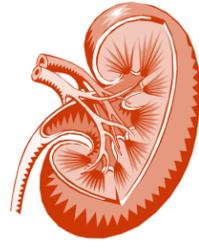


For More Information:

National Kidney Foundation
30 East 33rd Street
New York, New York 10016
1-800-622-9010
www.kidney.org



National Kidney Foundation of North Carolina, Inc.
5950 Fairview Road, Suite 550
Charlotte, North Carolina 28210
1-800-356-5362
www.kidneync.org

American Association of Kidney Patients
3505 East Frontage Road, Suite 315
Tampa, Florida 33607
1-800-749-2257
www.aakp.org

For Additional Copies Write To:
Nephrology and Hypertension Consultants
ATTN: Report Card Explanation
8430 University Executive Park Drive, Suite 685
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To help you better understand your lab values and how they affect your health.

Lab Report Card Explanation

To help you better understand your lab values and how they affect your health.

LAB	NORMAL RANGE	DESCRIPTION
GLOMERULAR FILTRATION RATE (GFR)	Varies according to the stage of kidney disease. Measured in milliliter per minute (mL/minute): Stage 1: ≥ 90 Stage 2: 60 - 90 Stage 3: 30 - 59 Stage 4: 15 - 29 Stage 5: <15	Your GFR tells how well your kidneys filter out waste products. It is based by a formula based on your weight, gender, race, and the levels of creatinine, BUN, and albumin in your blood. If your GFR falls below 60 you may need to see a kidney disease specialist (nephrologist) to improve your kidney function. A GFR below 15 indicates that you may need to consider dialysis or a kidney transplant.
CREATININE (Cr)	Varies according to gender, age, body size, musculature, and stage of kidney disease. 0.5 - 1.4 mg/dL for those without kidney disease.	Creatinine is a waste product of muscle activity that is filtered out by the kidneys. Creatinine level rises when your kidney function decreases.
BLOOD UREA NITROGEN (BUN)	Varies greatly among the stages of kidney disease due to dietary protein intake and/or due to the stage of kidney disease. 5 - 25 mg/dL for those without kidneys disease.	Urea nitrogen is a normal waste product that comes from dietary protein metabolism. It is normally removed from your blood by your kidneys, but when kidney function slows down, BUN levels rise. BUN levels also rise from dehydration or too much dietary protein. High BUN levels can cause nausea.
ALBUMIN (alb)	3.5 - 5.5 g/dL for all stages	Albumin is a type of protein in your blood made from the protein you eat each day. Not getting enough protein will cause a low albumin level. Another cause of low albumin is from damaged kidneys leaking albumin into the urine. A low level of albumin may lead to increased risk of infections, swelling, and blood clots. Ask your dietitian how to get the right amount of protein from your diet.

LAB	NORMAL RANGE	DESCRIPTION
PROTEIN TO CREATININE RATIO	<0.2g protein per 1.0g creatinine	This estimates the amount of protein you lose in your urine in a day, as analyzed from a urine sample.
CALCIUM (Ca)	8.4 - 10.3 mg/dL without kidney disease 8.4 - 9.5 mg/dL preferred if there is kidney disease	Calcium is a mineral that is needed for muscle movement and strong bones, and requires vitamin D for absorption. Your kidneys are important to the process because they activate the Vitamin D. Damaged kidneys may not be able to activate Vitamin D, which in turn may cause low calcium. If so, you may need to take calcium supplements and a special prescription form of Vitamin D. Take only the supplements and medications recommended by your doctor.
PHOSPHORUS (P)	Measured in milligrams per deciliter (mg/dL) Stages 1 and 2: 2.5 - 5.0 Stages 3 and 4: 2.7 - 4.6 Stage 5: 3.5 - 5.5	Phosphorus is a mineral needed for energy and bone health. Phosphorus is in most foods, and builds up in your blood as your kidneys get weak. If your phosphorus level is too high, your doctor may ask you to reduce your intake of high-phosphorus foods and take a medication called a phosphate binder with your meals and snacks.
PARATHYROID HORMONE (PTH)	Measured in picograms per milliliter (pg/mL) Stages 1 & 2: 10-55 Stage 3: 35 - 70 Stage 4: 70 - 110 Stage 5: 150 - 300	A high level of parathyroid hormone (PTH) results from an imbalance of calcium and phosphorus in your body. To keep your PTH in the normal range, you must keep calcium and phosphorus normal. Your doctor may order a special prescription form of vitamin D to help lower your PTH. [Caution: Do not take over-the-counter vitamin D unless ordered by your doctor].
POTASSIUM (K)	3.5 - 5.5 meq/L for all stages	Potassium is a mineral needed for proper nerves, muscles, and heart function. A potassium level outside of normal range may weaken muscles, change your heart rhythm, or even cause sudden death. Healthy kidneys keep potassium in the normal range. Whether you need to change the amount of potassium in your diet depends on the stage of kidney disease.
HEMOGLOBIN (Hgb)	11.4 - 16.0 g/dL for all stages	Hemoglobin, a part of red blood cells, carries oxygen from your lungs to all parts of your body. If your hemoglobin level is low, it is called anemia. Anemia makes you feel tired and breathless. If you have anemia, you may need to take iron supplements and a hormone called erythropoietin (EPO). The goal of anemia treatment is a hemoglobin level of at least 10.5 to 12.

LAB	NORMAL RANGE	DESCRIPTION
TRANSFERRIN SATURATION (TSAT)	>20%	Your TSAT (pronounced tee-sat) is a measure of iron level in your body. Iron helps make red blood cells. Your TSAT should be above 20 percent. You may need to take iron supplements to be within a normal range.
BLOOD PRESSURE	Stages 1 to 3: <130/80 Stages 4 & 5: <140/90	High blood pressure causes the kidneys to lose function. If your blood pressure is high, your doctor may prescribe medication or other treatment. This may include decreasing the amount of salt in your diet, losing excess weight, and following a regular exercise program.
BODY WEIGHT	A normal body weight is estimated according to height and gender and body frame.	Maintaining a healthy weight is important to your overall health. Your dietitian can help you gain or lose weight as needed. Speak to your doctor if your weight changes noticeably; a sudden weight gain may be a sign of fluid retention. This can cause swelling, shortness of breath, and high blood pressure.
BMI	18.5 - 25	Body Mass Index or BMI is a measure of body fat based on height and weight. For adults over 20 years old, BMI falls into one of these categories: <u>BMI.....Weight Status</u> Below 18.5..... Underweight 18.5 – 24.....Normal 25.0 – 29.9..... Overweight
BICARBONATE (HCO3)	22 - 30 mmol/L for all stages	Your bicarbonate level measures the acid/base balance of the blood as controlled by the kidneys. An increased value could result from taking too many antacids. A decreased level is common with kidney disease and can be corrected with taking bicarbonate supplements. Left untreated, a low bicarbonate level can lead to bone loss, muscle weakness, and shortness of breath.
URIC ACID	3.0 - 7.0 mg/dL for all stages	A high uric acid level might cause gout or kidney stones, which can in turn increase the risk of kidney failure. Most uric acid (85%) is produced by the body, while the rest comes from your diet. Uric acid is also a by-product of dietary protein metabolism. To lower uric acid levels, your physician might prescribe a combination of medication and diet.