

# Diabetes and High Blood Pressure

Anna Cason, Dietetics and Human Nutrition



**D**iabetes increases the risk for developing high blood pressure, or hypertension. High blood pressure means your heart works harder to pump blood through your body. This increases the risk for heart disease and stroke. It also increases the risk of diabetes complications, including kidney disease, eye problems that may lead to blindness, and nerve problems.

## What is blood pressure?

Blood pressure is the force of blood inside the arteries. This force is needed to move blood from the heart to other parts of the body.

## What is high blood pressure?

High blood pressure is a condition in which the force with which blood flows through the blood vessels is above normal. Having high amounts of glucose in the blood thickens it. This makes it more difficult to flow through the vessels and can increase the pressure.

## Understanding blood pressure terms and numbers

Two numbers indicate a blood pressure reading:

- The top number is called the systolic (pronounced “sis-TOL-ik”) pressure. It measures the pressure inside the artery as the heart beats and pumps blood to the blood vessels.
- The bottom number is called the diastolic (pronounced “di-a-STOL-ik”) pressure. It measures the pressure between beats, when the heart is resting.

Both of these numbers are recorded as millimeters of mercury (mmHg).

The blood pressure goal for most people with diabetes is 140/90 mmHg or lower to reduce the risk of developing diabetes complications. This number may be different for you. Ask your health-care provider what your goal should be.

If you have diabetes-related complications such as kidney disease, your doctor may suggest a lower blood pressure goal.

## What should I be aware of?

Two out of three adults living with diabetes also have high blood pressure. High blood pressure has no symptoms. It may be difficult to tell if your blood pressure is high. A person may have high blood pressure for years and not know it. If you have diabetes, you should have your blood pressure checked each time you visit your health-care provider, or at least two to four times a year.

## What can I do to control my blood pressure if I have diabetes?

**Reduce salt and sodium intake.**

Reducing the amount of sodium in the diet is helpful in controlling high blood pressure. Sodium is found in salt and used as a preservative in packaged foods.

- Many Americans eat 2,900 to 4,300 milligrams (mg) of sodium daily (roughly 1¼ to 2 teaspoons). Most of the sodium comes from processed and packaged foods.
- Set a goal to eat less than 1,500 mg of sodium each day. This is less than three-quarters of a teaspoon of salt.
- Eat foods with less than 400 mg of salt per serving.

### Eat fewer high-sodium foods.

The following foods are high in sodium. Eat these foods less often:

- Salted snacks
- Canned or frozen, pre-breaded, pre-fried fish
- Cured or preserved meats (for example, luncheon meats, sausage, hotdogs, or corned beef)
- Canned foods
- Cheeses and buttermilk
- Seasoned salts
- Convenience or processed foods
- Packaged pastries or desserts
- Ketchup, mayonnaise, soy sauce, and salad dressings

### Cut back on added sodium at mealtime.

Add little or no salt to your food at the table and during cooking.

- Season food with herbs and spices instead of using salt or store-bought seasonings that contain sodium.
- Lemon juice and hot chilies add flavor.
- Cut back on condiments such as mustard, relish, ketchup, soy sauce, and barbecue sauce.
- Rinse canned foods like vegetables, tuna, and salmon to remove some of the sodium.

### Check food labels.

Sometimes it is difficult to tell how much sodium is in a food. Many foods that are high in sodium do not taste salty. Reading food labels can help you choose foods that are low in sodium and can also help you compare the sodium amounts in different foods. When reading the food label, look at the amount of sodium in each serving.

Use the Percent Daily Value (%DV) information found on food labels to see the percentage of the daily recommended amount you are getting for sodium.

- Choose foods that contain five percent or less of the Daily Value for sodium.
- Low-sodium foods contain 140 milligrams (mg) of sodium or less in each serving.
- High-sodium foods contain 20 percent of the Daily Value of sodium.

### Get moving.

Taking part in physical activity is another way to prevent or manage high blood pressure. Thirty minutes of physical activity on five or more days of the week is recommended. These 30 minutes can be broken up into 10-minute segments and can include activities such as walking, dancing, and household and yard chores. Always check with your health-care provider before you begin exercising.

### Limit alcohol.

Drinking alcohol can raise your blood pressure. It is recommended that women consume no more than one drink per day and men consume no more than two drinks per day. Examples of one drink include 12 ounces of beer, five ounces of wine, and 1.5 ounces of 80-proof distilled spirits. No matter the alcoholic beverage choice, alcohol should always be consumed in moderation, and people should look for ways to limit or remove alcohol from the diet to support overall health.

### Stop smoking.

Smoking injures the wall of the arteries and causes them to harden. People who smoke have more problems managing their diabetes and are more likely to experience complications.

### Use medication, if prescribed.

Not everyone takes the same kind of blood pressure medicine, and many individuals take more than one type of medication. It is important that you take medication as prescribed by your provider. This includes taking the right dose at the correct time of day. To help keep medications organized, consider writing yourself a note or adding a reminder on your phone to take your medications at the appropriate time each day. Pill organizers can also help you take medications on the right days at the right times.

### Summary

Having diabetes can put you at a higher risk for some health conditions. Many of these can be prevented or managed with some lifestyle changes. Cutting back on sodium in your diet is one way to support blood pressure levels. Engaging in regular physical activity can help manage blood pressure and blood-glucose levels. Movement also supports weight management, which can help to lower blood pressure. Take medication for blood pressure and diabetes as prescribed. Embracing some lifestyle changes can help support your overall health.



## Resources

Kentucky Diabetes Network: <http://www.kydiabetes.net/>  
National Diabetes Education Program: <http://www.ndep.nih.gov>  
American Diabetes Association: <http://www.diabetes.org>

## References

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Contributor: Margaret E. Cook-Newell, R.D., L.D., CDE

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