Your health checkup summary

For Medicals conducted on : 06/10/2017

Dear Hussain Jivani,

Congratulations for completing the first step to **Good Health.**

This document is a brief analysis of your health checkup report and will help you work towards a healthier life. It is prepared using your vitals like height, weight, BP, BMI recorded during the health check up camp and lab values.
Please keep in mind that this report is only analytical and not prescriptive or diagnostic. You should consult your physician for detailed analysis and action plan.

On behalf of Optum and UnitedHealthcare India we wish you **Good Health.**

Your health checkup package comprises of the following

Name of Test Conducted	What it means
 Blood Pressure	Blood pressure is the pressure of your blood on the walls of your arteries as your heart pumps it around your body. It's a vital part of how your heart and circulation works. Your blood pressure naturally goes up and down all the time, adjusting to your heart's needs depending on what you are doing. The most common condition is High blood pressure when your blood pressure is persistently higher than normal. Consistently high BP will need physician intervention to avoid complications like Heart Ailments, stroke etc. Low BP though less common also needs monitoring and physician intervention.
 BMI	BMI, is a way to help you figure out if you are at a healthy weight for your height. BMI is a number based on your weight and height. In general, the higher the number, the person has higher composition of body fat. BMI is often used as a screening tool to decide if your weight might be putting you at risk for health problems such as a) heart disease, b) diabetes, and c) cancer.
 Waist : Hip Ratio	The waist-to-hip (WTH) ratio is a common measure of fat distribution. Your WTH ratio can help you track your weight loss progress, while also serving as a warning about your estimated health risk for problems related to being overweight (For Eg: diabetes, stroke and heart disease). In fact, the waist-to-hip ratio is a better indicator of increased mortality risk than body mass index (BMI), which compares your height to your weight.
 RBS	Random blood sugar (RBS) measures blood glucose regardless of when you last had your meal. Several random measurements may be taken throughout the day. Random testing is useful because glucose levels in healthy people do not vary widely throughout the day. Wide variation in Blood glucose levels may be followed by your physicians' advice to undertake FBS, PPBS, GTT, HBA1C (Lab Tests) to identify TYPE 2 Diabetes.
 HbA1C	The glycosylated hemoglobin test (HbA1c) is an important blood test to diagnose diabetes or determine control of your diabetes. It provides an average blood glucose measurement over the past 3 months and is used in conjunction with home glucose monitoring to make treatment adjustments.
 Total Cholesterol	This test measures the total amount of cholesterol in your blood, including low-density lipoprotein (LDL) cholesterol and high-density lipoprotein (HDL) cholesterol. Higher value of Total Cholesterol increases the risk for heart disease, stroke, and other problems caused by narrowed or blocked arteries.
 HDL Cholesterol	HDL is a lipoprotein (a combination of fat and protein) found in the blood. It is called "good" cholesterol, High levels linked to a reduced risk of heart and blood vessel disease. The higher your HDL level, the better. HDL Cholesterol is checked to evaluate your cardiovascular, cerebrovascular and diabetes risks.
 LDL Cholesterol	LDL is a lipoprotein (a combination of fat and protein) found in the blood. It is called "bad" cholesterol. . A high LDL level is related to a higher risk of heart and blood vessel disease. Tests are done to evaluate increased risk of heart and blood vessel disease, including coronary artery disease.

 CBC	A complete blood count (CBC) is a blood test used to evaluate your overall health and detect a wide range of disorders – primarily for anemia and infections. A complete blood count test measures several components and features of your blood like Red blood cells - which carry oxygen, White blood cells - which fight infection, Hemoglobin - the oxygen-carrying protein in red blood cells, Hematocrit -the proportion of red blood cells to the fluid component or plasma, in your blood, Platelets - which help with blood clotting; to name a few.
 ESR	It is a test that indirectly measures how much inflammation is in the body. This can be useful in diagnosing conditions that cause inflammation, such as autoimmune diseases, cancers, arthritis, fever and infections. The ESR test is rarely performed alone and is usually combined with other tests to determine the cause of your symptoms.
 BUN	Blood Urea Nitrogen (BUN) is one of the indicator of kidney functions. Urea is also a metabolic by-product which builds up if kidney functions are impaired. BUN tests are mainly used to assess kidney health in diseased kidney conditions – most common being Diabetes. However, temporary altered BUN counts can be the result of any disease, drug, or condition that affects the kidneys or liver functions.
 Serum Creatinine	Creatinine is a chemical waste molecule that is generated from muscle metabolism. Creatinine is transported through the bloodstream to the kidneys. The kidneys filter out most of the creatinine and dispose of it in the urine. The creatinine production normally remains essentially unchanged on a daily basis. Elevated creatinine level signifies impaired kidney function or kidney disease due to poor clearance of creatinine by the kidneys. Abnormally high levels of creatinine thus warns of possible malfunction or failure of the kidneys.
 Vitamin D, 25 Hydroxy (Total)	The major circulating form of vitamin D is 25-hydroxyvitamin D (25(OH)D); thus, the total serum 25(OH)D level is currently considered the best indicator of Vitamin D supply to the body from cutaneous synthesis and nutritional intake. Vitamin D is essential for strong bones, because it helps the body use calcium from the diet.
 Vitamin B12	Vitamin B12, like the other B vitamins, is important for protein metabolism. Vitamin B-12 is an important vitamin for many bodily functions, such as brain health, blood cell production, and proper nerve functioning. Vitamin B12 deficiency causes tiredness, weakness, constipation, loss of appetite, weight loss, and megaloblastic anemia. Nerve problems, such as numbness and tingling in the hands and feet, can also occur. Other symptoms of vitamin B12 deficiency include problems with balance, depression, confusion, dementia, poor memory, and soreness of the mouth or tongue.
 Iron Profile	Iron tests are groups of clinical chemistry laboratory blood tests that are used to evaluate body iron stores or the iron level in blood serum. These includes Serum iron, Ferritin, Transferrin, Total iron-binding capacity (TIBC),Transferrin saturation (Iron saturation of transferrin),Unsaturated iron binding capacity (UIBC),Transferrin receptor (TfR).
 Iron	A serum iron test measures how much iron is in your blood. Iron plays many important roles in the body. Iron is best interpreted with the Total Iron Binding Capacity. This test can help physician to co relate with other iron profile to diagnose Iron Deficiency Anemia, Hemochromatosis and other low and high iron states.
 TIBC	Total iron binding capacity (TIBC) is a blood test to see if you have too much or too little iron in your blood. This test helps your health care provider know how well that protein can carry iron in your blood.The Total Iron Binding Capacity or TIBC, reflects the total capacity of the blood to carry iron. Although TIBC is not interpreted on its own, it is useful in conjunction with the iron to calculate the % saturation and ferritin. In Iron deficiency anemia, the iron level and the % saturation will be low while the TIBC may be elevated.
 Transferrin Saturation	Iron and TIBC (total iron binding capacity) are best interpreted together and with their ratio that is known as Percent Transferrin Saturation or % Saturation. Transferrin saturations of less than 20% indicate iron deficiency, while transferrin saturations of more than 50% suggest iron overload. This test helps other iron profile to diagnose Iron deficiency anemia and other hematological diseases.

 Liver Function Test	A liver panel may be used to screen for liver damage, especially if someone has a condition or is taking a drug that may affect the liver. A liver panel or one or more of its component tests may be used to help diagnose liver disease. If a person has a known condition or liver disease, testing may be performed at intervals to monitor the health of the liver and to evaluate the effectiveness of any treatments.
 Bilirubin Total	The bilirubin blood test measures the level of bilirubin in the blood. Bilirubin is a yellowish pigment found in bile, a fluid made by the liver. Bilirubin can also be measured with a urine test. It may be used to help determine the cause of jaundice The presence of bilirubin in urine almost always implies liver disease. This test will measure direct + indirect Bilirubin. Bilirubin rises in such as liver disease, hemolytic anemia, and blockage of the bile ducts.
 Bilirubin Direct	The direct bilirubin test provides an estimate of the amount of conjugated bilirubin present. Subtracting direct bilirubin level from the total bilirubin level helps estimate the "indirect" level of unconjugated bilirubin. The pattern of bilirubin test results can give the healthcare provider information in diagnosis and monitoring of diseases of the liver and bile duct (e.g. Cirrhosis, hepatitis, or gallstones)
 Bilirubin Indirect	Indirect bilirubin is the difference between total and direct bilirubin. Increased destruction of red blood cells (hemolysis) can increase the production of unconjugated or indirect bilirubin. If the production of unconjugated bilirubin is prolonged, it can precipitate bilirubin salts, leading to the formation of gallstones.
 Alkaline Phosphatase	Alkaline phosphatase is a protein found in all body tissues. Tissues with higher amounts of ALP include the liver, bile ducts, and bone. The test helps to diagnose and monitor treatment of liver, bone, intestinal, and parathyroid diseases. This test will also tell about obstructive bile diseases, bone disease, intrahepatic cholestasis, and Placental diseases in pregnancy.
 SGOT	SGOT (AST) is an enzyme found in a variety of tissues including liver, heart, muscle, kidney, and the brain. It is released into the serum when any one of these tissues is damaged. For example, AST level in serum is elevated in heart attacks or with muscle injury. It is therefore, not a highly specific indicator of liver injury as its elevation can occur as a result of other injured tissues. But SGOT will give information regarding liver, muscle and bone health.
 SGPT	SGPT (ALT) is an enzyme normally found largely in the liver. This is not to say that it is exclusively located in the liver, but that is where it is most concentrated. It is released into the bloodstream as the result of liver injury. Thus, it serves as a fairly specific indicator of liver status like for detecting hepatitis or cirrhosis. ALT test is also used to detect the side effect of certain drugs that cause liver damage. ALT is often interpreted with other tests of liver function.

How to read your report?

Report published by Quest Diagnostic has analysis of your health status basis your biometrics data and results of blood samples collected during the health camp. The report is indicative and the risk ratio calculated are basis internationally accepted algorithms. Any high risk ratio needs to be supported with a confirmatory diagnostic tool and a physician consult for further management.

Your report consists of following section

Your Health : It contains health risk assessment of the key organ systems, Liver, Kidney and Cardiac. You will not find any risk for Pancreas (Diabetes) as the analysis requires Fasting Blood Sugar.

Your Results : This section describes your health status for each organ profile and individual parameter analysis. In this section please read AST as SGOT and ALT as SGPT.

Your Wellness : This section describes status of vitals like BMI, blood pressure and basic steps needed to live a healthier lifestyle.

Summary report : This section is the summary of individual parameter and risk status.

You're Health Summary

What you are good at?

Name of Test Conducted	What it means
Waist : Hip Ratio	Your waist:hip ratio is in normal range .Waist-to-Hip (WTH) ratio is a common measure of fat distribution. Your WTH ratio can help you track your weight loss progress, while also serving as a warning about your estimated health risk for problems related to being overweight, such as diabetes, stroke and heart disease. In fact, the waist-to-hip ratio is a better indicator of increased mortality risk than body mass index (BMI), which compares your height to your weight. As per your levels risk is low. maintian healthy lifestyle.
Serum Iron	Your serum iron is within normal level , but alone serum iron is not reliable indicator for iron deficiency anemia .It is advised to check your serum ferritin levels , Tibc , transferrin saturation and CBC, pheripheral smear to appriciate IDA from other anemias .
HB	Your Hb is in within normal range , but some times even normal hb asoociated with hematological disorders , best to interpret with cbc and pheripheral smear parameters hemoglobin molecule fills up the red blood cells. It carries oxygen and gives the blood cell its red color. The hemoglobin test measures the amount of hemoglobin in blood and is a good measure of the bloods ability to carryoxygen throughout the body.Iron rich food in diet keeps HB within normal range. Consult a dietician to get appropriate diet plan to maintain your health. You should consult your physiciean for further evaluation. It is best to interpret condition by checking MCV, MCH.MCHC, RBC COUNT ,RDW ,and pheripheral smear based on need . Consult physician for further approach .
Platelet	We derive your platelet count in your blood via lab test. Platelets are parts of the blood that helps the blood clot. Platelets are tiny fragments of cells that are essential for normal blood clotting. A platelet count may be used to screen for or diagnose various diseases and conditions that can cause problems with clot formation. It may be used as part of the workup of a bleeding disorder, bone marrow disease, or excessive clotting disorder, to name just a few. The test may be used as a monitoring tool for people with underlying conditions or undergoing treatment with drugs known to affect platelets. It may also be used to monitor those being treated for a platelet disorder to determine if therapy is effective. A platelet count may be performed in conjunction with one or more platelet function tests, which assess the function of platelets, and other tests that evaluate coagulation such as PT and PTT. If results are not within the normal interval, a number of other tests may be performed to help give clues as to the cause. Sometimes a blood smear may be done as a follow up to examine the platelets under a microscope. This would help to determine the Platelet count in the blood.

Vitamin B12	Your vitamin B12 is within normal . Vitamin B12 is a water-soluble vitamin, water-soluble vitamins dissolve in water. After the body uses these vitamins, leftover amounts leave the body through the urine.The body can store vitamin B12 for years in the liver.Vitamin B12, like the other B vitamins, is important for protein metabolism. It helps in the formation of red blood cells and in the maintenance of the central nervous system.Low levels of B12 can cause:Anemiaandperniciousanemia,Loss of balance (subacute combined demyelination of spinal cord) Numbness or tingling in the arms and legs ,weakness .If you found any of these symptoms consult physician for further approach . Vitamin B12 is best to interpret with MCV,MCH,MCHC,HB ,RDW,HCT.

What you need to improve ?

Name of Test Conducted	What it means
BLOOD PRESSURE	You blood pressure is high . Life style modification along with medical management is required . Chek for comorbidity such as DM2 , Dyslipedemia . Keep the BP goal as < 120/80 . HTN is one of the leading cause for cardiac problems .Maintain healthy life style , avoid stress . consult physician for further work up and medical management.
HbA1C	Your HbA1C value is higher than normal range, you should consult a Physicien for future course of tretment.

NOTE : The above parameters are those which can be analyzed as stand alone parameter. For detailed clinical analysis please consult a physician.

Tips for Good Health

These are some general tips to stay healthy. For exact recommendation we suggest you consult your physician

1. Balanced nutrition and regular exercise is good for health. These habits can help you lose or maintain weight.Try to set realistic goals.
2. Fruits and vegetables decrease the risk of cardiovascular diseases including coronary heart disease (CHD) and stroke, including death from CHD.
3. High intake of fruits and vegetables may reduce the risk of developing cancer. Tomato and tomato-basedfoods may be beneficial at lowering the risk of prostate cancer. Recommended intake is at least five servings of fruits and/or vegetables every day.
4. Eating a diet that is high in fiber can decrease the risk of coronary heart disease, colon cancer. Eating fiber also protects against type 2 diabetes and eating soluble fiber (such as that found in vegetables, fruits and legumes) may help control blood sugar in people who already have diabetes. The recommended amount of dietary fiberis 25grams per day for women and 38grams per day for men. Many breakfast cereals, fruits and vegetables are excellent sources of dietary fiber.
5. Regularly eating whole grains has shown to help weight loss and lowers the risk of diabetes.
6. Saturated fats (found in animal products such as cheese, butter and red meat) have typically been viewed as unhealthy and monounsaturated fats (found in combination with other fats in many oils, such as olive oil) as healthy, newer evidence suggests that saturated and mono unsaturated fats do not significantly increase or decrease the risk of coronary heart disease, although saturated fats raise cholesterol levels. Choose chicken, fish and beans instead of red meat and cheese.
7. Folate is a type of B vitamin that is importantin the productionof red blood cells. Low levels of folate in pregnant women have been linked to a group of birth defects called neural tube defects, which includes spina bifida and anencephaly. Vitamins containing folate and breakfast cereal fortified with folate are recommended as the best ways to ensure adequate folate intake.
8. The antioxidant vitamins include vitamins A, C, E and beta-carotene. Many foods, especially fruits and vegetables, contain these Vitamins as well as have additional antioxidant properties.
9. Adequate Calcium and Vitamin D intake are important, particularly in women, to reduce the risk of Osteoporosis. Experts recommend that premenopausal women and men consume at least 1000 mg of calcium per day and postmenopausal women should consume 1200 mg per day. No more than 2000 mg of calcium should be consumed per day. VIT D 600 IU per day is generally recommended.
10. Recommended daily physical activity is 30 to 60 minutes. bright light gadgets(mobile phone) should be avoided 4 hours before sleep. Bright light brings down melatonin (sleep hormone) and disturbs your quality of sleep and will disturb your day and night circadian rhythm.
11. Walking or cardio or running will help to reduce your TPR and control your BP.
12. If you are obese seek a dietitians to reduce weight.
13. If your have Family history of diabetes or HTN or CVD, PVD go for annual health checkup. Try to keep all the parameters within normal range.
14. Reduce stress, if required seek the EAP psychologist'ssupport for emotional wellbeing .Maintain healthy relationships at work place and home.
15. Don't smoke , choosing not to smoke is, without a doubt, the single most important health decision you can make.Drink alcohol in moderation.
16. Use a sunscreen of at least 15 SPF. Skin cancers are the most common of all cancers by far.
17. Find time for some kind of meditation/relaxation practice Physical activity that is "relaxing" toget your mind away from stressful thoughts can be helpful. All of us should take the time to "get away" mentally and emotionally at least once a day, wherever we are, or whatever we are doing.
18. HbA1C should be normal.