



wellness travel

Health 101: A Beginners Guide to Health Check Ups, Screenings and Tests

At Wellness Travel, we believe in empowering you with an understanding of the different health screening packages that are available to you by providing you with the information you need to know. Our aim is to teach you and help you to be more knowledgeable of how and why each test is important to your health. We hope that this information will enable you to make an informed decision on the health screening package most suited to your lifestyle and screening needs.

To this end, we have gone a step further and designed this brochure to guide and help you understand the tests that your health screening package includes.

Please keep in mind that a health screening only provides an instant snapshot of your current health status, and as your health may dramatically change within a few weeks or months, you should make it a point to have an annual health screening and check up.

Visit www.wellnesstravel.com/health-check-ups for a complete list of screenings offered and take hold of your health today by booking one now at enquiries@wellnesstravel.com.

Note:

- Screening and Test results must be read and interpreted all together, rather than individually, in order to facilitate an accurate diagnosis from the Doctor.
- As with most medical tests and services, it is not always possible to detect all possible and potential diseases and abnormalities.



Blood Tests

Hematology

The comprehensive full blood count (CBC) includes a series of tests to determine the following:

- Total white cell count
- Differential count
- Hemoglobin
- Packed cell volume
- Total red cell count
- Platelet count
- Peripheral blood film
- ESR
- Blood grouping
- Red blood cell indices (MCV, MCH, MCHC)

These tests are essential in determining the breakdown and levels of white blood cells, red blood cells and platelets. These tests help to indicate certain bacterial infections, bleeding anemia, disorders and leukemia.

Kidney Panel

A Kidney Panel provides results on how well a patient's kidneys are functioning. Levels outside of the normal ranges of the electrolytes (Sodium, Potassium and Chloride) may be indicative of dehydration, diabetes, kidney disease or other conditions that could affect the muscle and heart functions. The Kidneys produce and excrete your body's waste products, such as Glucose, Urea and Creatinine, and high levels of any of these substances may indicate diabetes and/or kidney disease or failure.

Bone / Joint Function

The Bone / Joint function tests include:

- Calcium
- Phosphate
- Uric Acid

Calcium and Phosphates are two important minerals necessary for good health. High levels of these minerals may be due to a wide range of medical disorders, amongst which includes bone diseases. Uric acid is the main chemical in the blood associated with gout.

Cholesterol Panel

Excessive amounts of cholesterol can cause plaque build up and blockage of the arteries leading to coronary heart disease. The acceptable range depends on your age, sex and other coronary risk factors and will be discussed with a doctor after your screening.

Cholesterol Panel analyzes levels of

- Total Cholesterol
- LDL (the 'bad' Cholesterol, a very important barometer of risk of coronary heart disease)
- HDL (the 'good' Cholesterol, which reduces the risk of coronary heart disease)



- Cholesterol/HDL ratio
- Triglycerides (associated with foods rich in animal fat and alcohol).

Liver Panel – The liver makes important proteins and chemicals, and breaks down and excretes old materials.

The liver panel includes nine different tested levels:

- Total bilirubin
- Total protein
- Albumin
- Globulin
- SGOT / AST
- SGPT / ALT
- Albumin / Globulin ratio
- Alkaline Phosphatase
- GGT

High levels of total bilirubin and total protein (including Albumin and Globulin) may be indicative of liver disease, infections or alcoholism. Elevated amounts of the enzymes SGOT, SGPT, Alkaline Phosphatase and GGT may signify liver disorders, hepatitis or bone disease.

Hepatitis A, B and C Screen – Hepatitis A screening is done to detect the presence of the hepatitis A antibodies, which protects against the hepatitis A infection, usually due to consumption of contaminated food or drinks.

Hepatitis B screening is done to detect the presence of the Hepatitis B virus in the system, and whether the Hepatitis B antibodies are present to protect against such viruses.

Hepatitis C screening is done to detect the presence of the Hepatitis C virus in the system, usually spread by an infected person's blood or bodily fluids.

Tumor Markers

Elevated levels of:

- AFP - may indicate liver cancer
- CEA - may indicate cancer in the gastrointestinal tract and lung
- EBV - may indicate cancer in the ear, nose and throat region
- CA19.9 - may indicate pancreatic, stomach or colorectal cancers
- CA125 - may indicate ovarian cancer
- PSA - may indicate prostate cancer

Rheumatoid Arthritis Factor (RA Factor) – Most adults with Rheumatoid Arthritis have high levels of RA factor and will show a positive result. Arthritis is an inflammation of the joints and can occur in several diseases.



Thyroid Test – The thyroid test diagnoses hyperthyroidism or hypothyroidism. Hypothyroidism is the decreased activity of the thyroid gland, while hyperthyroidism is the over-activity of the thyroid gland. due to tumor or the overgrowth of the gland.

STD Screen – This includes the VDRL and HIV tests. THPA test is done to confirm a syphilis infection if the VDRL test is reactive.

Rubella – The infection is often mild but can cause profound damage to unborn babies if the mother is infected. If you are not immune against rubella, you are strongly recommended to take rubella vaccination.

Thalassemia Screen – Thalassemia is a genetic blood disorder whereby the body is not able to make enough normal hemoglobin and the life of red blood cells is much shorter; thus leading to gradual and progressive anemia.

Iron Studies – The iron and iron binding capacity test for iron deficiency and the iron absorption ability of your body.

Hormones Profile

The tests (i) Prolactin, (ii) FSH and (iii) LH/ICSH are used to help evaluate ovulation and fertility. These hormones are also affected as the individual approaches menopause.

Homocysteine – Blood test screening as a risk factor for strokes and heart attacks.

Highly Sensitive C-Reactive Protein (HSCRP) – The test for HSCRP searches for low grade inflammation. It provides an indication of risk of future heart attacks and strokes.

Hormones Profile

Dehydroepiandrosterone Sulphate (DHEAS) – DHEAS is a natural steroid hormone produced from cholesterol by the adrenal glands atop of the kidneys. It is the precursor to sex hormones and hence plays a vital role in regulating our body's production of it. DHEAS tends to decline as we age.

Testosterone – A male sex hormone that plays key roles such as enhanced libido, energy, immune function and protection against bone loss. Testosterone levels decline gradually with men.

Insulin Growth Factor I (IGF-I) – IGF-I is an indirect measure of growth hormone, which is produced by the liver and used by many different tissues throughout the body. It promotes healthy skin, supports growth of muscle, bone and hair and is critical for the growth and development of nerve cells, increasing physical and mental performance. Production of IGF-I decreases significantly after the age of about 30.

Free T4 – Free T4 is a hormone produced by the thyroid gland, which plays a vital role in controlling the rate at which your body uses energy. Deficiency of Free T4 is very common in the



elderly and results in lethargy, dry skin and weight gain.

Thyroid Stimulating Hormone (TSH) – TSH is a hormone that helps regulate Thyroid function. Testing for TSH helps determine proper thyroid gland functionality, which may be under-producing (hypothyroidism) or over-producing (hyperthyroidism).

Estradiol (E2 for Ovarian Fx) – This is the female sex hormone produced in the ovaries and is responsible for developing, maintaining female physical characteristics, and maintaining bone density. Reduced level may indicate menopause.

Follicle Stimulating Hormone (FSH) – FSH is a hormone that helps control the menstrual cycle and the production of eggs by the ovaries. An FSH test is used to diagnose certain pituitary gland disorders, evaluate menstrual problems and determine whether a woman has gone through menopause.

Interstitial Cell Stimulating Hormone (LH/ICSH) – Determines the levels of LH/ICSH, which stimulates female sex hormone production and regulates its secretion. Analyzing these levels may also help to evaluate menstrual problems.

Prolactin – Prolactin is a female hormone that stimulates the breast to produce breast milk in late pregnancy and maintaining and continuing milk production after birth. High prolactin levels have the effect of suppressing the other hormones responsible for normal functioning of the ovaries and female organs, leading to irregular menstruation and/or fertility problems.

Folic Acid – Folic Acid is necessary for your body to make red blood cells, platelets and new genetic material (DNA), and for normal growth. Deficiency of either folic acid or vitamin B12 may cause anemia, which is the deficiency of red blood cells.

Vitamin B12 – Vitamin B12 comes from the food we eat and from vitamin supplements. It is necessary for the creation of blood cells, as well as the normal and efficient functioning of your nerve cells and brain. Testing for Vitamin B12 deficiency determines your body's ability to absorb and utilize sufficient B12.

PAP Smear Test – A Pap smear test allows random sampling of cells from the cervix, which may demonstrate pre-cancerous changes.

Urine Test – Urine is tested for blood (white and red blood cells), glucose, protein and bacteria. As none of these substances should normally be present in urine, they may indicate certain organ or system failures or diseases.

Stool Analysis – Analysis of a stool sample is used to detect any traces of blood. The presence of occult blood indicates bleeding from the Gastro-Intestinal tract, whereby the cause may be benign or malignant.

Seminal Analysis – Analysis of a semen sample, including an analysis of the volume, number and structure of the sperm, sperm motility/movement and the fluid viscosity/thickness, acidity and



sugar content.

Radiologic and Diagnostic Imaging

Chest X-ray – Used evaluate the lungs, heart, chest wall and surrounding organs and bones.

Mammogram and Breast ultrasound – Both mammogram and breast ultrasound are different means to diagnose breast diseases in females. The appropriate examination would depend on the doctor's recommendation. In general, females above 40 years old (earlier if with family history) are recommended to do a mammogram once every year.

Abdominal Ultrasound – A visual image generate to help the examination of internal organs in the abdominal region, including the kidneys, liver, gall bladder, spleen and pancreas.

Pelvis Ultrasound – A visual image generate to evaluate any abnormalities in a woman's reproductive organs.

HBS Ultrasound (Liver/GB/Pancreas) – Provides a visual image for the evaluation of liver, gall bladder, spleen and pancreatic problems.

Bone Mineral Density (Lumbar Spine) – detects osteoporosis, which is the decreasing of the density of the bone and causes it to weaken, making it more susceptible to fractures.

CT Cardiac Calcium Sore – This uses the CT scan to detect the formation of calcium containing plaques in the coronary (heart) arteries, demonstrating possible obstruction. Heart disease is caused by a build-up of plaque in the arterial walls, which blocks the flow of blood to the heart muscle. As plaques grow and age, bits of calcium are deposited into the plaque. These calcium deposits are present in the arteries of 96% of all heart attack victims and can be detected years.

Other Examinations

Resting ECG - Records the electrical conductive activity of your heart while at rest. Abnormality may mean significant heart disease.

Treadmill ECG – Tests and records the electrical activity of heart function during strenuous exercise conditions.

Spirometry - Lung function test to diagnose lung disorders through forced exhalation. Abnormality may mean asthma, bronchitis or chronic obstructive lung disease.

Audiometry - Hearing ability test to determine hearing deficiency, which is common in the elderly.

Tonometry - measure the pressure inside the eyes, using the non-contact method of a brief puff of air blown into the eyes. High value may indicate glaucoma which is common in the elderly.