

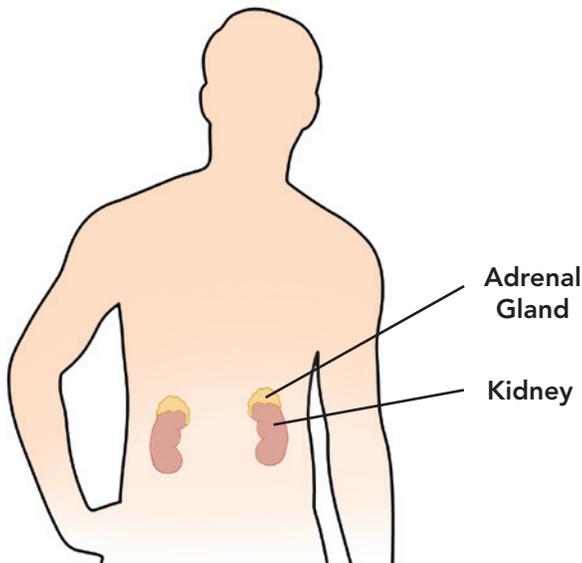
Hormones **and** Hypertension

WHAT IS HYPERTENSION?

Hypertension, or chronic (long-term) high blood pressure, is a main cause of heart and blood vessel (cardiovascular) disease. Hypertension greatly raises your risk of heart attack, stroke and kidney failure, which may lead to death. Since people with hypertension often have no symptoms, it has been called “the silent killer.”

As blood flows through the body, it pushes against the walls of the arteries. The force of this push in the arteries is the blood pressure.

Measurement of blood pressure includes two readings. An example is 120/80 mm Hg (millimeters of mercury). The first number is the systolic pressure as the heart contracts. The second number is the diastolic pressure when the heart relaxes between beats.



Normal
Below 120/80 mm Hg
Prehypertensive
Systolic: 120 to 139 mm Hg
Diastolic: 80 to 89 mm Hg
Hypertensive
Greater than 140/90 mm Hg

About 50 million adults in the United States have high blood pressure. It is more common among African Americans than people of other ethnic backgrounds. For all people, the chance of having high blood pressure increases with age.

DID YOU KNOW?

Primary hypertension (high blood pressure) most often can be controlled with medicine and lifestyle changes, such as a healthy diet and exercise.

WHAT CAUSES HYPERTENSION?

There are two types of hypertension—primary and secondary. Most hypertension is the primary type. Its cause is unknown, but genetics and factors such as eating too much salt, obesity, and the use of tobacco, alcohol, and certain medications play a part. Hormones made in the kidneys and in blood vessels play a key role in the start and continuation of primary hypertension.

Secondary hypertension is due to other diseases such as kidney disease, Cushing syndrome, and primary aldosteronism. Primary aldosteronism is an adrenal gland disorder that is found in up to 8 out of 100 patients with hypertension.

RECOMMENDED LIFESTYLE CHANGES

- Keep a healthy weight (body mass index, or BMI, of 18.5 to 24.9 kg/m²).
- Reduce the amount of saturated and total fat in your diet. Eat lots of fruits and vegetables, and choose low-fat dairy products.
- Reduce salt (sodium) in your diet.
- Exercise (such as brisk walking) at least 30 minutes a day, most days of the week.
- Limit alcohol intake (men: no more than 2 drinks a day; women and lightweight men: no more than 1 drink a day).
- Quit smoking.

Source: National High Blood Pressure Education Program (NHLBI/NIH/DHHS)

HOW IS HYPERTENSION TREATED?

Although there is no cure for primary hypertension, it usually can be controlled. Doctors often prescribe a combination of medication and lifestyle changes. It is very important to take the medication exactly as prescribed on a daily basis. Missed doses can increase blood pressure and risk of heart attack or stroke.

Depending on the cause, surgery or medications that affect specific hormones in the body can greatly improve or even cure secondary hypertension.

After a hypertension diagnosis, you should have regular blood pressure checks (usually once a month for three months) to see how well your treatment is working. The goal is to lower your systolic blood pressure to less than 140 mm Hg and your diastolic blood pressure to less than 90 mm Hg. If you have diabetes or kidney disease, the goal is to lower your blood pressure to less than 130/80 mm Hg.

Monitor blood pressure at home and bring a written record to the doctor at each visit. This information can help in adjusting the medication dose, if needed, and making treatment effective.

Questions to ask your doctor

- How can I lower my high blood pressure?
- Should I measure my blood pressure at home, and how often?
- Will I need medicine to lower blood pressure?
- How long will I need to take blood pressure medicine?
- What are the side effects of the drug you have prescribed to lower my blood pressure?

RESOURCES

- Find-an-Endocrinologist: www.hormone.org or call 1-800-HORMONE (1-800-467-6663)
- To measure blood pressure at home: familydoctor.org (search for "monitor blood pressure")
- Hypertension Education Foundation: www.hypertensionfoundation.org
- MedlinePlus (National Institutes of Health): www.nlm.nih.gov/medlineplus/highbloodpressure.html
- American Heart Association: www.heart.org
- Mayo Clinic: www.mayoclinic.com/health/high-blood-pressure-medication/H100028

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The Hormone Health Network offers free, online resources based on the most advanced clinical and scientific knowledge from The Endocrine Society (www.endo-society.org). The Network's goal is to move patients from educated to engaged, from informed to active partners in their health care. This fact sheet is also available in Spanish at www.hormone.org/Spanish.

Hormones and Hypertension Fact Sheet



www.hormone.org