

Know Your Risk

for Blood Vessel Damage.

ADMA/SDMA

What are ADMA and SDMA?

ADMA (asymmetric dimethylarginine) and SDMA (symmetric dimethylarginine) are made by your body when proteins are broken down. Too much ADMA and SDMA can make it hard for your body to make nitric oxide, which is a chemical needed to keep blood vessels healthy.

Why check my ADMA and SDMA levels?

Picture wasps and honey bees competing for nectar. They may look similar, but only the honey bees can use nectar to make honey. This is like how ADMA can compete with structures in our bodies for certain proteins that make nitric oxide. Only special structures, like L-arginine (found in foods like seeds, nuts, fish, soy, meat, and dairy), can work with these proteins to make nitric oxide. ADMA looks like these structures, but it cannot be used to make nitric oxide. Without enough nitric oxide, blood vessels can become damaged, which increases your risk for heart and blood vessel disease.

High levels of ADMA may suggest your body isn't making enough nitric oxide and there could be a problem with your blood vessel health. SDMA looks a lot like ADMA and it can let your doctor know if your kidneys are working properly.

Your doctor may want to check your ADMA and SDMA levels if you don't have good eating or lifestyle habits, or if you have major risk factors for heart attacks, such as smoking, high blood pressure, high blood sugar, or high cholesterol levels, or your kidneys are damaged. Ask your doctor if this test is right for you.

What can I do to improve my ADMA/SDMA levels?

There are a number of things you can do help keep your blood vessels healthy and lower your risk of heart disease, as well as your ADMA/SDMA levels.

- **Eat a healthy diet.** A heart-healthy, Mediterranean diet – that is low in saturated fat and cholesterol, full of high-fiber foods (such as fresh fruits, vegetables, and whole grains), and has very little added salt and sugars – can help you control cholesterol levels, blood pressure, and blood sugar.

- **Exercise more.** Talk with your doctor about exercises that would be safe for you to do.
- **If you smoke, you should quit.** Smoking damages the walls of blood vessels and increases both heart attack and stroke risk, partly because smoking can also make clots form faster and bigger.
- **Take your medications,** if told by your doctor, to lower your blood pressure, blood sugar, and/or blood cholesterol levels.

With heart disease being the #1 killer of Americans, it's important to develop a plan with your doctor to lower your risk of a heart attack or stroke *before* one happens.

Additional Need-to-Knows:

The ADMA/SDMA test can be done at the same time you have your standard cholesterol test. When getting ready for the ADMA/SDMA test:

- Keep taking your medications as directed.
- Fasting is not required.

ADMA Relative Risk

<100 Low	Your ADMA result is in the desirable range, suggesting that you have good nitric oxide levels and lower risk of blood vessel damage.
≥100 Moderate/High	You have moderate/high levels of ADMA, suggesting that you may have low nitric oxide levels and higher risk of blood vessel damage.

What do my results mean?

SDMA Reference Range

<135 Low	Your result is in the desirable range, suggesting that you have lower risk for kidney problems.
≥135 Moderate/High	You have high levels of SDMA, suggesting that you have higher risk for kidney problems.

What do my results mean?

