Understanding Your Results

Your lab results will be mailed within two weeks of your lab draw. Please review your Wellness lab testing results upon receiving them. Results outside "normal" limits are indicated by "H" for High and "L" for Low to the side of the results. The expected normal range (ref. range) is listed in the middle of the report. The absence of an H or L flag indicates that your results fall within the expected normal range for that test. Abnormal results do not require immediate medical attention, but we recommend you contact your personal physician for further evaluation. A copy of your test results will be sent to the physician you listed.

Please call your physician indicated on your results with any questions. If you have lab processing questions, please call 530.543.5913.
**Your Wellness Panel**

The following is a list of blood tests included in your wellness panel:

**HEMATOLOGY**

**WBC (White Blood Cell Count)** refers to the leukocytes or white blood cells found in your blood. These cells are primarily responsible for the body's defense system. An increase in WBC's generally indicates the body is responding to an infection process, usually caused by bacteria. A low WBC count may indicate the body's response to a viral infection.

**Hemoglobin** is the component of the red blood cell, related to iron levels, responsible for carrying oxygen and carbon dioxide to and from all parts of the body. Increased hemoglobin is often seen in people living in high elevations (like Lake Tahoe). Decreased hemoglobin is seen in various forms of anemia.

**Hematocrit** is the ratio of red blood cells to the total blood volume.

**CHEMISTRY**

**Sodium** is a body salt that is regulated by the kidneys and the adrenal glands. Disease of either of these organs, as well as such conditions as dehydration, can result in abnormal values.

**Potassium** is a body salt that is carefully controlled by the kidneys. It is important for the proper functioning of nerves and muscles, including the heart.

**Chloride** is a body salt that is regulated by the kidneys. It generally increases or decreases along with sodium levels.

**Carbon Dioxide (CO₂)** is an ion that is instrumental in the acid-base (pH) balance of your body's cells, and is regulated by your lungs and kidneys. Increased levels can be caused by emphysema and other diseases related to smoking.

**Glucose** is the measure of sugar in the blood. High results can be seen in pre-diabetes and diabetes, and in having eaten before the test.

**BUN & Creatinine** are waste products that are normally removed from the blood by the kidneys and excreted. Elevated levels may indicate kidney disease, although certain other conditions elevate BUN such as dehydration, etc.

**Calcium** is a mineral in the blood that is controlled by the parathyroid glands, the kidneys and some vitamins. It is found largely in bone but is also important for proper blood clotting and in nerve and muscle activity.

**Cholesterol & Triglycerides** are a measurement of fats in the blood.

**HDL Cholesterol (High Density Lipoprotein)** is also classified as a blood fat and serves to transport cholesterol. There is evidence that, unlike total cholesterol and triglycerides, an increased level of HDL cholesterol, the so-called "good" cholesterol, may actually reduce the level of risk for coronary heart disease.

**LDL Cholesterol (Low Density Lipoprotein)** is often referred to as “bad” cholesterol because an excess of LDL may deposit cholesterol in the walls of the arteries over time. Elevated levels are associated with an increased frequency in hardening of the arteries (atherosclerosis) that may cause heart disease, kidney disease, stroke and other circulation disorders.

**Cholesterol Ratio** is the ratio between total Cholesterol and HDL. Data from various studies suggests that the ratio may provide a "Rule of Thumb" guide in predicting increased risk to coronary heart disease.

**Total Protein** measures the sum of the proteins in your blood, primarily Albumin and Globulin. They are a general index to overall health and nutrition. Abnormal levels are seen in liver disease, kidney disease and poor nutrition.

**Albumin** is a major protein faction in the blood. Albumin is manufactured in the liver. Abnormal results may be seen in kidney disease and poor nutrition.

**AST** is an enzyme produced in the liver. Elevated results may indicate liver disease.

**Alkaline Phosphatase** is an enzyme in the blood that is found primarily in the bones and liver. High levels may result when damage to the bones or liver has occurred, as well as in growth (children) and pregnancy.

**Bilirubin Total** is a measurement of bile pigments in blood. Elevated values may be seen in liver disease, gall bladder disease, and certain blood disorders and should be evaluated by your doctor. Low values are probably of no significance.

**ADDITIONAL TESTS**

**PSA (Prostate Specific Antigen)** is recommended by the American Cancer Society for all men over 50, black men over 45 and men over 40 with a family history of prostate cancer. PSA is a simple blood test that detects substances that may be an early warning sign of prostate cancer. Any abnormal result should be followed up with an office visit and a digital exam, which is performed by your physician.

**TSH (Thyroid Stimulating Hormone)** is produced by the pituitary gland and is important in regulating the thyroid gland. The thyroid produces several hormones that influence the body's metabolism. An increased TSH may indicate hypothyroidism and a decreased TSH may indicate hyperthyroidism.

**Hemoglobin A1C (Glycohemoglobin)** is a test that indicates the past few months of glucose (sugar) levels.

**Uric Acid** is normally excreted in the urine. High levels of Uric Acid may be associated with gout, arthritis and certain kidney problems such as kidney stones and the use of some water pills. High levels should be evaluated by your physician. Low levels are probably of no significance.