

Weighing in on **OBESITY** AND Your **KIDNEYS**

by Linda-Marie Lavenburg, DO; and Shivam Joshi, MD

A healthy weight is your first line of defense against obesity-related conditions like type 2 diabetes and heart disease. Another common yet serious condition is kidney disease, though many overlook it.

Unfortunately, a high body mass index (BMI) puts you at risk for chronic kidney disease. However, you can preserve the life of your kidneys by recognizing how weight affects your health and engaging in thoughtful lifestyle changes.

WHAT DO YOUR KIDNEYS DO?

Your kidneys are crucial! They remove harmful toxins from your blood and maintain a normal PH level in your body. They also influence your blood pressure.

If you don't know what your kidneys look like, imagine kidney bean-like organs about the size of a chalkboard eraser. Inside are millions of blood vessels that clean your blood and create urine. Factors such as age, sex, race and size all affect how well your kidneys function. In fact, as we get older, kidney function usually starts to decline.

HOW DOES OBESITY AFFECT YOUR KIDNEYS?

Having excess weight puts you at risk for a larger waist circumference, insulin resistance and high blood pressure. Studies show that a larger waist circumference and excess fat in the belly area can contribute to kidney disease. Among other causes, kidney damage can also happen from inflammation and pressure from fat.

Insulin is a hormone your body produces after your blood sugar rises. If you have insulin resistance, you need more insulin than normal to control your blood sugar. Over time, weight gain can cause insulin resistance to turn into type 2 diabetes. This is a disease where blood sugar remains high even without eating. Unfortunately, type 2 diabetes can damage blood vessels in your kidneys and lead to kidney failure. Not surprisingly, type 2 diabetes is the number one cause of kidney failure and affects 100 million U.S. adults.

High blood pressure is the second most common cause of kidney failure. Two common yet preventable risk factors include:

- Obesity
- A diet rich in salt

A diet rich in salt can lead to high blood pressure. This can strain your kidneys by forcing them to work harder and faster to clean more blood. With time, this extra force can lead to kidney failure.

SYMPTOMS OF KIDNEY DISEASE

Kidney disease usually worsens slowly over many years if it is caused by the risk factors mentioned earlier. However, symptoms typically don't begin to show until the disease is advanced. Symptoms include:

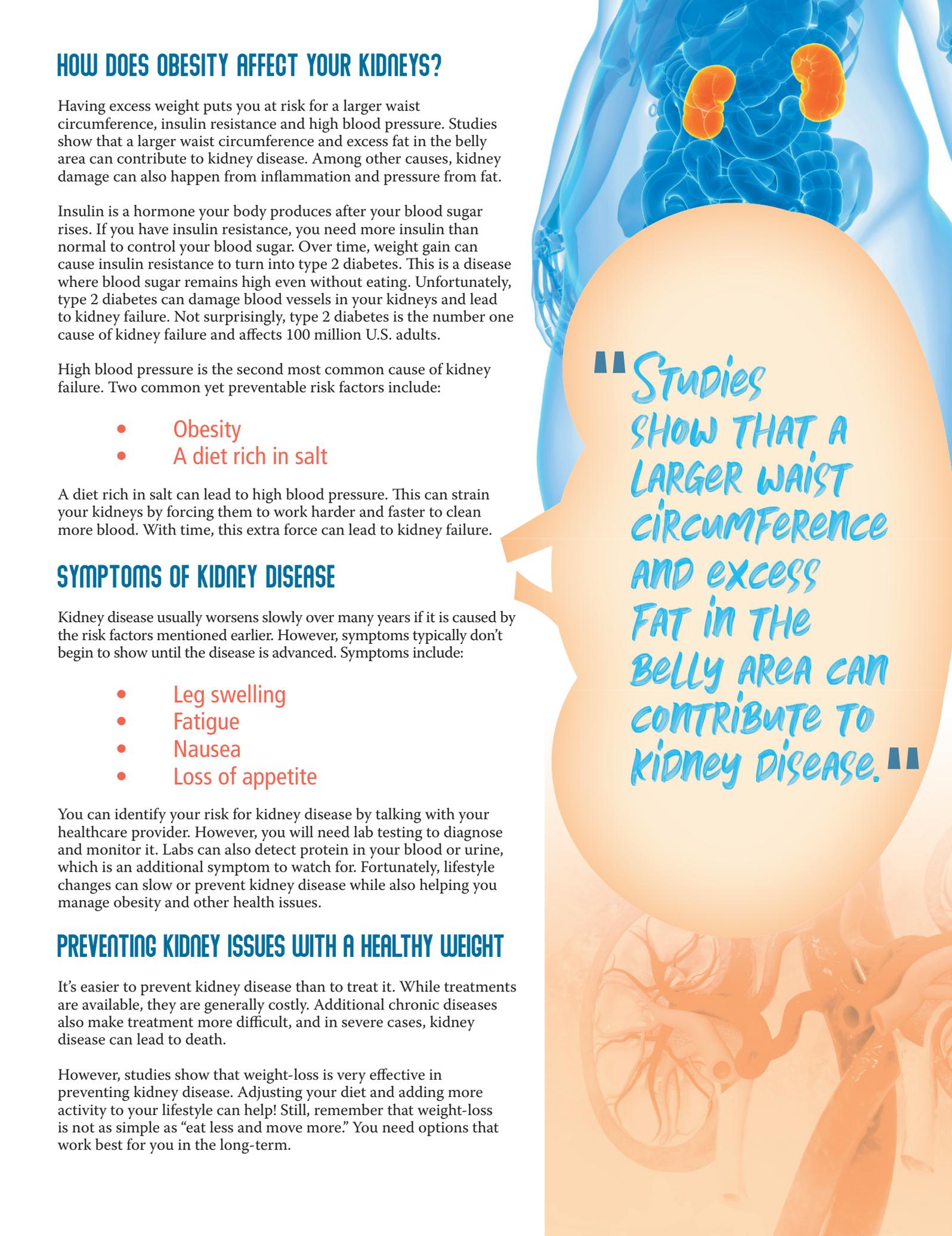
- Leg swelling
- Fatigue
- Nausea
- Loss of appetite

You can identify your risk for kidney disease by talking with your healthcare provider. However, you will need lab testing to diagnose and monitor it. Labs can also detect protein in your blood or urine, which is an additional symptom to watch for. Fortunately, lifestyle changes can slow or prevent kidney disease while also helping you manage obesity and other health issues.

PREVENTING KIDNEY ISSUES WITH A HEALTHY WEIGHT

It's easier to prevent kidney disease than to treat it. While treatments are available, they are generally costly. Additional chronic diseases also make treatment more difficult, and in severe cases, kidney disease can lead to death.

However, studies show that weight-loss is very effective in preventing kidney disease. Adjusting your diet and adding more activity to your lifestyle can help! Still, remember that weight-loss is not as simple as "eat less and move more." You need options that work best for you in the long-term.



■ ■ Studies show that a larger waist circumference and excess fat in the belly area can contribute to kidney disease. ■ ■

EXERCISE GUIDELINES FROM THE AMERICAN HEART ASSOCIATION:



2 HOURS AND 30 MINUTES
(150 minutes) of moderate-intensity activity,
like brisk walking, every week.



OR



1 HOURS AND 15 MINUTES
(75 minutes) of vigorous-intensity activity,
like jogging or running, every week.



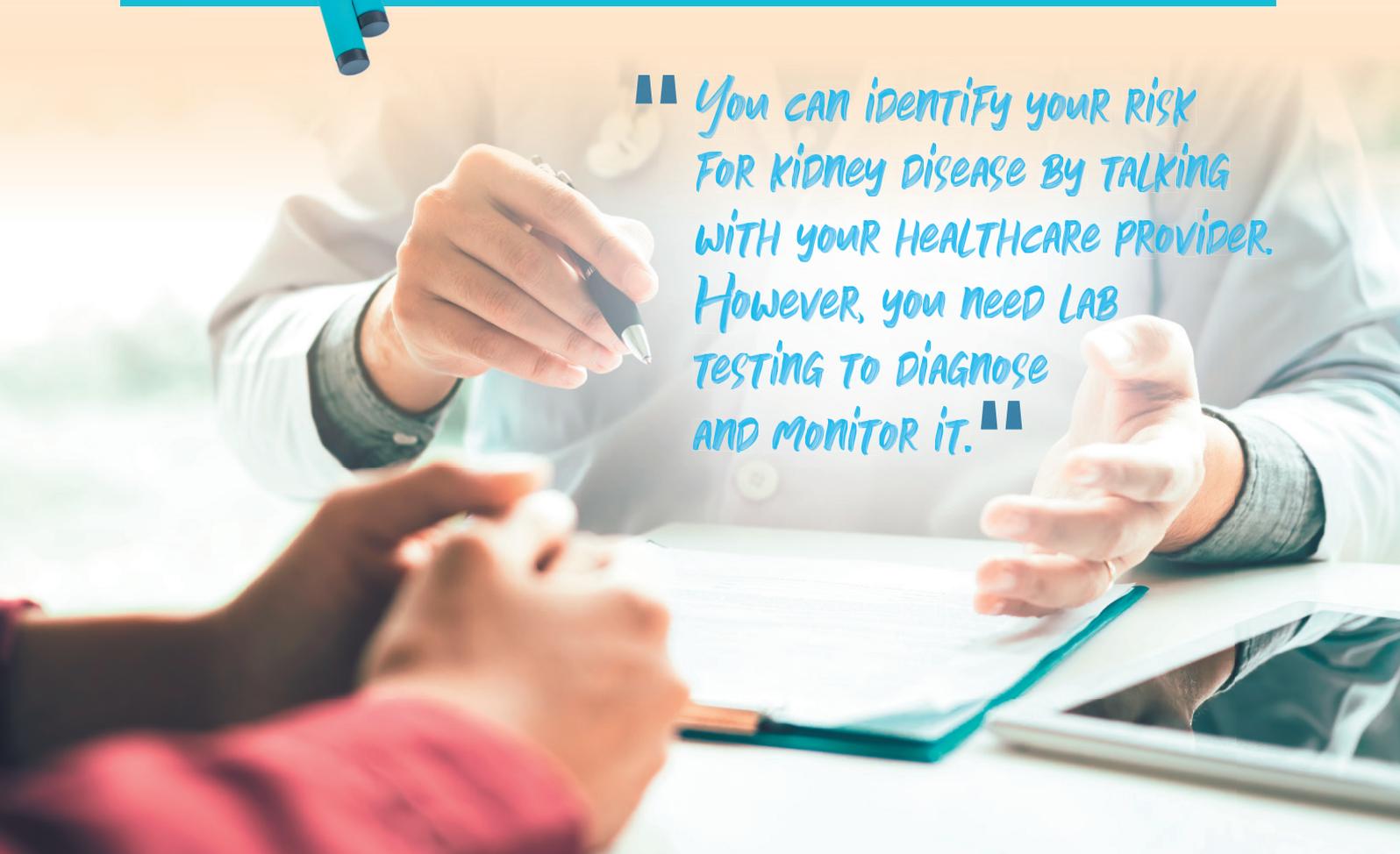
OR



AN EQUIVALENT MIX
of moderate and vigorous-intensity
activity every week.



■ ■ You can identify your risk
for kidney disease by talking
with your healthcare provider.
However, you need lab
testing to diagnose
and monitor it. ■ ■



TIPS FOR IMPROVING YOUR NUTRITION

If you want to build healthier eating habits, consider foods that are whole and plant-based such as fruits, veggies, whole grains and legumes. These foods can keep your kidneys healthy. They are also low in calories but high in key nutrients like fiber!

Additionally, whole and plant-based foods are high in potassium and low in sodium. You can manage your blood pressure by making them a regular part of your diet and consuming less than one teaspoon of salt per day. In the average American diet, most excess salt comes from processed or pre-packaged foods – not the table salt you add to a meal at home. Therefore, before you buy something packaged, look at the nutrition label on the back.

CREATING A HEALTHY AND SUSTAINABLE LIFESTYLE

Changing your lifestyle requires time and patience. However, it can help you sustain a healthy weight and prevent or manage kidney disease. The good news is that even modest weight-loss of just 5-10% improves your blood sugar and lowers your blood pressure, thus preserving your kidney function!

Make it happen by setting S.M.A.R.T. goals. These goals are specific, measurable, attainable, relevant and time-based. For example, rather than aiming to “eat healthier,” be more specific. A S.M.A.R.T. goal could be, “I will eat one cup of non-starchy vegetables with each meal, seven days a week.” S.M.A.R.T. goals help you track progress. Start making some today and ask your family, friends or healthcare providers to hold you accountable!



“ The good news is that even modest weight-loss of just 5-10 percent improves your blood sugar and lowers your blood pressure, thus preserving your kidney function! ”

KIDNEY ISSUES, OBESITY AND BARIATRIC PROCEDURES

If you are struggling to lose weight, bariatric surgery might be an option if you have a BMI of 35-40 with related health conditions. It may also be an option if you have a BMI of 40 or greater.

However, surgery is only successful long-term when combined with lifestyle changes like a healthy diet and regular exercise. The benefits of surgery also go beyond weight-loss! Studies show that it can slow kidney disease, improve kidney function and reverse type 2 diabetes. It can also make kidney transplants possible for individuals struggling with severe obesity. A high BMI often prevents individuals from qualifying for transplants.

CONCLUSION

You can help prevent kidney disease through lifestyle changes that have other great health benefits beyond weight-loss. Prevention is a lot easier than many treatment options for kidney failure such as transplants and dialysis.

While obesity can affect kidney function and worsen it through high blood pressure and type 2 diabetes, even modest weight-loss can reduce stress placed on your kidneys. Weight-loss can also help you alleviate or reverse obesity-related conditions. Luckily, you have a lot of power to protect your kidneys by exercising regularly and eating a diet rich with whole and plant-based foods. It's all about a lifestyle you can keep!

About the Authors:

Linda-Marie Lavenburg, DO, is an internal medicine physician and pediatrician in Long Island, NY. She is completing a Clinical Obesity Medicine fellowship at NYU Langone Health and will start a Nephrology/Research fellowship at the University of Pennsylvania in late 2019. She received her Bachelor of Science degree in nutritional basic sciences from Pennsylvania State University. Her research interests include obesity and its long-term effects on the kidneys.

Shivam Joshi, MD, is an internal medicine physician and nephrologist practicing at Bellevue Hospital in New York City. He is a faculty member of NYU's School of Medicine with research interests in popular diets and nephrology. He received his BS from Duke University and his MD from the University of Miami. He completed his residency at Jackson Memorial Hospital/University of Miami and his residency at the Hospital of the University of Pennsylvania. You can follow him on Twitter/Facebook (@sjoshiMD) or on his website: AfternoonRounds.com.



ABOUT THE OBESITY ACTION COALITION (OAC)

The Obesity Action Coalition (OAC) is a National non-profit organization dedicated to giving a voice to individuals affected by obesity and helping them along their journey toward better health. Our core focuses are to elevate the conversation of weight and its impact on health, improve access to obesity care, provide science-based education on obesity and its treatments, and fight to eliminate weight bias and discrimination.



VIBRANT COMMUNITY



NATIONAL AWARENESS CAMPAIGNS



ANNUAL CONVENTION



ADVOCACY



PUBLIC EDUCATION

LEARN, CONNECT, ENGAGE

The OAC knows that the journey with weight can be challenging but we also know that great things happen when we learn, connect and engage. That is why the OAC Community exists. Our Community is designed to provide quality education, ongoing support programs, an opportunity to connect, and a place to take action on important issues.

Through the OAC Community, you can get access to:

- Weight & Health Education • Community Blogs
 - Community Discussion Forum
 - Ongoing Support • Meaningful Connections
- AND MUCH MORE**



JOIN TODAY: GO TO OBESITYACTION.ORG/JOIN

info@obesityaction.org

(800) 717-3117 | (813) 872-7835 | Fax: (813) 873-7838



@ObesityActionCoalition

@ObesityAction