



Cardiovascular-Kidney-Metabolic Syndrome (CKM)

CKM syndrome is a condition that highlights how closely connected our heart, kidneys and metabolism are. Instead of viewing heart disease, kidney disease, diabetes or obesity as separate issues, CKM looks at how they influence one another.

These systems work together in your body:

- **The heart** pumps blood to keep everything moving.
- **The kidneys** filter waste and help manage blood pressure.
- **Your metabolism** — how your body uses and stores energy — affects blood sugar and fat levels.

When one part of this system isn't working well, it can put extra strain on the others. Over time, this can raise the risk of serious problems like kidney failure, cognitive decline, heart attack, stroke or sudden cardiac death.

Focusing on your overall health — not just one condition at a time — helps doctors spot risks earlier so you can get the right care before issues become more serious.

WHAT ARE THE RISK FACTORS FOR CKM SYNDROME?

Excess body fat is often the starting point for CKM syndrome. Body fat can trigger inflammation that damages the heart, arteries, kidneys and liver. It also can lead to insulin resistance, which can result in type 2 diabetes.

HOW EARLY SHOULD SOMEONE START WATCHING FOR CKM RISK FACTORS?

CKM syndrome is grouped into stages from 0 (no risk factors) to 4 (people being treated for serious heart conditions like heart disease, heart failure or stroke).

Risk factors can appear **at any age** — even in **childhood**. Kids with extra body weight, high blood sugar, high blood pressure or early heart or kidney problems may already be moving toward CKM. That's why it's important to look for these risk factors as soon as they appear.

Even if someone is healthy and does not have any CKM risk factors, the most effective time to prevent heart disease and worsening CKM health is early. Maintaining good habits in young adulthood sets you up for good CKM health over your entire life span.

WHAT CAN SOMEONE DO TO PREVENT CKM SYNDROME?

Eating a healthy diet, staying active, keeping a healthy weight and not smoking are the basics of taking care of your CKM health.

Prevention also means getting regular checkups and knowing your numbers. Talk with your doctor about which screenings make sense for your age. Even some younger people may need to be checked for things like high blood pressure, high cholesterol or high blood sugar.

Your doctor may also recommend screening for kidney problems, depending on your age and overall health. And if you're worried about your weight, it's always better to bring it up with your doctor sooner rather than later. They're here to help.

CKM SYNDROME CAN BE STOPPED

Making healthy choices can help you take control of your CKM risk. Early findings from a randomized [controlled study showed](#) that when healthy young adults reduced their calorie intake by about 12%, the progression of CKM syndrome slowed down — or even reversed.

If your health starts moving toward disease on the CKM spectrum, it is possible to move back toward health. Risk factors like extra weight, high blood pressure or diabetes don't have to be permanent. Many can improve with healthy changes and the right medical care.

To learn more about the connection between CKM health and your overall health, visit the American Heart Association's [CKM health page](#).

SOURCES:

[Cardiovascular-Kidney-Metabolic | American Heart Association](#)

[About 9 in 10 haven't heard of condition that affects nearly 90% of U.S. adults | American Heart Association](#)

