

# ADMA/SDMA

Know your risk™ for endothelial dysfunction.



inflammation

## What is the endothelium and why is it important?

The endothelium is a thin layer of cells lining the inside of your blood vessels. These cells are in constant contact with the blood supply and, therefore, play an integral role in immunity, blood clotting and maintenance of blood pressure. When your endothelium is damaged, it may signify that you are at increased risk of having cardiovascular disease or renal failure.

## What are ADMA and SDMA?

ADMA (asymmetric dimethylarginine) and SDMA (symmetric dimethylarginine) are compounds made in your body as proteins are degraded, or broken down. ADMA and SDMA reduce your body's ability to produce nitric oxide, a molecule that helps maintain a healthy endothelium. Therefore, elevated levels of ADMA and SDMA may identify reduced nitric oxide production and endothelial dysfunction, or damage.

## What causes increased ADMA/SDMA levels?

Your ADMA and SDMA levels may increase if you have a poor diet/lifestyle, elevated LDL cholesterol, high blood sugar, high blood pressure, or if you are a smoker. These are all risk factors that can damage the delicate endothelial cells that protect your vasculature.

## Why should I check my ADMA/SDMA levels?

You should check your ADMA/SDMA levels to determine if you have a healthy endothelium.

- ADMA can tell you if your risk factors may be contributing to endothelial damage and increasing your likelihood for cardiovascular disease.
- SDMA can tell you if your risk factors may be contributing to an increased likelihood for kidney damage or, in some cases, kidney failure.

## When should my ADMA/SDMA levels be checked?

Your ADMA and SDMA levels should be checked if you have a poor diet/lifestyle, elevated LDL cholesterol, high blood sugar, high blood pressure, or if you are a smoker.

## How do I prepare for the ADMA/SDMA test?

It is recommended, but not required, that you fast overnight before your sample is collected.

## What can I do to lower my ADMA/SDMA levels?

Focusing on the health of your endothelium may help to lower ADMA and SDMA levels. This may be accomplished through:

- Lifestyle changes, including a balanced diet that is low in fat and incorporates more fruits and vegetables. You should limit your intake of sweet and salty foods.
- Maintaining an active lifestyle with regular exercise, maintaining a healthy weight, lowering blood pressure and decreasing blood LDL cholesterol levels.
- Medications your provider may prescribe to achieve a healthy blood pressure or normalize blood cholesterol and blood sugar levels.

It is important that you talk with your medical provider to develop a plan that works for you.



### RELATIVE RISK

ADMA (ng/mL)

<100 Low

100 - 123 Moderate

> 123 High

### REFERENCE RANGE

SDMA (ng/mL)

73 - 135 Low

>135 High

**Disclaimer:** The information provided here is for educational purposes only. All testing results should be reviewed and interpreted by your treating physician.

