



Cardiovascular-kidney-metabolic (CKM) syndrome can have a serious impact on your health. The good news is that following healthy habits can help you prevent CKM syndrome. And if you have CKM syndrome, the same habits can help you stay healthy and slow its progress.

What is CKM syndrome?

CKM syndrome is a health condition caused by connections between:

- **Heart (cardiovascular) disease** – a broad category of diseases that affect the heart and blood vessels
- **Chronic kidney disease** – when the kidneys, which help filter waste and fluid out of your blood, become damaged and don't work as well as they should
- **Type 2 diabetes (a metabolic condition)** – when the body doesn't make enough insulin (a hormone) to help move sugar into your cells, or the body doesn't use insulin well
- **Obesity (another metabolic condition)** – when a person has too much body fat, which affects how well the body can use oxygen, insulin, and energy from food

Researchers have found strong connections between these health conditions. People who have 1 of these conditions are more likely to develop 1 or more of the others.

CKM syndrome is a **progressive** condition – meaning that it can get worse over time. There are 5 stages of CKM syndrome. People in the later stages may have serious complications (health problems) like heart attack, stroke, or kidney failure.



Am I at risk for CKM syndrome?

You are more likely to have CKM syndrome if you have 1 or more of these health conditions:

- Heart disease
- Chronic kidney disease
- Type 2 diabetes
- Obesity

Other health conditions can impact your risk of progressing to the later stages of CKM syndrome. You are more likely to progress to the later stages – and experience serious complications – if you have:

- A chronic inflammatory condition, like lupus, rheumatoid arthritis, psoriasis, or HIV/AIDS
- A family history of kidney failure or type 2 diabetes
- A sleep disorder, like sleep apnea
- A mental health condition, like depression or anxiety
- Polycystic ovarian syndrome (PCOS)

Other factors can impact your risk, too. For example, people who don't have enough healthy food or safe places to get active may be more likely to progress to later stages of CKM syndrome.

What can I do to stay healthy?

Following healthy habits can lower your risk for CKM syndrome. If you have CKM syndrome, the same habits can help to slow its progress and protect your health.

Eat healthy.

Get plenty of vegetables and fruits, whole grains (like oatmeal, brown rice, or whole wheat bread), lean proteins (like fish or beans), and healthy fats (like olive oil or avocados). Limit sodium (salt) from food and drinks.



Stay active.

Get at least 150 minutes of physical activity each week. Go for a walk or bike ride, try chair yoga, or do some household chores – any type of movement counts!



Avoid tobacco.

Don't smoke, vape, chew tobacco, or use other tobacco products.



Limit alcohol.

Drink in moderation or not at all.



Get enough sleep.

Try to get 7 to 9 hours of sleep each night.



Aim for a healthy weight.

Follow your doctor's advice to lose weight or maintain a healthy weight.



Get to know your numbers.

Ask your doctor about checking your cholesterol, blood pressure, blood sugar, and kidney health. When you get test results, ask your doctor what they mean.



Follow your doctor's advice.

Get any tests your doctor recommends and follow their guidance to prevent future health problems.



Learn more

Learn more about CKM syndrome at [kidneyfund.org/all-about-kidneys/other-kidney-diseases/cardiovascular-kidney-metabolic-ckm-syndrome](https://www.kidneyfund.org/all-about-kidneys/other-kidney-diseases/cardiovascular-kidney-metabolic-ckm-syndrome)