

POZ FOCUS

SANA Y POSITIVA Healthy & Positive: A Two-Part Series



Healthy Kidneys

They clean your blood, build your bones, help blood cells grow. Here's how to keep your kidneys *en buena forma*.

30%

of HIV-positive people experience abnormal renal function, according to the Infectious Disease Society of America.

Q: Why should I care about my kidneys?

A: If you have HIV, you have a one-in-three chance of experiencing kidney issues. Además, diabetes and high blood pressure are the leading causes of kidney disease—and one in ten Latinos is diabetic while one in five has high blood pressure. *¡Pero no te preocupes!* In the pages that follow, we make it easy for you to understand what your kidneys do and why they're important. We also offer tips for what you and your doctor can do to make sure they stay healthy and strong.



El doctor dice

How you and your care provider can keep your kidneys healthy By Kenyon Farrow

Do get your kidney function examined early

Anyone with HIV is at risk for kidney disease, which can damage the kidneys and lead to organ failure. "All patients should have their serum creatinine checked and a urinalysis at the time of their HIV diagnosis," says Dr. Rudy Rodriguez, an associate professor of medicine at the University of Washington in Seattle (see "Kidney Report," page 3). "People at high risk, especially those who are African American and patients with low CD4 counts, and people with other risk factors like diabetes, hypertension or using tenofovir [in Viread, Truvada and Atripla] should be tested yearly thereafter."

Don't stretch the truth

Be upfront about any health issues you're having. Tell your doctor if you've been skipping doses or haven't been following a healthy diet. Otherwise, Rodriguez says, your doctor may overprescribe meds thinking your blood pressure is difficult to control.

TALK TO HER
Keep *tus riñones* healthy with regular lab work and good communication.

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QUICK KIDNEY FACTS

Do monitor your blood pressure

Talk to your doctor about how you can improve your diet and get more exercise. In addition, you may need a medication such as an ACE inhibitor to help regulate blood flow. Try to keep your blood pressure below 120/80 if possible. Keep your cholesterol in check, exercise and quit smoking.

Don't forget kidneys when taking meds

If you have HIV and kidney disease, you may need to avoid certain meds or adjust their doses. Unhealthy kidneys can mean elevated blood levels of certain HIV meds, which can lead to serious side effects. Be sure to check with your doctor. Says Rodriguez: "What may work for one patient may be an improper dose for you."

Do follow your regimen

HIV itself can damage the kidneys. The condition, called HIV-associated nephropathy (HIVAN), is most common among positive black men. HIV treatment can both prevent and manage the condition. But be aware that some antiretroviral (ARV) meds can cause kidney toxicity, says Dr. Rodriguez.

Don't delay treatment

If you don't have insurance, call your local health department to find the nearest public hospital for the uninsured. "Hospitals in cities or towns with Latino populations will have bilingual staff," says Dr. Rodriguez. Some hospitals can even set up a teleconference with an on-call interpreter if one isn't immediately available.

Do think positive—*¡sí se puede!*

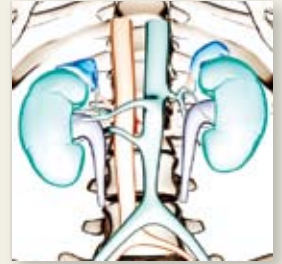
You cannot be denied access to medical care because of your immigration status or if you are an undocumented immigrant. It's your health that's at risk, so talk to your doctor when you're not sure about anything having to do with your medical status.

They're not just your body's cleanup crew

By Derek Thaczuk

Where they are

Put your hands on your back, beside your spine at about waist level—voilà!



What they do

Your kidneys are like your body's janitors. Without them we'd be swimming in our own waste. Job One for the kidneys is to filter waste products out of the blood, including the byproducts of most HIV meds in the nucleoside or "nuke" class, such as tenofovir (Viread) and emtricitabine (Emtriva). Your body dumps these wastes when you urinate.

Interesting kidney fact We're born with a pair, yet we can manage with just one. That's why you can donate a kidney and remain alive and well.

How they multitask Your kidneys also help build blood and bones. They produce vital chemicals, including: erythropoetin, which stimulates red blood cells to grow; calcitriol, an active form of vitamin D needed for healthy bones; and hormones that control blood pressure.

How to keep them chugging Many people have kidneys that function at less than 100 percent. That may be OK, but for some it can still lead to kidney disease. A few simple tests will detect any signs of trouble.

Keeping Things Real

This HIV-positive Dominicana says it's all about nurturing a healthy body and mind

Vitals Elizabeth Marte, 45, a mother and grandmother who lives in Los Angeles; HIV positive 14 years

Health profile Viral load: three years undetectable; CD4 count: 567; resistance testing: resistant to Sustiva (efavirenz). She keeps her kidneys healthy by preventing her blood sugar and cholesterol levels from spiking, working with her doctor, watching her diet and exercising.

Why she's at risk "I come from a family where there's cancer, high cholesterol and diabetes," says Marte, who works as an HIV educator and

domestic violence counselor for women.

Medical history 411

Marte shares her medical history with her doctor, as well as what's happening at home, at work and in her relationships. Her doctor even had Marte speak with a nutritionist about eating healthier while enjoying her favorite Dominican dishes, *locrio* and *mangú*.

Recipe for health Plays volleyball weekly, walks, avoids salt and sugar.

Her advice Latinos who are newly



diagnosed with HIV need to speak up when it comes to their health.

"Advocate for yourself," says Marte. "We won't get the highest quality medical treatment until we do." —KF

Kidney report

What you and your doctor will look out for in your checkups and lab work By Derek Thaczuk

Blood pressure

High blood pressure, or hypertension, can raise the risk of kidney disease and other ailments, so make sure your health care provider is checking your blood pressure at most regular visits. Blood pressure varies as your heart beats, so doctors measure the highest (systolic) and lowest (diastolic) numbers to capture the overall range. Normal readings are lower than 120/80 mmHg. [Note: mmHg, or millimeters of mercury, are the units of pressure.]

Readings higher than 140/90 (either number) are considered a diagnosis of high blood pressure. Anything in between—a top number from 120 to 139, or 80 to 89 on the bottom—could flag trouble to come and may require some lifestyle adjustments. High blood pressure is more likely to go undiagnosed or untreated in Latinos, so ¡cuidate! Avoid becoming a statistic and get checked.

Blood tests

Excess waste products in the blood can mean the kidneys aren't clearing them properly. Measuring two such waste chemicals, creatinine and urea, is key to tracking poor kidney function.

Creatinine levels

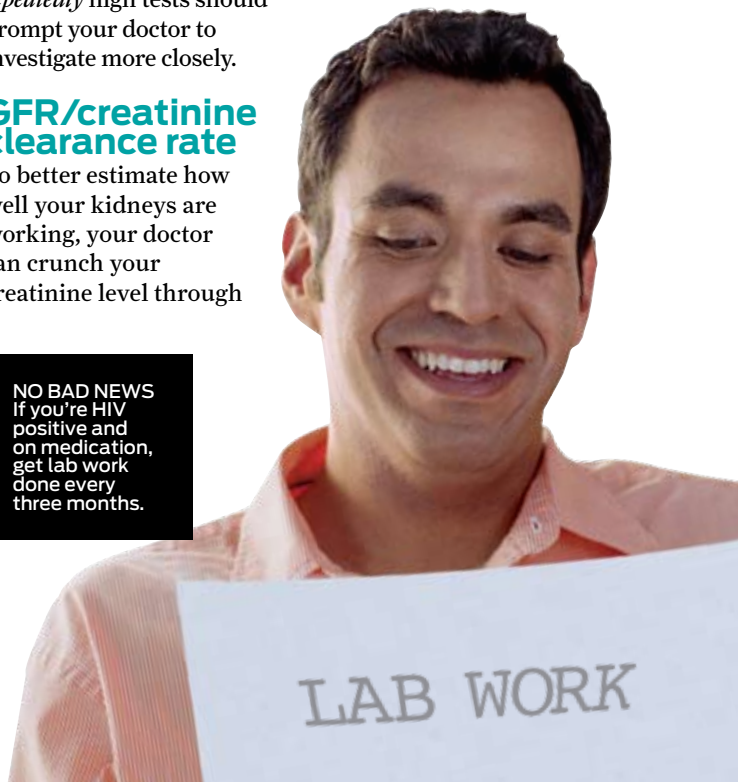
Creatinine is a chemical released by the normal buildup and breakdown of muscle cells. It can be measured by a simple blood test. Your kidneys should eliminate creatinine as it is produced, keeping levels constant. Definitions of "normal" vary slightly, but are generally between 0.6 and 1.2 mg/dL for men and 0.5 and 1.1 mg/dL for women.

Note: The more muscular you are, the higher your "normal" creatinine levels will tend to be. In people taking tenofovir, creatinine levels may occasionally spike but return to normal. Don't worry about the odd blip. But *repeatedly* high tests should prompt your doctor to investigate more closely.

GFR/creatinine clearance rate

To better estimate how well your kidneys are working, your doctor can crunch your creatinine level through

NO BAD NEWS
If you're HIV positive and on medication, get lab work done every three months.



WHAT'S IN YOUR CABINET?

Some HIV medications and complementary therapies may cause
Talk to your doctor about these drugs:

Nucleotide Analogues

Drug Tenofovir, the active ingredient in Viread and one of the drugs in Truvada and Atripla

Possible side effect Accumulation in the kidney tubules, resulting in renal problems in a very small percentage of users

Nucleoside Analogues

Drugs All, notably Zerit (stavudine) and Videx (didanosine)

Possible side effect Rare acid buildup in the blood that can result in kidney failure

Protease Inhibitors

Drugs Crixivan (indinavir) and, less frequently, Reyataz (atazanavir)

Possible side effect Formation of kidney stones, which can be very painful and require hospitalization to remove. Tip: Drink at least eight glasses of water a day.



a few calculations. These equations, called Cockcroft-Gault and MDRD (Modification of Diet in Renal Disease), factor in your age, weight and other factors like sex and race. The results—your creatinine clearance rate and glomerular filtration rate (GFR)—describe how quickly your kidneys process creatinine. (The National Kidney Foundation and other experts consider GFR to be the best measurement of kidney function.) Higher numbers are better: A healthy creatinine clearance rate is one higher than 60 mL per minute.

Blood urea nitrogen (BUN) and proteinuria tests

Healthy kidneys dump protein waste products from blood into your urine. The blood urea nitrogen (BUN) test measures how much urea, a waste product from protein breakdown, is still in your blood. Normal adult levels are typically in the 7 to 18 mg/dL range; high levels show that the kidneys aren't eliminating this waste as much as they should. Healthy kidneys also keep useful protein in the blood. Urine tests can determine whether protein has leaked into the urine, a condition called proteinuria. Abnormal lab results may signal that kidney damage may be occurring. At the first sign of trouble, you should: Get blood sugar and blood pressure under control; make sure you're not taking kidney-toxic drugs; and possibly have more detailed tests, such as an ultrasound or biopsy.

21 million

The number of Americans with diabetes. More than half experience kidney damage or disease, according to the National Kidney Foundation.

What's up, doc?

Protecting your kidneys doesn't require anything out of the ordinary, just a talk with your doctor about your HIV and your overall health. Here are some questions to get you started. By Tim Horn

How is my blood pressure?

Chances are your doctor checks your blood pressure using a medical instrument called a sphygmomanometer. Not only can high blood pressure (with a reading above 140/90) lead to kidney disease, it can also be caused by kidney disease. If your BP is high, you and your doctor should talk about meds and lifestyle changes, such as reducing salt in your diet, to keep it under control.

How is my glucose level?

Diabetes, another major kidney disease risk factor, is common among Latinos. Fortunately, doctors usually check glucose levels—the amount of sugar in the blood—every time they order a chemistry screen. This basic lab test, which checks for a variety of chemicals in a blood sample, is recommended on a regular basis for every HIV-positive person, especially those on treatment. Some HIV meds can increase the risk of diabetes, as can a poor diet, a family history of diabetes and too little exercise. Ask your doc for more info.

How's my viral load?

HIV can reproduce inside the kidneys, damaging their filtering capabilities. This condition, known as HIV-associated nephropathy (HIVAN), is most common among black men with high viral loads. HIVAN is less common among Latinos. Not only is antiretroviral therapy an effective treatment for HIVAN, it may also have preventive benefits as well. You and your doctor can discuss when you should start or, if you're on it, how it's working for you.

How are my meds?

Some drugs can increase the risk of kidney disease, including prescription HIV meds and over-the-counter pain relievers. It's important to let your doctor know what you're taking. One possibility is to keep a list of what and how much you take and when you take it. A quicker solution? Dump all your pills into a paper bag and let your doctor sort through it for meds that don't mix well or might possibly be harmful to you.

(MAN) GETTY IMAGES; (MEDICINE CHEST) GETTY IMAGES/JONATHAN KANTOR

kidney side effects.

Complementary Therapies

Drugs Chinese herbs containing sources of aristolochic acid, including *Aristolochia*, *Bragantia* and *Osarum*

Possible side effect Chinese herbal nephropathy, leading to rapid kidney failure

Antibiotics

Drugs Some meds that treat fungal infections, PCP and CMV

Possible side effect

A rapid shutdown of the kidneys

Nonsteroidal Anti-inflammatory Drugs

Drugs Advil (ibuprofen) and Aleve (naproxen)

Possible side effect An allergic reaction known as interstitial nephritis, which can decrease blood flow inside the kidneys