What You Need to Know About Hemoglobin

Complete Blood Count (CBC)

When your doctor orders a complete blood count (CBC), the lab automatically runs several different tests. Hemoglobin is one of the tests that is done as a part of a complete blood count.



Why Are Blood Cells Red?

Hemoglobin is the protein that makes red blood cells red. It holds oxygen in your red blood cells, and lets them bring oxygen to the rest of your body. Healthy kidneys make a hormone (erythropoietin, or EPO) that tells your bone marrow to make more red blood cells. When the kidneys don't work well, they make less EPO so you may have a



shortage of oxygen-carrying red blood cells, called anemia. Other health problems can also lead to anemia. The level of hemoglobin in your blood can be tested to see if you have anemia. If so, your doctor will sort out the reason so you can get the right treatment. To learn more about anemia, read the Symptoms of Kidney Disease topic.

What Does Hemoglobin Do for You?

Since it brings oxygen to each cell in your body, hemoglobin revs your engine and gives you energy. When you don't have enough hemoglobin, you can feel very tired. You can be treated for anemia that is due to kidney disease.



Photo credit to US Army

What Does Your Hemoglobin Level Mean?

Do you know your hemoglobin level? If you have chronic kidney disease (CKD), your target range for hemoglobin may be different than the range for healthy people. Talk to your care team about your new target. And, then work together to stay in the range.

 If your hemoglobin is too high, you may be at risk for health problems. Some studies have shown a higher risk of heart attacks and strokes in people with CKD whose hemoglobin levels were too high. If you are taking EPO, your doctor may lower your dose.



• If your hemoglobin is **too low**, you may have anemia. Anemia can make you feel tired, weak, cold, and confused. Getting treatment can help give you back your energy so you can stay active and do the things you want to do.

What You Can Do About Hemoglobin

You need iron as a building block to make red blood cells. You can get iron into your diet by eating iron-rich foods and cooking with cast iron. In most cases, your doctor will also



prescribe iron for you to take. You may also need a medication called EPO to tell your body to make more red blood cells.