EXECUTIVE HEALTH CHECK - Glossary of Terms

Kidney Function Panel
These tests, or panel, provide an assessment of your Kidney Function to determine your risk of kidney disease and your general state of nutrition.

- Creatinine is a waste product from the normal breakdown of muscle tissue. As Creatinine is produced, it's filtered through the kidneys and excreted in urine. Doctors measure the blood creatinine level as a test of kidney function.

- A Blood Urea Nitrogen (BUN) Test measures the amount of nitrogen in your blood that comes from the waste product urea. Urea is made when protein is broken down in your body. Urea is made in the liver and passed out of your body in the urine. A BUN Test is done to see how well your kidneys are working.

Uric Acid
This test is done to check for high levels of uric acid in your blood. High levels of uric acid can cause Gout or Kidney Disease. Your doctor may also order this test if you have had or are about to have certain types of chemotherapy.

Liver Function Panel
A Liver (Hepatic) Function Panel is a blood test to check how well the liver is working. This test is used to evaluate your liver for injury, infection, or inflammation and measures the blood levels of total protein, albumin, bilirubin, and liver enzymes. High or low levels may mean that liver damage or disease is present. The liver plays important roles: It stores energy from food, makes proteins, and helps remove toxins. The liver also makes bile, a fluid that helps in digestion.

- SGOT (AST) and SGPT (ALT)
  - This blood test is an Aspartate Aminotransferase (AST) Test which measures the amount of this enzyme in the blood. Enzymes are chemicals that help the cells of your body work. AST is normally found in red blood cells, liver, heart, muscle tissue, pancreas, and kidneys. AST formerly was called serum Glutamic Oxaloacetic Transaminase (SGOT). Low levels of AST are normally found in the blood.
  - The ALT (SGPT) blood test measures an enzyme called Alanine Transaminase (ALT). Enzymes are chemicals that help the cells of your body work. ALT is an enzyme made in the liver.

Lipids (Fat) Profile
A Lipid Profile or Lipid Panel is a panel of blood tests that serves as an initial broad medical screening tool for abnormalities in lipids, such as cholesterol and triglycerides.

- Total Cholesterol
  - A Total Cholesterol Test measures all types of cholesterol in your blood. Cholesterol blood tests are done to help you and your health care provider better understand your risk for heart disease, stroke, and other problems caused by narrowed or blocked arteries. There are two main types of cholesterol that are carried by different types of lipoproteins.

- High Density Lipoprotein (HDL Cholesterol)
  - High-Density Lipoproteins (HDL) are referred to as “good” cholesterol

- Very Low Density Lipoprotein (VLDL Cholesterol)
  - Low-Density Lipoproteins (LDL) are sometimes called “bad” cholesterol. High levels of LDL Cholesterol can build up in your arteries, causing heart disease.

- Triglycerides (another type of fat in your blood)
  - Triglycerides are the main constituents of natural fats and oils, and high concentrations in the blood indicate an elevated risk of stroke.
• Alkaline Phosphatase
  o Alkaline Phosphatase (ALP) is a protein found in all body tissues and is measured with a blood test. Tissues with higher amounts of ALP include the liver, bile ducts, and bone.

• Total Protein, Albumin, Globulin
  o Serum Total Protein, also known as Total Protein, is a biochemical test for measuring the total amount of protein in serum. Protein in the plasma is made up of Albumin and Globulin.

  o Albumin is a protein made by the liver. It makes up about 60% of the total protein in the blood and plays many roles. It keeps fluid from leaking out of blood vessels and nourishes tissue.

  o Globulins are a group of proteins within the blood. They are produced by the liver and the immune system. Albumin makes up more than half of the total protein within the blood, and globulins make up the remainder. They transport hormones, vitamins, drugs, and ions (like calcium) throughout the body.

• Total Bilirubin and Direct Bilirubin Test
  o A Bilirubin Test measures the amount of bilirubin in a blood sample. Bilirubin is a brownish yellow substance found in bile and is produced when the liver breaks down old red blood cells. Bilirubin is then removed from the body through the stool (feces) and urine. It is responsible for the yellow colour of bruises and the yellow discolouration in jaundice. Elevated Bilirubin levels may indicate certain diseases.

  • GGT Test
    o The Gamma-Glutamyl Transferase (GGT) Test may be used to determine the cause of Elevated Alkaline Phosphatase (ALP). Both ALP and GGT are elevated in disease of the Bile Ducts and in some liver diseases, but only ALP will be elevated in bone disease.

Thyroid Panel / TSH
A Thyroid Panel is a group of tests that may be ordered together to help evaluate thyroid gland function and to help diagnose thyroid disorders. The tests included in a Thyroid Panel measure the amount of Thyroid Hormones in the blood.

Thyroid-Stimulating Hormone (TSH) is produced by the pituitary gland, a tiny organ located below the brain and behind the sinus cavities. TSH stimulates the thyroid gland to release the hormones Thyroxine (T4) and Triiodothyronine (T3) into the blood.

When the thyroid gland isn’t producing enough thyroid hormone (a condition called hypothyroidism), the pituitary gland produces more TSH in an attempt to stimulate the thyroid and increase its production of thyroid hormones. If the pituitary gland isn’t functioning properly, it may produce too little TSH, and this can result in hypothyroidism as well. Women are five to 10 times more likely to develop hyperthyroidism than men. Untreated hyperthyroidism can lead to serious complications, mainly related to the heart. When you have hyperthyroidism, your body is, in a way, running on overdrive all the time, and that can greatly affect your heart.

Urine Examination
A regular Urine Test may be done to help find the cause of symptoms and give valuable information about your health and problems you may have. The kidneys take out waste material, minerals, fluids, and other substances from the blood to be passed in the urine.

ECG/EKG
An Electrocardiogram (called EKG or ECG) is a painless test that checks for problems with the electrical activity of your heart. An EKG / ECG translates the heart’s electrical activity into line tracings on paper. The spikes and dips in the line tracings are called waves. The EKG / ECG is used to reflect underlying heart conditions.
It is recommended you have a Bone Density Test if:

- help you protect your bones.
- It can also be called a Bone Mass Measurement Test. This test estimates if you should be concerned about your bones.
- A Bone Density Test will help assess whether you have Osteoporosis and Bone Health Screen

If you have a strong family history of premature heart disease or are at intermediate risk of heart disease based on your age and risk factors, calcium scoring can help better assess your risk of heart disease and can help tailor medical therapy.

Echocardiogram
An Echocardiogram (also called an Echo) is a type of ultrasound test that uses high-pitched sound waves that are sent through a device called a transducer. The device picks up echoes of the sound waves as they bounce off the different parts of your heart. It is used for the diagnosis or monitoring of heart disease.

SCREENING PACKAGE ADD-ONS

Tumor Markers
Tumor Markers are substances found in the blood, urine or body tissues that are produced by cancer cells. If a certain tumor marker is found in the body, it can indicate that the cancer is present and treatment may be recommended. Specifically the test is used (in conjunction with other tests) to monitor the success of a current therapy, evaluate the need for surgical intervention, or assess the development of recurrence.

Hepatitis Screening
- HBsAg, HBsAB, Anti-HCV
  - Hepatitis Screening involves testing a small sample of blood for Antigens and Antibodies to determine whether the individual has been infected with viral hepatitis. Antigens are foreign substances, such as microorganisms (e.g., bacteria, fungi, parasites, viruses) or chemicals, which invade the body. Hepatitis is an inflammation of the liver. The condition can be self-limiting or can progress to fibrosis (scarring), cirrhosis or liver cancer. Studies have also shown that some viral infections may be triggers for autoimmune diseases.

Bone Health Screen
A Bone Density Test will help assess whether you have Osteoporosis and if you should be concerned about your bones.

It can also be called a Bone Mass Measurement Test. This test estimates the amount of bone in your hip, spine and sometimes other bones. Your test result will help your healthcare provider make recommendations to help you protect your bones.

It is recommended you have a Bone Density Test if:
  - you are a woman age 65 or older
  - you are a man age 70 or older
  - you break a bone after age 50
  - you are a woman of menopausal age with risk factors
  - you are a postmenopausal woman under age 65 with risk factors
  - you are a man age 50-69 with risk factors

- Bone Densitometer Check
  - An easy and painless procedure, an osteoporosis screening requires you to place your foot in an ultrasound device called a bone densitometer. This device then measures the bone mineral density of your heel. The heel is measured because its bone is similar to that found in the hip, where fractures most often occur. A bone density test tells you if you have normal bone density, low bone density (osteopenia) or osteoporosis. It is the only test that can diagnose osteoporosis. The lower your bone density, the greater your risk of breaking a bone. A bone density test can help you and your healthcare provider: This test is recommended every two years if:

- Xray (as needed)
  - A Bone Density Test uses low radiation X-rays to measure how many grams of calcium and other bone minerals are packed into a segment of bone. The bones that are most commonly tested are in the spine, hip and forearm.

- Vitamin D
  - A Vitamin D Test is used to determine bone weakness, bone malformation, or abnormal metabolism of calcium (is occurring as a result of a deficiency or excess of Vitamin D).

- Rheumatoid Arthritis Factor
  - Rheumatoid Arthritis (RA) causes inflammation, pain, and swelling of joints. Persistent inflammation over time can damage affected joints and the severity can vary from mild to severe. Treatments include disease-modifying medicines to suppress inflammation, which can prevent or delay the progression of the disease, and medication to ease pain. The earlier treatment is started, the less joint damage is likely to occur. Surgery is needed in some cases if a joint becomes badly damaged. It is three times more likely to occur in women than men.

Diabetic Screening
Diabetes Screening Tests are a good preventative method for catching the development of diabetes at an early stage. A screening test is advisable if you have any of the symptoms of diabetes, such as frequently needing to urinate, increased thirst or persistent lethargy. Diabetes screening tests are also advisable for people with a number of risk factors for Type 2 Diabetes such as being overweight or obese, having a close family member with Type 2 Diabetes or being of African-Caribbean, Middle Eastern or South Asian origin. In the absence of evidence for interventions to prevent or delay Type 1 Diabetes, screening for Type 1 Diabetes is not recommended.

A positive result will usually indicate a diagnosis of diabetes, however, if there is doubt, you may be given a second test to confirm the result. If you fall within the prediabetes range of a diabetes test, you should be monitored with a further screening test each year.

- HbA-1C
  - An HbA1C is a lab test that shows the average level of blood sugar (glucose) over the previous 3 months. It shows how well you are controlling your Diabetes as well as screens for pre-diabetes.

- Urine Micro-Albuminuria
  - A Urine Microalbumin Test is a test to detect very small levels of a blood protein (albumin) in your urine. A Microalbumin Test is used to detect early signs of kidney damage in people who have a risk of kidney disease. Microalbumin Tests are recommended for people with an increased risk of kidney disease, such as those with type 1 diabetes, type 2 diabetes or high blood pressure.
**Respiratory Screening (Spirometry)**

Spirometry (spy-ROM-uh-tree) is a test used to assess how well your lungs work by measuring how much air you inhale, how much you exhale and how quickly you exhale. Spirometry is used to diagnose asthma, chronic obstructive pulmonary disease (COPD) and other conditions that affect breathing.

- **Pulmonary Function Test**
  - Pulmonary Function Tests (PFTs) are noninvasive diagnostic tests that provide measurable feedback about the function of the lungs. By assessing lung volumes, capacities, rates of flow, and gas exchange, PFTs provide information that, when evaluated by your doctor, can help diagnosis certain lung disorders.

- **Consultation with a Pulmonologist**
  - The Pulmonary Consultation Service provides help in the diagnosis and state of the art clinical care of patients with various adult respiratory disease including interstitial lung diseases, lung cancer, obstructive lung diseases, pulmonary hypertension and sarcoidosis. We provide consultations to establish or review a treatment plan, as well as longitudinal care of patients, if requested. The service will assess for disease severity, design a personalized treatment plan, and arrange for pulmonary rehabilitation, home oxygen, smoking cessation, dietary counseling, or other therapies as deemed appropriate.

**STD Screenings**
STD Testing and treatment can help reduce the spread of Sexually Transmitted Diseases.

- **HIV**
  - The HIV Test is designed to detect antibodies to HIV in your blood or saliva. Antibodies are proteins produced by your body when you have an infection and they help fight infection. If you are infected with HIV, your body makes very specific antibodies to fight the infection.

- **VDRL**
  - The VDRL Test is a screening test for syphilis. It measures substances, called antibodies that your body may produce if you have come in contact with the bacteria that causes syphilis. This bacteria is called Treponema Pallidum. The test is similar to the newer rapid plasma reagin (RPR) test.

**Pelvic Assessment (Women)**

This Pelvic Assessment utilizes a blood test and a pelvic ultrasound to screen for uterine abnormalities or ovarian cancer.

- **Cancer Antigen 125 (CA-125)**
  - The CA-125 is a protein found on the surface of many ovarian cancer cells. It also can be found in other cancers and in small amounts in normal tissue. A CA-125 test measures the amount of this protein in the blood and is used diagnostically and as a tumor marker, which means it can help to show if some types of cancer are present. The CA-125 is also used to check how well treatment for ovarian cancer is working or to see if ovarian cancer has returned.

- **Pelvic Ultrasound**
  - A Pelvic Ultrasound is a noninvasive diagnostic exam that produces images used to determine the shape, size, and position of organs in the pelvis, and can detect tumors, cysts, or extra fluid in the pelvis, and help find the cause of symptoms such as pelvic pain, some urinary problems, or abnormal menstrual bleeding in girls.

**Myocardial Perfusion Study**
A Myocardial Perfusion Scan (also referred to as MPI) is a nuclear medicine procedure that illustrates the function of the heart muscle (myocardium). It evaluates many heart conditions such as coronary artery disease (CAD), hypertrophic cardiomyopathy and heart wall motion abnormalities.

This means that a tiny amount of a radioactive substance, called a radionuclide (radiopharmaceutical or radioactive tracer), is used during the procedure to assist in the examination of the tissue under study. Specifically, the myocardial perfusion scan evaluates the heart’s function and blood flow.

- **CT Scan**
  - A Coronary CT is used primarily to assess the coronary arteries, as well as to search for plaque or stenoses. CT, or CAT scans, are special X-ray tests that produce cross-sectional images of the body using X-rays and a computer. CT scans are also referred to as computerized axial tomography.

**Colonoscopy**
- The Colonoscopy is the most accurate test for cancer of the colon and rectum. It is a way for a specialist to examine the inner lining of your large intestine (colon). The doctor uses a thin, flexible tube fitted with a light and a camera to inspect the colon. A colonoscopy helps find ulcers, colon polyps, tumors and areas of inflammation or bleeding. Any abnormal areas seen can be biopsied and polyps can be removed, often preventing colorectal cancer. Men and women over the age of 50 who have average risk factors should have a colonoscopy.

**Gastroscopy**
- A Gastroscopy is an examination of the upper digestive tract (the oesophagus, stomach and duodenum) using an endoscope — a long, thin, flexible tube containing a camera and a light — to view the lining of these organs. The procedure is also sometimes referred to as an upper endoscopy.