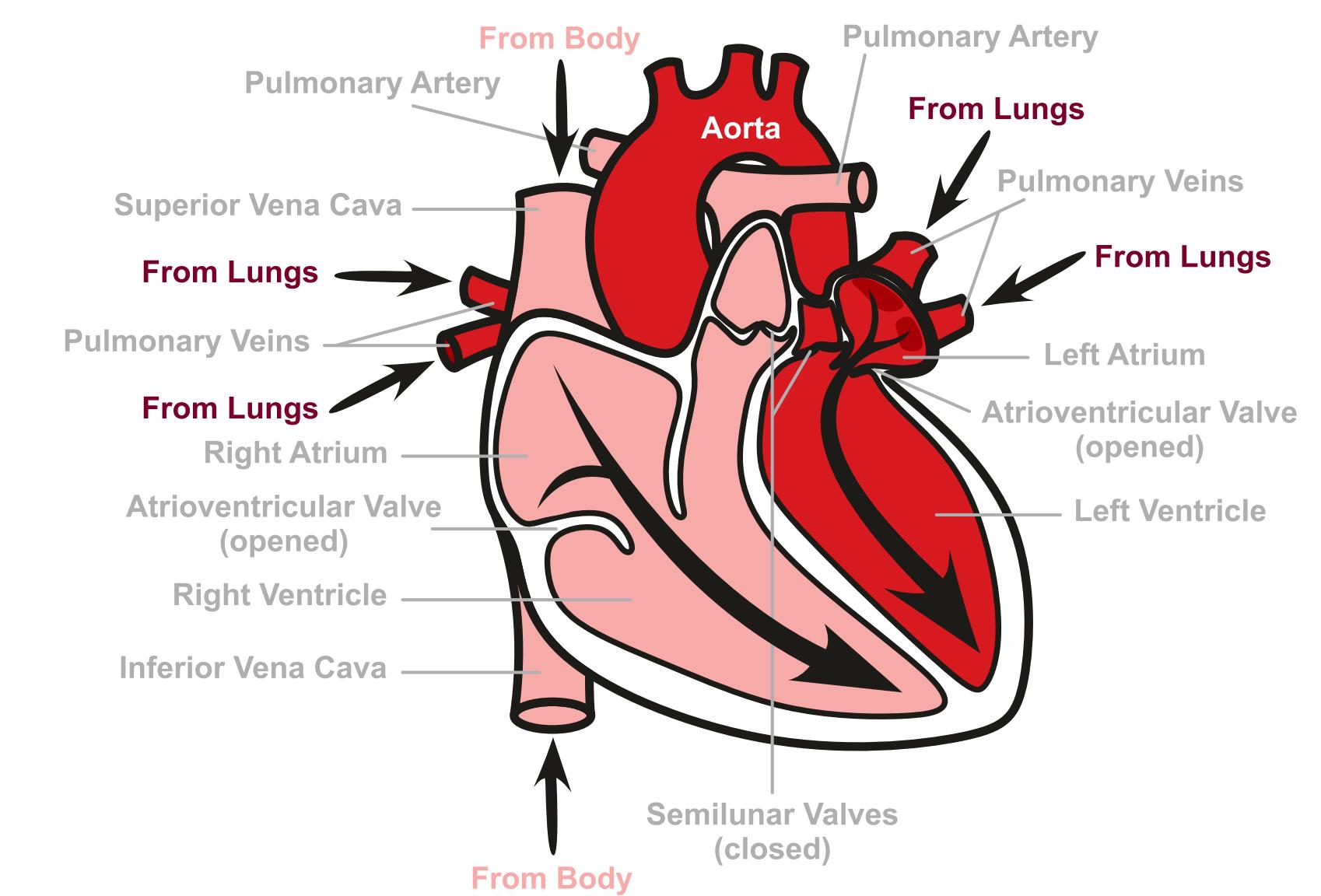
**Systolic**—The pressure on the walls of your arteries when your heart pumps blood through them. This happens every time your heart “beats” or contracts.

**Diastolic**—The pressure on the walls of your arteries when your heart “rests,” or the short space of time between heartbeats.

### Systole (Pumping)



### Diastole (Filling)





## What Should My Blood Pressure Be?

**Healthy:** Your systolic (top) number should be 40 points higher than the diastolic (bottom) number. For the vast majority of people, you're shooting for less than 120/80 mm Hg.<sup>2</sup>



**Unhealthy:** If your blood pressure consistently measures above 120/80 mm Hg, that's not good.

**Pulse pressure:** Lots of people don't know this, but the difference between the two blood pressure numbers is called pulse pressure, and it can be an important consideration in addition to the two main numbers.<sup>3</sup>



## Blood Pressure: Know Your Risks

### What should my blood pressure be?

Life Extension recommends an optimal target of 115/75 mm Hg for most people.

**Why?** Because for every 20 mm Hg your systolic blood pressure increases (along with every 10 mm Hg diastolic increase) above 115/75 mm/Hg, your chance of cardiovascular disease doubles.<sup>2</sup>

Blood Pressure Category	Systolic mm Hg (upper #)	Diastolic mm Hg (lower #)
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	At least 140	or At least 90
Hypertensive Crisis	Higher than 180	and/or Higher than 120



## Causes of High Blood Pressure

There are lots of reasons you might have high blood pressure. We'll give you a list of lifestyle choices and habits to watch out for.



## What Causes High Blood Pressure?

**Short answer:** Lots of things. Some are avoidable. Others, not so much. Do everything you can to lessen these risk factors.

**Stress.** Psychological stressors, both past and present, can contribute to high blood pressure.<sup>4,5</sup> Worrying does, too.

**Diet.** Specifically, too much salt.<sup>6</sup> Coincidentally, too little potassium (not enough veggies, fruits, and plant foods) is also a problem.<sup>7</sup> Without potassium, your body tends to be more sensitive to salt. So, skip the French fries and go for a banana instead!



**Tobacco.** That includes second-hand smoke. Vaping too; any form of nicotine ups your blood pressure.<sup>8</sup>

**Sleep.** Insomnia, or simply not sleeping enough, as well as problems like sleep apnea keep your body from having the healthy natural dip in blood pressure that happens during quality sleep.<sup>9,10</sup> If you think you suffer from sleep problems, talk to your doctor.

**Inactivity.** The less you exercise (and the more you sit), the more likely your blood vessels will narrow. This may increase

## How Will I Know If My Blood Pressure is Too High?

The ugly truth? You probably won't know—until it's too late.



Blood pressure is called "the silent killer" because most of the time there are no symptoms of high blood pressure.

In extreme cases of very high blood pressure, you might get a headache—but you'll most likely already be in the hospital.<sup>14</sup>

Other signs? Decline in kidney function or vision loss. But by the time that happens, the damage has already been done.

That's why your best bet is to achieve (and maintain) healthy blood pressure levels **NOW**.

your blood pressure. Plus, the more sedentary you are, the more weight is likely to be an issue.<sup>11</sup>

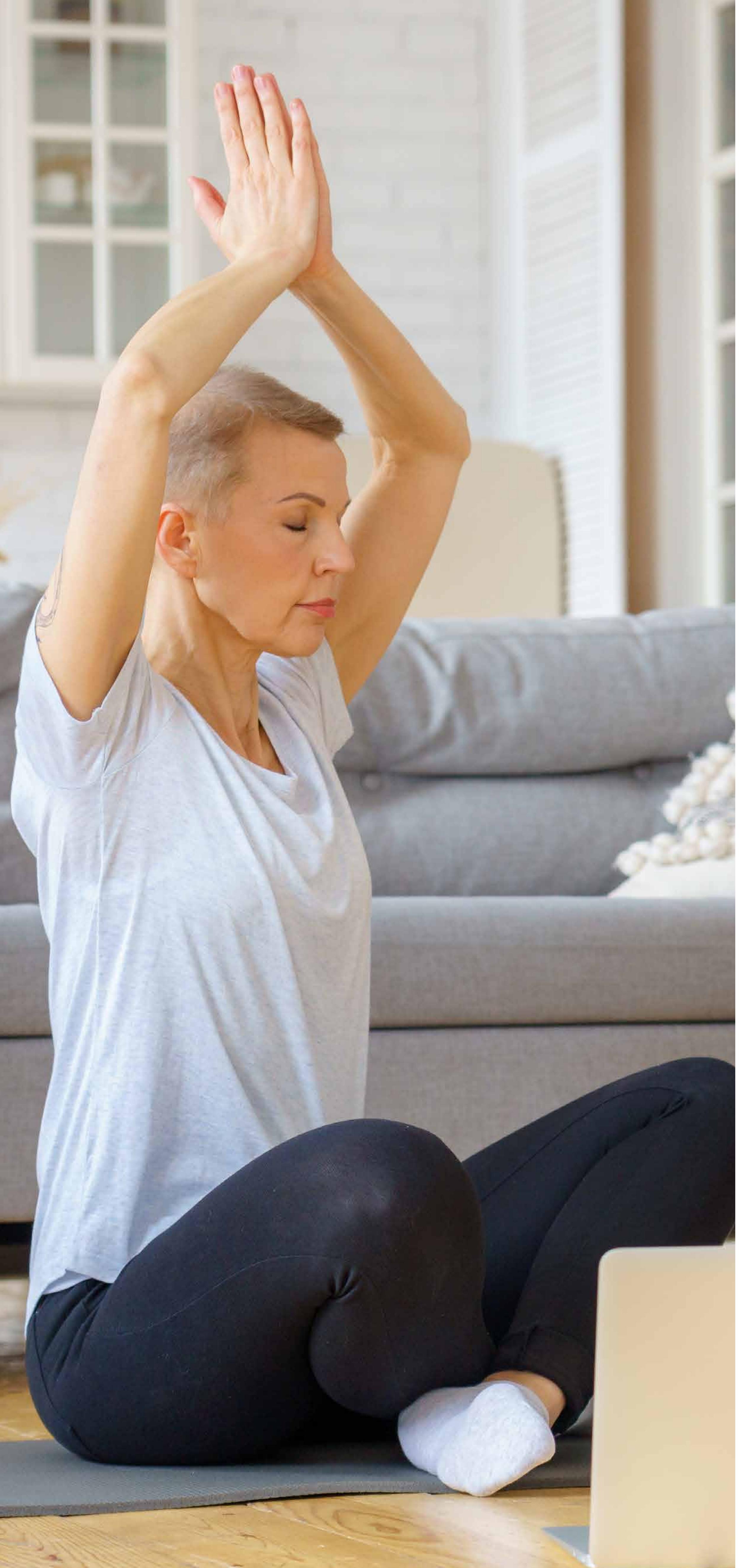
**Weight.** Extra pounds, especially around your middle, raise your blood pressure.<sup>12</sup>

**Alcohol.** Heavy drinking, defined as more than 14 drinks per week, raises your blood pressure—and even moderate drinking, or 7-13 drinks a week, can do the same.<sup>2,13</sup>



## Measuring & Monitoring Blood Pressure

Blood pressure is called the “silent killer” because there are rarely any warning signs. Do not go quietly: follow these tips instead.



## How Can I Measure My Blood Pressure?

### Choose a device:

The American Heart Association recommends automatic, cuff-style, bicep or upper-arm monitors. Skip the finger or wrist monitors—these can be unreliable.<sup>15</sup>



### Taking your reading:

**Keep calm:** If you're stressed, your reading will be elevated. Take 5 minutes to relax, perhaps even closing your eyes.

**Sit correctly:** Blood flows through your whole body, so posture is important. Put your feet flat on the floor, with your back straight and supported, legs uncrossed (and at a 90-degree angle). Remove your sleeve and keep your arm at heart level, and supported on a chair or table.

**Which arm?** Test both. You'll likely get two different readings; use the arm with the higher reading for future checks.<sup>2</sup>



### Why is My Blood Pressure Different When the Doctor Takes It?

If your blood pressure is higher at the doctor's office than it is at home, you can—and should—relax. You likely have "white coat syndrome."

This is when your blood pressure is elevated in the doctor's office but is normal during out-of-office readings.

Interestingly enough, out-of-office measurements are better at predicting cardiovascular complications.

We recommend taking your own blood pressure regularly, both to confirm a hypertension diagnosis and to help your physician adjust blood pressure medications.<sup>16</sup>



## Tracking Trends in Your Blood Pressure

You want your blood pressure readings to change over time—but only in the right direction. If your measurements are trending up, what's changed? Identify and course-correct.

### Blood Pressure Diary

You may not remember what was happening a few weeks ago when you measured, so write it down.

Were you stressed? Had you eaten salty foods, drank alcohol or slept poorly the night before? Even something as simple as your morning coffee or tea can alter your readings.

There's an app for that: both online and smartphone programs will help track your blood pressure—if you'd rather not do it the old-fashioned way with pen and paper.





## Does Time of Day Matter?

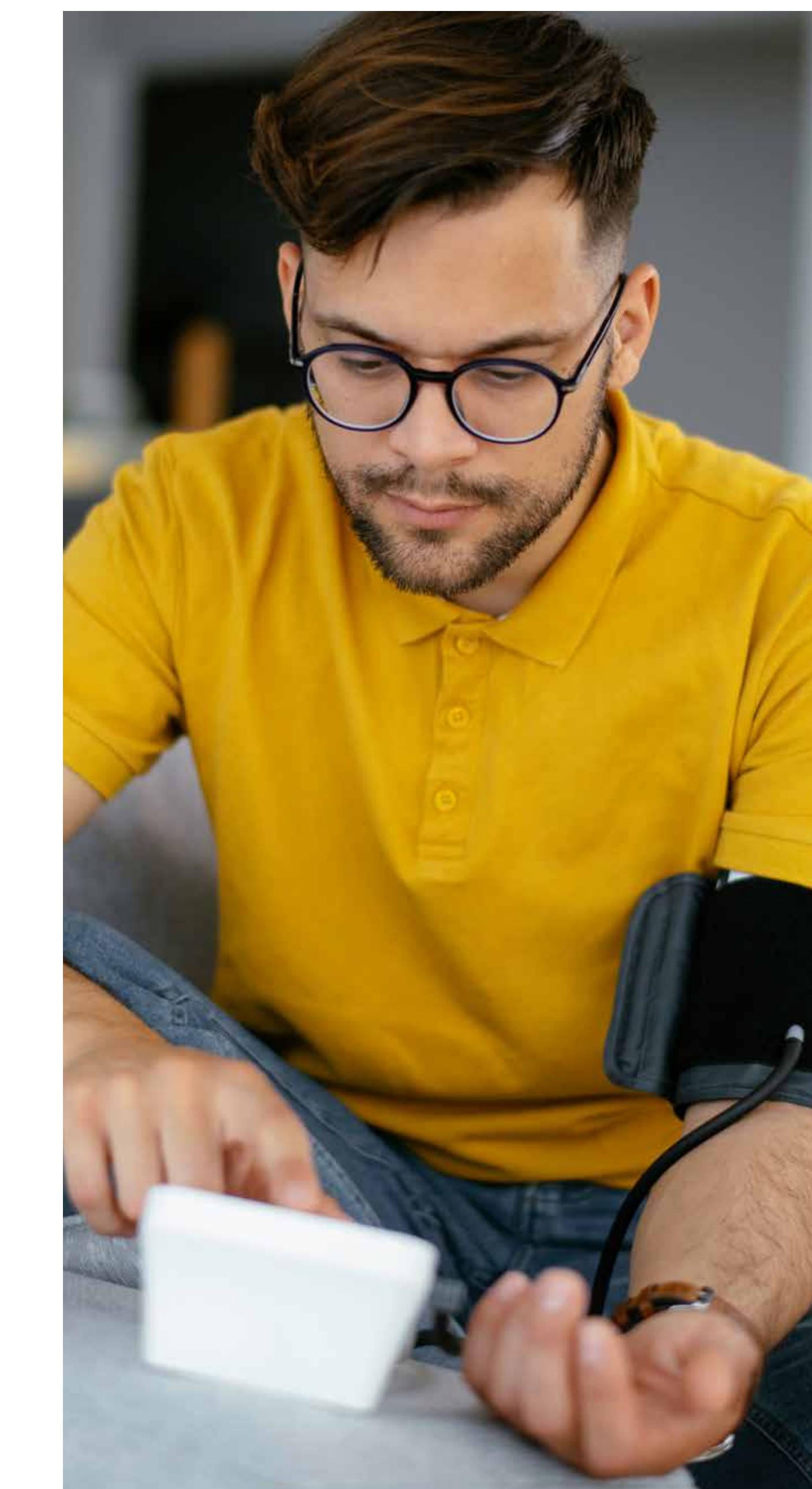
If your blood pressure is high later in the day, check it in the morning. This gives you a more accurate picture if you're trying to evaluate your risk of cardiovascular events like a heart attack or stroke.<sup>17</sup>

**2 x 2** – Take two readings, one minute apart, in the morning (before taking any medications) and in the evening before you eat.<sup>18</sup>

**Wow, that's high** – Don't be alarmed by a single high reading. Confirm correct placement of the cuff, and that the steps above have been followed.

**When to worry** – A reading of greater than 180/120 is a medical emergency requiring immediate medical or hospital care.

If you have concerns, contact your health care practitioner.





## Lowering Your Blood Pressure Naturally

Your blood pressure will respond to healthy choices. So eat right, exercise, and choose the best nutrients for your blood pressure health.

# Can I Lower My Blood Pressure Naturally?

Bad news: high blood pressure is a crucial risk factor for cardiovascular disease. OK, so here's the good news: blood pressure is also a *modifiable* risk factor—which means simple changes can have BIG positive impacts!

**Meditate.** Meditation can help you recover from past stressors... as well as manage ongoing and future ones.<sup>5</sup>

**Exercise.** Specifically, the aerobic kind: it benefits the delicate lining of your blood vessels, promotes nitric oxide production and other crucial aspects of blood vessel health.<sup>2,19</sup>

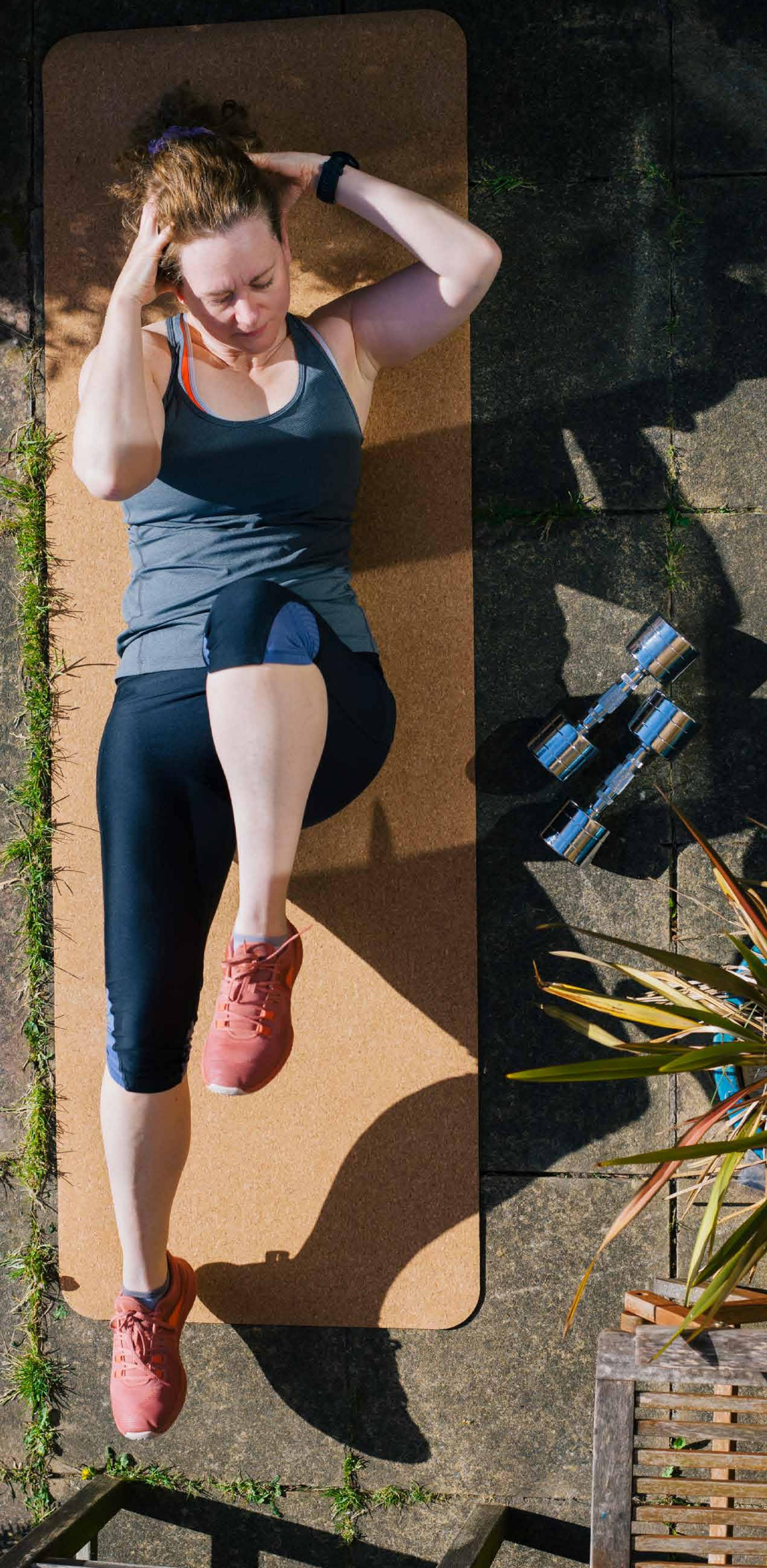
**Decaffeinate.** If you have high blood pressure, drinking coffee will likely cause a short-term rise in your blood pressure. If you have poorly controlled high blood pressure, avoid consuming large amounts of caffeine.<sup>2,20</sup>

**Sleep.** Both insomnia and sleep deprivation are associated with high blood pressure.<sup>21</sup> Shoot for 7-8 hours of quality sleep per night—that increases the likelihood that your blood pressure will “dip” while asleep.<sup>10</sup>

**Detox.** Cut back on alcohol as much as you can: people who regularly drank more than two alcoholic drinks a day saw improvements in blood pressure when they reduced intake.<sup>22</sup> And if you smoke, by all means, quit—doing so will help lower your blood pressure.



**Diet.** The Dietary Approaches to Stop Hypertension (DASH) diet is a tried-and-true eating plan to lower blood pressure. It includes specific but flexible goal amounts of daily fresh fruits and vegetables, whole grains, beans, seeds, nuts, lean meat, poultry and fish. It limits salt, red meat, saturated and total fat, sweets, sugary drinks and alcohol.<sup>23</sup>





## Food for Thought: How Dietary Changes Improve Blood Pressure

**Watch what you eat.** Eating healthy is a great way to improve blood pressure. Need a guide? Follow the Mediterranean Diet or the Dietary Approaches to Stop Hypertension (DASH) diet. Both are tried-and-true eating plans associated with lower blood pressure.

### Never heard of DASH?

It includes specific but flexible goal amounts of daily fresh fruits and vegetables, whole grains, beans, seeds, nuts, lean meat, poultry and fish. DASH also limits salt, red meat, saturated and total fat, sweets, sugary drinks and alcohol.<sup>23</sup>



**Hold the salt.** You should be shooting for less than 1,500 mg of sodium intake a day. But beware: salt can be hiding anywhere! Look for hidden sources on the labels. And cheese, packaged foods, soups, deli meats and restaurant foods can really up your salt intake...so eat these foods only occasionally.



## The power of potassium.

Increase your potassium intake. Potassium counteracts how salt affects your body by increasing vasodilation. It also helps you eliminate excess sodium through your urine.<sup>24</sup>

## Consume nutrients that promote healthy blood pressure.

Potassium is just one nutrient that supports healthy blood pressure levels—here are others that promote a heart-healthy lifestyle.

Top ten potassium foods <sup>25</sup>	Milligrams (mg) per serving	Percent DV
Apricots, dried, 1/2 cup	1,101	23
Lentils, cooked, 1 cup	731	16
Prunes, dried, 1/2 cup	699	15
Squash, acorn, mashed, 1 cup	644	14
Raisins, 1/2 cup	618	13
Potato, baked, flesh only, 1 medium	610	13
Kidney beans, canned, 1 cup	607	13
Orange juice, 1 cup	496	11
Soybeans, mature seeds, boiled, 1/2 cup	443	9
Banana, 1 medium	422	9

Nutrient	How It Helps	Top Foods
<b>Minerals</b>		
Magnesium	Blocks calcium channels and promotes vasodilation <sup>26</sup>	Pumpkin seeds, chia seeds, almonds, spinach, cashews, peanuts
Potassium	Promotes vasodilation and sodium excretion <sup>7</sup>	Apricots, lentils, prunes, squash, raisins
<b>Polypheophols</b>		
Anthocyanins and anthocyanidins	Increases nitric oxide production to improve arterial flexibility <sup>27</sup>	Blueberries, cherries
Flavonoids (quercetin, myricetin, and myricitrin)	Angiotensin receptor blocker <sup>28</sup>	Vegetables, fruits, nuts, berries, tea and red wine
Punicalagins	Inhibits the angiotensin-converting enzyme <sup>29</sup>	Pomegranate
<b>Herbs</b>		
Steviosides [from stevia leaf]	Blocks calcium channels <sup>30</sup>	Stevia leaf
<b>Hormones</b>		
Melatonin	Relaxes blood vessels and promotes vasodilation <sup>31</sup>	Tart cherries, pistachios, eggs, milk, lentils, beans, mushrooms

# Your Health is In Your Hands

Blood pressure health is essential to living longer. Unlike many conditions, high blood pressure can be mitigated by diet and lifestyle changes—so don't lose hope. Talk to your doctor about whether your blood pressure requires medication, as well as which blood pressure medication (if any) is right for you.



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## Have a health question?

We have the answers... You can speak with a Life Extension Wellness Specialist toll-free at 1-800-226-2370. This informational service is staffed by doctors, nurses and other health practitioners and is free.



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