Why Do Diabetics Have High Blood Pressure?

by COLLEEN KELLY

High Blood Pressure and Diabetes: Does Diabetes Increase Blood Pressure?

Complications.

I always ensure I discuss the potential complications of diabetes with my patients. And high blood pressure is one such complication of diabetes.

Some of my patients already have high blood pressure (or hypertension) before their diabetes diagnosis, but others do not, so it is important to understand the link between high blood pressure and diabetes.

Does High Blood Pressure and Diabetes Go Hand in Hand?

Possibly.

Diabetes causes damage to the arteries of the heart – it causes the arteries to harden, causing a condition called atherosclerosis. When atherosclerosis occurs, the heart doesn't pump as effectively, and this can lead to high blood pressure.

Atherosclerosis can also cause kidney problems, heart attack, and further problems with heart vessels.

People with hypertension (especially uncontrolled) are more likely to have coronary artery disease, heart failure, strokes, and peripheral vascular disease.

In general, your blood pressure should be 130/80 or lower.

Can Low Blood Sugar Cause High Blood Pressure?

In general, symptoms of hypoglycemia (low blood glucose) do not cause high blood pressure. Symptoms of hypoglycemia include the following:

- Fatigue
- Pallor
- Shakiness
- Anxiety
- Sweatiness
- Hunger
- Irritability
- An irregular heart rhythm

However, a little context: someone who already has high blood pressure could certainly have a hypoglycemic

episode. This could potentially worsen the high blood pressure.

And what are some causes of low blood glucose?

- An inaccurate dose of insulin.
- Someone has gone too long without a meal.
- A higher than normal activity level.
- Certain medications can also precipitate hypoglycemia – for example, certain high blood pressure medications (atenolol, propranolol, metoprolol), certain antidepressants, quinine, haloperidol, and certain antibiotics.

Can High Blood Sugar Cause High Blood Pressure?

Maybe not immediately, but allowing your blood glucose levels to run high consistently will wreak havoc on your blood pressure levels at some point.

According to the American Diabetes Association, 1 in 3 American adults has hypertension. 2 in 3 people with diabetes report having hypertension or taking a prescription medication to reduce their blood pressure levels.

The thing about it is that hypertension is typically a “silent” disease – there are rarely any symptoms associated with it. It is of the utmost importance to have your blood pressure checked regularly – at least twice yearly – to ensure that your number is within a target range.

Can High Blood Pressure Cause Diabetes?

So, by now, we’ve established that diabetes can cause high blood pressure. But what about the opposite – can hypertension lead to diabetes?

Possibly – but it may be that the two are linked together.

The American Heart Association notes that if you have hypertension or other heart conditions, you should note if you have the following risk factors for the development of type 2 diabetes.

Non-modifiable risk factors for type 2 diabetes:

- Having a family history of type 2 diabetes.
- Being African-American, Pacific Islander, Native American, Asian-American, or Latino/Hispanic-American descent.
- Being over the age of 45.
- Having a history of gestational diabetes.

Modifiable risk factors for type 2 diabetes:

- Being overweight or obese.
- Being physically inactive.
- Having hypertension.
- Having abnormal lipid levels (blood cholesterol levels).

Diabetes and High Blood Pressure Diet Plan

If you have high blood pressure, as well as diabetes, your physician will probably want you to eat in a way that will lower both your blood pressure levels as well as your blood glucose levels. This can be a fine balance – it may be beneficial to ask for a referral to speak with a registered dietitian (RD), who can help to create a specific meal plan for your needs.

Regardless, here are some generic tips for healthy eating with diabetes that can help keep both your blood pressure and glucose levels in check.

Use different spices to season your meals. Your sodium intake should be no more than 1,500mg per day, so put down that salt shaker and experiment with other seasonings – different types of peppers, garlic, cumin, salt substitutes, jalapeno peppers.

You can also control the amount of salt you put in your food by cooking at home. Food that is prepared in a restaurant tends to be higher in sodium.

Limit your caffeine intake. Caffeine can raise your blood pressure. Your coffee intake should be no more than 2 cups per day – about 200mg.

If you're also watching your cholesterol levels, make your coffee at home using a paper filter. There is some research that indicates that a paper filter can soak up the oily compound in coffee beans, which may increase cholesterol.

Oh, and keep the sugary creamers and added sugar to a minimum – it will help to control your glucose levels!

Choose healthier fats. Fats get a bad reputation, but not all fat is bad for you. Choosing fat from sources like avocados, olive oil, and nuts is beneficial to your health, whereas unhealthy fats can increase your cholesterol and increase your risk of heart disease.

Obviously, this is all very general information – a diet plan when you have both hypertension and diabetes is a delicate dance. Please seek expert option from your physician and/or an RD.

Diabetes and High Blood Pressure Treatment

There is a specific algorithm that physicians follow when prescribing antihypertensive (blood pressure) medications to their diabetic patients. Sometimes it may seem like they are throwing darts at the wall – when one medication doesn't work, it may seem like they are randomly trying a new medication. But, this isn't the case.

As discussed initially, the target blood pressure for a patient with diabetes is 130/80. ACE inhibitors and ARBs are the preferred blood pressure medications. If the target blood pressure is not achieved with an ACE or an ARB, a thiazide diuretic is a second-line medication to be added. The algorithm continues from there.

The Bottom Line…

Hypertension occurs hand-in-hand with diabetes frequently. Being aware of this fact can ensure that you take control of your blood pressure early.