

Understanding Your Lab Values

Some or all of following tests may be used to check your nutrition and general health. Ask your doctor and dialysis care team which tests you will have and how often they will be done. If your numbers are not in the normal range, ask how to improve them.

Serum Albumin

Albumin is a type of protein made from the protein you eat each day. A low level of albumin may lead to health problems, such as difficulty fighting off infections. Ask your dietitian how to get the right amount of protein and calories from your diet.

Blood Pressure

Ask your doctor what your blood pressure should be. If your blood pressure is high, make sure to follow all the steps in your prescribed treatment. These steps may include taking high blood pressure medications, cutting down on the amount of salt in your diet, losing weight if you are overweight and following a regular exercise program.

Blood Urea Nitrogen (BUN)

Urea nitrogen is a normal waste product in your blood that comes from the breakdown of protein from foods you eat. Healthy kidneys remove BUN from your blood, but when kidney failure occurs, your BUN rises. BUN is also removed from your blood by your dialysis. Your BUN rises from not getting enough dialysis or from eating too much protein. It can fall from getting more dialysis or from eating the right

amount of protein recommended by your doctor or dietitian.

Body Weight

Maintaining a healthy weight is important to your overall health. If you are losing weight without even trying, you may not be getting the right nutrition to stay healthy. Your dietitian can suggest how to safely add extra calories to your diet. On the other hand, if you are slowly gaining unwanted weight, you may need to reduce calories and increase your activity level. A sudden weight gain may also be a problem. If it is accompanied by swelling, shortness of breath and a rise in blood pressure, it may be a sign of too much fluid in your body. You should check your weight at home every morning. Speak to your doctor if your weight changes suddenly.

Calcium

Calcium is a mineral that is important for strong bones. Ask your doctor what your calcium level should be. To help balance the amount of calcium in your blood, your doctor may ask you to take calcium supplements or a special prescription form of Vitamin D. Take only the medications recommended by your doctor.

Cholesterol Total

Cholesterol is a fat-like substance found in your blood. A high cholesterol level may increase your risk of having heart and circulation problems. However, a cholesterol level that is too low may mean you

HDL

LDL

are not eating well enough to stay healthy. Ask your doctor if your cholesterol level is in the right range. HDL cholesterol is a type of “good” cholesterol that protects your heart. For many dialysis patients, the target level for HDL cholesterol is above 35. LDL cholesterol is a type of “bad” cholesterol. A high LDL level may increase your chance of having heart and circulation problems. For many dialysis patients, the target level for LDL cholesterol is below 100. If your LDL level is too high, your doctor may recommend changing your diet and increasing your activity level.

Serum Creatinine

Creatinine is a waste product in your blood that comes from the normal function of your muscles. Healthy kidneys remove creatinine from your blood, but when the kidneys are not working, your creatinine level rises. Your dialysis also removes creatinine from your blood. Not getting enough dialysis can cause your creatinine level to rise, while getting more dialysis causes it to fall. Your creatinine level can also fall from not eating well over a long period of time.

Creatinine Clearance

Creatinine clearance is another measure of how well your dialysis clears wastes from your blood. Your dialysis care team will check your weekly creatinine about once every four months to make sure you are getting the right amount of dialysis.

Hematocrit

Your hematocrit is a measure of the red blood cells your body is making. A low hematocrit can mean you have anemia and need treatment with EPO and extra iron. You will feel less tired and have more energy when your hematocrit is at least 33 to 36 percent.

Hemoglobin

Hemoglobin is the part of the red blood cells that carries oxygen from your lungs to all the tissues in your body. Measuring your hemoglobin level tells your doctor if you have anemia, which makes you feel tired and have little energy. To treat your anemia, you may need to take a hormone called EPO along with iron. The goal of anemia treatment is to reach and maintain a hemoglobin level of at least 11 to 12.

Iron**TSAT and
Serum Ferritin**

Your TSAT (pronounced tee sat) and serum ferritin (pronounced ferry tin) are measures of iron in your body. Your TSAT should be above 20 percent, and your serum ferritin should be above 100. This will help you build red blood cells. Your doctor will recommend iron when needed to reach your target levels.

Kt/V

Kt/V (pronounced kay tee over vee) is a measure of the amount of dialysis you receive. Getting the right amount of dialysis is important to your overall health and can also affect how well you eat. Your target weekly Kt/V should be at least 2.0 for

nPNA

CAPD, 2.1 for CCPF and 2.2 for NIPD. Your nPNA (normalized Protein Nitrogen Appearance) is a test that may tell if you are eating enough protein. This measurement comes from lab studies that include urine collection and blood work. Your dietitian may ask for an accurate food record to go with this test.

Parathyroid Hormone (PTH)

High levels of parathyroid hormone (PTH) may result from a poor balance of calcium and phosphorus in your blood. This can cause bone disease. Ask your doctor if your PTH level are in the right range. Your doctor may order a special form of vitamin D to help lower your PTH. CAUTION: Do not take over-the-counter vitamin D unless ordered by your kidney doctor.

Phosphorus

A high phosphorus level in your blood can lead to weak bones, itching, bone pain and hardening of the blood vessels. Ask your doctor what your phosphorus level should be. If your level is too high, your doctor may ask you to reduce your intake of foods that are high in phosphorus and take a phosphate binder with all your meals and snacks.

Potassium

Potassium is a mineral that helps your heart and muscles work properly. A potassium level that is too high or too low may weaken muscles and change your heartbeat. Whether you need to change your

intake of high-potassium foods varies with each person on peritoneal dialysis. Ask your doctor or dietitian what your potassium level should be. Your dietitian can help you plan your meals to get the right amount of potassium.

Subjective Global Assessment (SGA)

Your dietitian may use SGA to help check for signs of nutrition problems. The dietitian will ask you some questions about your daily diet and check your weight and the fat and muscle stores in your face, hands, arms, shoulders and legs. Ask your dietitian about your score on the SGA. If your score is too low, ask how to improve it.

Triglyceride

Triglyceride is another type of fat found in your blood. A high triglyceride level, along with high levels of total and LDL cholesterol, may increase your chance of having heart and circulation problems.

Urea Reduction Ratio (URR)

URR is another measure of how well your dialysis treatments are working to clear wastes from your blood. It uses blood tests but does not include urine collection. Your target URR should be 65 percent or higher.
