



Congratulations, Peter Pan4! You have taken an important step toward understanding your own biochemistry. Knowledge is power and with this knowledge you will be able to make better choices about your lifestyle.

Protection to prevent oxidative damage is more optimal in the **green** and **blue** ranges of the report scale. The **green** area statistically represents one to two standard deviations beyond the average. The **blue** area statistically represents two to three standard deviations beyond the average. If your values are within the **yellow** range, you have enough nutrients to deal with everyday metabolic needs. However, in order to benefit from the effects of these compounds, a level in the **green** or **blue** range is most desirable. Not all tests follow this exact color format due to the nature of the particular test (ie. fatty acids, free T3, leucine, etc.). Values that lie in the **orange** or **red** area in most instances indicate a need for improvement through diet and other means.

Standard laboratory results are considered acceptable if they are within two standard deviations of the mean. This is based upon the notion that 95 percent of the population is healthy, which we know is incorrect. For instance, health statistics indicate that one-third of the people in the "acceptable" range may develop cancer.

Most studies of the incidence of disease in relation to nutrient intake reveal that people in the upper one-fourth (**blue** and **green** range) of a group have the lowest incidence of illness.

In our reporting Check Your Health results, the term "more optimal nutrient level" is used when an individual's specific nutrient level is in the upper one-fourth (green and blue range) of the population.

Although you may not have received optimal values this time, you now have an opportunity to review your nutritional intake and make adjustments to enhance your biochemical status. We suggest that antioxidant levels be tested every year to check your progress.

We recommend that you eat more of the nutrients listed in this report. You may want to learn more about nutrients by reading materials in the Mabee Library at the Riordan Clinic or by purchasing our audiotapes, videotapes, or books at the Riordan Clinic store.

The human body biochemically changes most of its cells every six years. Most cells in the body change more rapidly. Imagine how you want your body to be six years from now. Through Check Your Health, you have the resources to be that person.





Your serum vitamin A level measured 69 ug/dL. While the normal range is 24 to 90 ug/dL, the optimal level for antioxidant protection is 74 to 107 ug/dL.

Function: Vitamin A is a fat soluble vitamin that has excellent antioxidant properties. Beta Carotene and other carotenoids are converted to vitamin A based on the needs of the body. Provided your absorption, metabolism and thyroid are effective, beta carotene is the safest way to supplement for low vitamin A levels. It is essential for vision, immune function, reproduction and cellular communication.

Food Sources: black-eyed peas, broccoli, butternut squash, cantaloupe, carrot, cod liver oil, egg yolk, fish, kale, liver, mango, sweet peppers, pumpkin, spinach, sweet potato, whole milk

Depleted By: oral contraceptives containing estrogen and progestin, aluminum antacids, chronic alcoholism, hypothyroidism

Complications of Deficiency: night blindness, impaired immunity, impaired tissue healing, increased risk of infection, keratosis

Did You Know? Per serving, sweet potatoes have the highest amount of vitamin A with over 28,000 IU per serving (one serving is considered 1 whole sweet potato baked in the skin).

Riordan Clinic Doctors Recommend: Beta Carotene (with mixed carotenoids)



Your serum vitamin E measured 1.5 mg/dL. While the normal range is 0.6 to 2.7 mg/dL, the optimal level for prevention of degenerative diseases is 2.2 to 3.2 mg/dL.

Function: Vitamin E is a fat soluble antioxidant, helping to protect cells from free radical damage. Vitamin E is important within the cardiovascular system because it helps dilate blood vessels and keeps blood from clotting within them. It is important for optimal immune system functioning as well as regulating cell signaling.

Food Source: almonds, avocados, broccoli, eggs, hazelnuts, leafy green vegetables, milk, nuts, oils (olive, sunflower, safflower, corn, soy, canola), seeds, soya, spinach, sunflower seeds, walnuts, wheat germ, whole grains

Depleted by: malabsorption, cholestyramine, olestra and certain anti-convulsants (phenobarbital, phenytoin)

Complications of Deficiency: increased risk of cardiovascular disease, cataract formation, age-related macular degeneration, retinopathy, peripheral neuropathy, muscle weakness

Did You Know: Tocopherols(vitamin E) are used as a natural preservative in foods because the potent antioxidant properties naturally prevent oxidation of fats and oils and help maintain the freshness and shelf life of food products.

Riordan Clinic Doctors Recommend: Riordan Clinic Vitamin E Complex



Your plasma vitamin C measured 0.6 mg/dL. While the normal range is 0.6 to 2.0 mg/dL, the optimal level for antioxidant protection is 1.7 to 2.4 mg/dL or above.

Function: Vitamin C is a strong, water-soluble antioxidant. Its ability to limit free radical damage makes vitamin C a great preventative nutrient for conditions in which oxidative stress play a role such as cancer and cardiovascular disease. It is required for biosynthesis of collagen, L-carnitine and certain neurotransmitters. The highest levels of vitamin C are maintained in leukocytes (white blood cells), adrenal glands, brain, eyes and the pituitary gland.

Food Sources: broccoli, Brussels sprouts, cabbage, cauliflower, collards, grapefruit, kale, kiwi, lemons, mango, oranges, papayas, parsley, potatoes, spinach, strawberries, sweet potatoes, sweet peppers, tomatoes

Depleted by: oral contraceptives, aspirin, diuretics, NSAIDS, smoking, tetracycline, Flonase®, Lasix®

Complications of Deficiency: scurvy, inflammation of the gums, fatigue, soft tissue ulcerations, poor wound healing, joint pain, depression, increased risk of infection

Did You Know: Most mammals produce their own vitamin C. Goats can produce up to 100 grams per day! Humans have a genetic mutation which makes us unable to produce a crucial enzyme in the biosynthetic pathway necessary to produce vitamin C.



Riordan Clinic Doctors Recommend: Riordan Clinic C-1000 or Bio En'R-G'y C

Your urine vitamin C measured 20 mg/dL. The optimal level for urine vitamin C is greater than 35 mg/dL. Urine vitamin C gives a good indication of your vitamin C reserve. If your plasma vitamin C level is high and your urine vitamin C level is low, your body is fully utilizing the amount that you are consuming. If both levels are high, then you are utilizing what you need as well as assuring you have adequate reserves.



Your serum folate (folic acid) level measured 17.0 ng/mL. While the acceptable level is 7.2 to 17.2 ng/mL, the optimal level is greater than 14.7 ng/mL.

Function: Folate, a water-soluble vitamin, is required for cell energy. It serves as a precursor for nucleic acids and as a repair mechanism for damaged DNA. It also plays a major role as a methyl donor in a reaction that lowers homocysteine levels. If optimal levels of folate are not present, an unhealthy buildup of homocysteine may occur, which has been associated with a risk for cardiovascular disease and stroke.

There is a strong link between cervical dysplasia, as seen in an abnormal pap spear, and low folate levels. Furthermore, low folate levels have been associated with an increased risk for cancers of the stomach, esophagus, pancreas, lung, colon, ovaries, breast, and cervix, which may be due to its role in repair and production of DNA. Low levels are also seen in patients who are depressed or have Alzheimer's disease and dementia. Preconception folate deficiency appears to be a risk factor for neural tube defects in fetuses (spina bifida).

Food Sources: avocado, asparagus, black-eyed peas, beans, beets, Brussels sprouts, dark green leafy vegetables, fortified grains, lentils, liver, peas, rice, spinach

Depleted by: alcoholism, high-dose NSAIDs, SSRIs, aluminum antacids, oral contraceptives, Pepcid®, diabetic medications, anti-inflammatory drugs (prednisone), tetracycline, Flonase®, certain diuretics and anti-convulsants

Complications of Deficiency: increased homocysteine, low methionine, fatigue, anemia, cardiovascular disease, birth defects, increased risk of certain cancers

Did You Know: Up to 60% of the U.S. population may have a genetic enzyme defect that makes it difficult for them to covert folic acid into an active form that can be utilized by the body. The active form of folic acid is 5-MTHF.

Riordan Clinic Doctors Recommend: L-5-Methyltetrahydrofolate (5-MTHF)



Your vitamin D (25-hydroxyvitamin D) measured 45 ng/mL. The optimal range for vitamin D is 40 to 80 ng/mL.

Function: Vitamin D promotes calcium absorption in the gut and maintains adequate serum concentration levels of calcium and phosphate. Vitamin D also plays an important role in the reduction of inflammation, modulation of cell growth and neuromuscular and immune function. Research indicates that vitamin D can cut your risks of 16 different types of cancers by up to 60%. It has also been shown to cut the risks of type 2 diabetes, age-related macular degeneration and Alzheimer's disease. Vitamin D should be taken with vitamin K2. While vitamin D promotes calcium absorption, vitamin K2 guides calcium to where your body needs it most, such as your bones and teeth, and directs it away from soft tissues and blood vessels.

Food Sources: butter, cod liver oil, eggs, halibut, herring, mackerel, meat, milk, salmon, sardines, swordfish, yogurt, (best source is from UVB sunlight on the skin)

Depleted by: aluminum antacids, Pepcid®, Phillips® Milk of Magnesia, Dilantin®, anti-inflammatory drugs (prednisone), Zantac®, Flonase®, colesevelam

Complications of Deficiency: osteoporosis, infection, autoimmune disease, increased risk of certain cancers, hypertension, arteriosclerosis, diabetes and insulin resistance, musculoskeletal pain, increased risk of falls, epilepsy and migraine.

Did You Know: Ultraviolet B (UVB) radiation with a wavelength of 290-320 nanometers on uncovered skin begins the process of converting 7-dehydrocholesterol on the skin to vitamin D3. UVB rays are blocked with a sunscreen of SPF 8 or more. UVB radiation does not penetrate glass, so exposure indoors does not produce vitamin D.

Riordan Clinic Doctors Recommend: Riordan Clinic D3/K2



Your serum lycopene level measured 49 ug/dL. While the normal range is 13 to 54 ug/dL, the optimal level for serum lycopene is 44 to 64 ug/dL.

Function: Lycopene is a fat-soluble carotene. It is one of the strongest antioxidants available and has been shown to reduce the risks of various cancers, especially cancer of the prostate, breast and ovaries. (The incidence of prostate cancer in Italian men, where tomato products are consumed in large quantities, is about 60% less than in the U.S.). Higher lycopene concentration in the serum is also associated with a lower risk of cardiovascular disease, as found in a recently completed study on middle-aged and elderly women. The study found that people whose concentration was highest had a 50% reduction in cardiovascular disease as compared to those whose serum concentration was low.

Food Sources: apricots, papaya, pink grapefruit, pink guava, red tomatoes, tomato products (catsup, paste, juice), watermelon

Riordan Clinic Doctors Recommend: Dietary improvements and supplemental Lycopene



Your serum Coenzyme Q10 measured 0.8 ug/mL. While the normal range is 0.3 to 1.5 ug/mL, the optimal level of serum Coenzyme Q10 is 1.2 to 1.8 ug/mL.

Function: Coenzyme Q10 is a potent antioxidant found in the mitochondria of every cell in the body where it interfaces to produce ATP, which is the fuel that our cells use for energy. 80% of the energy the heart uses comes from ATP. Heart, skeletal muscle and liver cells contain the highest number of mitochondria. Optimal levels help to maintain vitamin E in its active (reduced) form, protect LDL from oxidation thus inhibiting plaque formation in arteries, increase longevity and immunity as well as preventing cancer, cardiovascular disease, hypertension, periodontal disease and various asthma symptoms.

Food Sources: alfalfa, beef liver, beef heart, canola oil, eggs, fish, poultry, milk fat, nuts, whole grains, spinach, potatoes

Depleted by: several anti-diabetic medications, statins and beta-blockers

Complications of Deficiency: increased oxidative stress, high blood pressure, congestive heart failure, cardiac arrhythmias, neuro-degenerative diseases (such as Alzheimer's), migraines and periodontal disease

Did You Know: Statin drugs lower cholesterol by inhibiting an enzyme called HMG-CoA reductase. This enzyme is also needed in the biochemical pathway to produce CoQ10. Inhibition of this enzyme activity by statin drug therapy has been shown to decrease serum CoQ10 levels.

Riordan Clinic Doctors Recommend: Ubiquinol





Your blood vitamin B5 measured 21.0 mg/dL. While normal range is 10.0 to 36.0 mg/dL, the optimal range is 29.5 - 42.5. V

Function: Vitamin B5 is a water-soluble vitamin that is involved in a number of metabolic functions in the body. It is an essential component of coenzyme A, a catalyst in the metabolism of fats, carbohydrates, and protein. This vitamin is necessary for the production of cholesterol, steroids, fatty acids and aids in the utilization of vitamin B2 (riboflavin). It helps maintain precise communication between the central nervous system and the brain. It is important in stress management, cardiac stability, healthy joints, supporting the immune system, energy production and in the maintenance of healthy skin, hair, eyes and muscles.

Food Sources: avocado, brewer's yeast, cheese, corn, eggs, heart, kidney, legumes, lentils, liver, lobster, meats, milk, peanuts, peas, rice, soybeans, sweet potato, sunflower seeds, vegetables, wheat germ, whole grain cereals

Depleted by: periods of stress, adrenal fatigue, cold weather (increased requirements for coenzyme A and energy production), general antibiotics (tetracycline, penicillin)

Complications of Deficiency: fatigue, headaches, nausea, irritability, malaise, numbness and paresthesia in hands and feet, hypoglycemia, sleep disturbances, tension-related herpes infections (Epstein-Barr virus, shingles, oral and genital herpes)

Did You Know: The prefix pan in Greek means "everywhere". Most foods contain at least a small amount of vitamin B5, or pantothenic acid.

Riordan Clinic Doctors Recommend: Riordan Clinic B Complex



Your blood vitamin B6 measured 45 percent saturation. While the normal range is 42 percent to 89 percent saturation, the optimal level of vitamin B6 is 77 percent to 100 percent saturation.

Function: Vitamin B6 is an important, versatile water-soluble vitamin. It participates in more than 100 different enzyme reactions in the body. It helps convert stored blood sugar into glucose, which provides fuel for the brain. B6 is also involved in amino acid metabolism, biosynthesis of neurotransmitters, maintaining normal homocysteine levels, and improved immune function.

Food Sources: avocado, brewer's yeast, chickpeas, carrots, chicken, corn, fish, hazelnuts, halibut, ham, legumes, lentils, liver, peanuts, rice, salmon, shrimp, spinach, soybean, sunflower seeds, trout, tuna, walnuts, wheat germ, whole grain cereals

Depleted by: chronic alcoholism, long-term diuretic use, ciprofloxacin, oral contraceptives, HRT (estrogens), anti-inflammatory drugs (prednisone), tetracycline, theophylline, Flonase®, Vaseretic®, anti-TB meds (cycloserine), L-DOPA or digoxin

Complications of Deficiency: increased homocysteine levels, cognitive decline (e.g. decreased memory, dementia), increased risk of certain types of cancer, impaired immunity

Did You Know: The metabolism of B6 declines after the age of 40; individuals in midlife and older need approximately 20 percent more B6 for optimal cognitive functioning.

Studies have shown that women who suffer from PMS (premenstrual syndrome) might benefit from B6 with decreased irritability, moodiness, bloating, and anxiety. Nausea and vomiting during pregnancy can also be significantly reduced with supplemental B6.

Riordan Clinic Doctors Recommend: Riordan Clinic B Complex



Your red blood cell magnesium measured 4.9 mg/dL. While the normal range is 4.0 to 6.4 mg/dL, the optimal range of magnesium to aid in protective antioxidant action is 5.8 to 7.0 mg/dL.

Function: Magnesium is a highly important mineral that is involved in over 300 enzyme reactions, some of which are very important to antioxidant function. Magnesium is needed for protein synthesis, blood glucose control, blood pressure regulation, energy production, and proper muscle and nerve function. Magnesium is required for the synthesis of DNA, RNA and glutathione. Maintaining proper magnesium levels is dependent on its interactions with calcium, vitamin D and vitamin K. Balance of these nutrients is crucial for proper deposition of calcium in the bones instead of soft tissue structures.

Food Sources: almonds, beans, beef, brewer's yeast, cashews, chicken, green leafy vegetables, millet, nuts, oats, peaches, peanuts, peas, seafood, sesame seeds, soybeans, spinach, sunflower seeds, tofu, whole grains

Depleted by: soil depletion by modern farming techniques, renal disorders, diuretics, hyperparathyroidism, diabetes, chronic alcoholism, oral contraceptives, anti-inflammatory drugs (prednisone), raloxifene, sartan drugs, tetracycline, ciprofloxacin, Flonase®, digoxin, Lasix®, Vaseretic®, prolonged use of proton pump inhibitors (e.g. Nexium®, Prevacid®)

Complications of Deficiency: hypertension, heart arrhythmias, muscle cramps and tightness, fluid retention, bronchial spasms, high cholesterol, restless leg syndrome, chronic fatigue syndrome, seizures, personality changes

Did You Know: Magnesium can help control cholesterol levels by regulating an enzyme called HMG-CoA reductase. This enzyme is required for the synthesis of cholesterol. (This is the enzyme that is blocked by statin drugs). By naturally controlling this enzyme with magnesium, proper cholesterol levels can be maintained.

Riordan Clinic Doctors Recommend: Riordan Clinic Chelated Magnesium



Your red blood cell selenium measured 166 ug/L. While the normal range is 75 to 240 ug/L, the level for optimal antioxidant effect from selenium should be 199 to 281 ug/L.

Function: Selenium is one of the few trace minerals that acts as a true antioxidant compound. It is an essential component of a particular type of proteins called selenoproteins. Some important functions of these proteins are: reproduction, thyroid hormone metabolism, DNA synthesis, and protection from oxidative damage. Selenium forms part of a very important antioxidant enzyme, glutathione peroxidase. High levels of this enzyme in cells protect them against excess free radical release. Selenium has also been found to stimulate the immune system, protect the heart, reduce prostate, lung, colorectal, and breast cancer, lower miscarriage rates, and increase chances of conception.

Food Sources: Brazil nuts, brown rice, butter, cereals, chicken, clams, crab, dairy products, eggs, kidneys, lamb, liver, lobster, nuts, oats, salmon, shrimp, spinach, tuna

Depleted by: anti-inflammatory drugs (prednisone), Flonase®, long-term hemodialysis

Complications of Deficiency: increased risk of certain cancers,

Did You Know: Brazil nuts (1 ounce) have the highest content of selenium with 544 mcg per serving.

Riordan Clinic Doctors Recommend: Riordan Clinic Trace Mineral Complex



Your cholesterol measured 160 mg/dL. The National Cholesterol Education Program (NCEP) states that a cholesterol between 200-239 mg/dL is considered borderline high. The Center For The Improvement of Human Functioning International, Inc. recommends that optimal levels lie between 160-210 mg/dL. Note that optimal levels may vary on an individual basis. Cholesterol is needed to maintain cell membranes, the production of sex hormones, aids in the manufacturing of bile and converts sunshine to Vitamin D. It is also important in the metabolism of Vitamin A, D, E and K. Recent studies have found that cholesterol values <160 mg/dL may put you at risk for depression, anxiety, stroke, malnutrition, hyperthyroidism and liver disease.



Your triglycerides measured 132 mg/dL. The optimal triglyceride level is 35 to 150 mg/dL. Triglycerides are a form of fat containing three fatty acids. They are a form of storage for excess dietary fat and carbohydrates and serve as an energy source. Although decreased levels are rare, starvation and malnutrition can cause triglyceride levels to drop. Increased levels are seen following alcohol consumption, during non-fasting states, kidney disease, diabetes mellitus, hypothyroidism, genetic disorders and vascular risk.



Your high density lipoprotein measured 42 mg/dL. This is the "good cholesterol" that transports LDL away from the artery walls. While the normal range is 29 mg/dL to 72 mg/dL, the recommended level for HDL Cholesterol is greater than 40 mg/dL for men and greater than 50 mg/dL for women. When assessing HDL status, it is necessary to monitor the cholesterol/HDL ratio. It is more important to have a low ratio than it is to have a high level of HDL.



Your very low density lipoprotein (VLDL) measured 26 mg/dL. The optimal VLDL level is 5 to 30 mg/dL. VLDL carries triglycerides to the liver and other parts of the body. Malnutrition and malabsorption can cause reduced levels of VLDL. Increased levels can occur with alcohol use, obesity, genetic disorders, and high fat diets.



Your low density lipoprotein measured 92 mg/dL. The normal level is 50 to 100 mg/dL. LDL transports cholesterol and other lipids throughout the body. However, it can carry cholesterol to artery walls leading to atherosclerosis. It is the "bad cholesterol" especially when in excess. Starvation, malnutrition, certain medications and malabsorption can lead to low LDL levels. Genetic factors, diets high in fat and cholesterol, diabetes and kidney disease can lead to increased levels. High LDL levels are responsible for most atherosclerosis.

Risk Classification	Adult levels
Desirable Borderline Risk High Risk	 <100 mg/dL 100-159 mg/dL >160 mg/dL



Your cholesterol/HDL ratio is 3.8. The cholesterol/HDL ratio is a calculation of your risk for heart disease. It is optimal to have a low ratio. A low ratio indicates that total cholesterol is comprised mostly of HDL particles. This ratio is considered the most important indicator for atherosclerosis.

lisk Classification Male		Female	
1/2 Average Risk	< 3.4	< 3.3	
Average Risk	3.4 - 5.0	3.3 - 4.4	
2 Times Average Risk	5.1 - 9.6	4.5 - 7.1	
3 Times Average Risk	9.7 - 23.0	7.2 - 11.0	



Your LDL/HDL ratio is 2.2. The LDL/HDL ratio is also a heart disease risk indicator. It is best to have a low ratio as this indicates there is sufficient HDL in relation to LDL to aid in prevention of atherosclerosis. Excessively high or low levels can indicate a problem. It is best to maintain these in proper balance to HDL.

Risk Classification	Male	Female
1/2 Average Risk	< 1.0	< 1.5
2 Times Average Risk	3.7 - 6.3	3.3 - 5.0
3 Times Average Risk	6.4 - 8.0	5.1 - 6.1



Your C-Reactive Protein (CRP-hs) measured 0.8 mg/L. The normal range is less than 1.9 mg/L while the optimal range is less than 0.7 mg/L. The assay employed is a highly sensitive method, which is intended for the detection of very small amounts of inflammation that may take place if atherosclerosis (the deposition of fat on the interior lining of the blood vessels) is occurring. Atherosclerosis can lead to heart attack or stroke. Other inflammatory processes can also increase the CRP level. Up to 1/3 of the population that suffers heart attacks have normal blood pressure and cholesterol levels.

Risk Categories for CHD	CRP (mg/L)
Very Low	less than 0.7
Low	0.7 - 1.1
Moderate	1.2 - 1.9
High	2.0 - 3.8
Very High	greater than 3.8



Your lipoprotein (a) measured 23 mg/dL. While the normal range is less than 30 mg/dL, the optimal range is less than 20 mg/dL. Lipoprotein (a) may be the most atherogenic of the lipoproteins. Atherogenicity refers to the ability of a compound to cause advanced atherosclerotic disease. Individuals with increased concentrations of lipoprotein (a) are considered to have a significantly higher risk of coronary heart disease (CHD). Lipoprotein (a) varies with different population groups. African Americans have higher levels than caucasians and Asians, while native Americans have lower levels than caucasians. High levels carry the same risk no matter the ethnic population.

Risk Categories for CHD	Lipoprotein(a) (mg/dL)
Desirable Borderline High Very High	less than 20 20 - 30 31 - 50 greater than 50



Your plasma homocysteine measured 7.1 umol/L. While the normal range is 5.0 to 15.0 umol/L, values that lie at the low end of normal are preferred. Homocysteine is an amino acid produced in the liver exclusively from dietary sources of methionine. An elevated level is an important independent risk factor for atherosclerotic vascular disease affecting coronary, cerebral and peripheral arteries. It is stated that homocysteine has a toxic effect on the endothelial lining of the arteries, thus producing plaque formation. The most common cause of an elevated level is a deficiency of folic acid, vitamin B6 or B12. Studies have shown that 25 to 33 percent of women with recurrent miscarriage have increased blood levels of homocysteine. Having a folic acid deficient diet is the largest contributor to elevated homocysteine. Vitamin therapy and diet modification can work to lower levels of homocysteine by as much as 40 percent in a normal person.

Check Your Health



Protective Medicine for Your Optimal Health

Results For Peter Pan4 Specimen obtained 03/19/2014

Test Summary

Vitamin A69 $ -*- $ 2490ug/dLVitamin E1.5 $-*- $ 0.62.7mg/dLVitamin C, Plasma0.6 $-*- $ 0.62.0mg/dLVitamin C, Urine20 $-*- $ 2050mg/dLFolic Acid (Folate)17.0 $-*- $ 7.217.2ng/mLVitamin D (25-OH-D)45 $-*- $ 4080ng/mLLycopene49 $-*- $ 1354ug/dLCoenzyme Q100.8 $-*- $ 0.31.5ug/mLVit. B5-Pantothenic Acid21.0 $-*- $ 4.06.4mg/dLSelenium, RBC4.9 $-*- $ 4.06.4mg/dLSelenium, RBC166 $-*- $ 75240ug/LCholesterol160 $-*- $ 35150mg/dLTriglycerides132 $-*- $ 30mg/dLmg/dLLDL26 $-*- $ 50100mg/dLLDL22 $-*- $ 50100mg/dLLDL/HDL Ratio3.8 $-*- $ 0.03.6RatioCRP-hs0.8 $-*- $ 0.01.9mg/LLipoprotein (a)23 $-*- $ 0.01.9mg/LHomocysteine7.1 $-*- $ 5.015.0umol/I	<u>Test Name</u>	<u>Result</u>	<u>Ref</u>	Lo	<u>Hi</u>	<u>Units</u>
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Folic Acid (Folate)17.0-*-7.217.2ng/mLVitamin D (25-OH-D)45-*-4080ng/mLLycopene49-*-1354ug/dLCoenzyme Q100.8-*-0.31.5ug/mLVit. B5-Pantothenic Acid21.0-*-10.036.0mg/dLVit. B6-Pyridoxine45-*-4289% satMagnesium, RBC4.9-*-4.06.4mg/dLSelenium, RBC166-*-75240ug/LCholesterol160-*-100169mg/dLTriglycerides132-*-35150mg/dLULDL26-*-50100mg/dLLDL92-*-50100mg/dLCholesterol/HDL Ratio3.8-*-0.03.6RatioCRP-hs0.8-*-0.01.9mg/LLipoprotein (a)23-*-5.015.0umol/I	Vitamin C, Urine	20	-*-	20	50	mg/dL
Vitamin D (25-OH-D)45-*-4080ng/mLLycopene49-*-1354ug/dLCoenzyme Q100.8-*-0.31.5ug/mLVit. B5-Pantothenic Acid21.0-*-10.036.0mg/dLVit. B6-Pyridoxine45-*-4289% satMagnesium, RBC4.9-*-4.06.4mg/dLSelenium, RBC166-*-75240ug/LCholesterol160-*-100169mg/dLTriglycerides132-*-35150mg/dLHDL Cholesterol42-*-50100mg/dLLDL26-*-50100mg/dLLDL22-*-50100mg/dLLDL/HDL Ratio3.8-*-0.03.6RatioCRP-hs0.8-*-0.01.9mg/LLipoprotein (a)23-*-030mg/dLHomocysteine7.1-*-5.015.0umol/I	Folic Acid (Folate)	17.0	- * -	7.2	17.2	ng/mL
Lycopene49-*-1354ug/dLCoenzyme Q100.8-*-0.31.5ug/mLVit. B5-Pantothenic Acid21.0-*-10.036.0mg/dLVit. B6-Pyridoxine45-*-4289% sat.Magnesium, RBC4.9-*-4.06.4mg/dLSelenium, RBC166-*-75240ug/LCholesterol160-*-100169mg/dLTriglycerides132-*-35150mg/dLHDL Cholesterol42-*-2972mg/dLULDL26-*-530mg/dLLDL92-*-50100mg/dLCholesterol/HDL Ratio3.8-*-0.03.6RatioCRP-hs0.8-*-0.01.9mg/LLipoprotein (a)23-*-030mg/dLHomocysteine7.1-*-5.015.0umo/H	Vitamin D (25-OH-D)	45	- * -	40	80	ng/mL
Coenzyme Q100.8-*-0.31.5ug/mLVit. B5-Pantothenic Acid21.0-*-10.036.0mg/dLVit. B6-Pyridoxine45-*-4289% sat.Magnesium, RBC4.9-*-4.06.4mg/dLSelenium, RBC166-*-75240ug/LCholesterol160-*-100169mg/dLTriglycerides132-*-35150mg/dLHDL Cholesterol42-*-2972mg/dLULDL26-*-530mg/dLLDL92-*-50100mg/dLLDL/HDL Ratio3.8-*-0.03.6RatioCRP-hs0.8-*-0.01.9mg/LLipoprotein (a)23-*-030mg/dLHomocysteine7.1-*-5.015.0umol/I	Lycopene	49	- * -	13	54	ug/dL
Vit. B5-Pantothenic Acid 21.0 $ -*- $ 10.0 36.0 mg/dL Vit. B6-Pyridoxine 45 $ -*- $ 42 89 $\$$ sat.Magnesium, RBC 4.9 $ -*- $ 4.0 6.4 mg/dL Selenium, RBC 166 $ -*- $ 75 240 ug/L Cholesterol 160 $ -*- $ 100 169 mg/dL Triglycerides 132 $ -*- $ 35 150 mg/dL HDL Cholesterol 42 $ -*- $ 29 72 mg/dL ULDL 26 $ -*- $ 50 100 mg/dL LDL 92 $ -*- $ 50 100 mg/dL Cholesterol/HDL Ratio 3.8 $ -*- $ 0.0 3.6 RatioCRP-hs 0.8 $ -*- $ 0.0 1.9 mg/L Lipoprotein (a) 23 $ -*- $ $0.$ 30 mg/dL	Coenzyme Q10	0.8	- * -	0.3	1.5	ug/mL
Vit. B6-Pyridoxine45 -*- 4289% sat.Magnesium, RBC4.9 -*- 4.06.4mg/dLSelenium, RBC166 -*- 75240ug/LCholesterol160 -*- 100169mg/dLTriglycerides132 -*- 35150mg/dLHDL Cholesterol42 -*- 2972mg/dLVLDL26 -*- 50100mg/dLLDL92 -*- 50100mg/dLCholesterol/HDL Ratio3.8 -*- 0.03.6RatioCRP-hs0.8 -*- 0.01.9mg/LLipoprotein (a)23 -*- 030mg/dLHomocysteine7.1 -*- 5.015.0umol/I	Vit. B5-Pantothenic Acid	21.0	- * -	10.0	36.0	mg/dL
Magnesium, RBC4.9-*-4.06.4mg/dLSelenium, RBC166-*-75240ug/LCholesterol160-*-100169mg/dLTriglycerides132-*-35150mg/dLHDL Cholesterol42-*-2972mg/dLVLDL26-*-530mg/dLLDL92-*-50100mg/dLCholesterol/HDL Ratio3.8-*-0.05.0RatioLDL/HDL Ratio2.2-*-0.03.6RatioCRP-hs0.8-*-0.01.9mg/LLipoprotein (a)23-*-030mg/dLHomocysteine7.1-*-5.015.0umol/I	Vit. B6-Pyridoxine	45	- * -	42	89	% sat.
Selenium, RBC 166 -*- 75 240 ug/L Cholesterol 160 -*- 100 169 mg/dL Triglycerides 132 -*- 35 150 mg/dL HDL Cholesterol 42 -*- 29 72 mg/dL VLDL 26 -*- 50 100 mg/dL LDL 92 -*- 50 100 mg/dL Cholesterol/HDL Ratio 3.8 -*- 0.0 5.0 Ratio LDL/HDL Ratio 2.2 -*- 0.0 1.9 mg/L Lipoprotein (a) 23 -*- 0.0 3.0 mg/dL Homocysteine 7.1 -*- 5.0 15.0 umol/I	Magnesium, RBC	4.9	- * -	4.0	6.4	mg/dL
Cholesterol160 -*- 100169mg/dLTriglycerides132 -*- 35150mg/dLHDL Cholesterol42 -*- 2972mg/dLVLDL26 -*- 5030mg/dLLDL92 -*- 50100mg/dLCholesterol/HDL Ratio3.8 -*- 0.05.0RatioLDL/HDL Ratio2.2 -*- 0.03.6RatioCRP-hs0.8 -*- 0.01.9mg/LLipoprotein (a)23 -*- 030mg/dLHomocysteine7.1 -*- 5.015.0umol/I	Selenium, RBC	166	- * -	75	240	ug/L
Triglycerides132 -*- 35150mg/dLHDL Cholesterol42 -*- 2972mg/dLVLDL26 -*- 530mg/dLLDL92 -*- 50100mg/dLCholesterol/HDL Ratio3.8 -*- 0.05.0RatioLDL/HDL Ratio2.2 -*- 0.03.6RatioCRP-hs0.8 -*- 0.01.9mg/LLipoprotein (a)23 -*- 030mg/dLHomocysteine7.1 -*- 5.015.0umol/I	Cholesterol	160	- * -	100	169	mg/dL
HDL Cholesterol42 -*- 2972mg/dLVLDL26 -*- 530mg/dLLDL92 -*- 50100mg/dLCholesterol/HDL Ratio3.8 -*- 0.05.0RatioLDL/HDL Ratio2.2 -*- 0.03.6RatioCRP-hs0.8 -*- 0.01.9mg/LLipoprotein (a)23 -*- 030mg/dLHomocysteine7.1 -*- 5.015.0umol/I	Triglycerides	132	- * -	35	150	mg/dL
VLDL 26 -*- 5 30 mg/dL LDL 92 -*- 50 100 mg/dL Cholesterol/HDL Ratio 3.8 -*- 0.0 5.0 Ratio LDL/HDL Ratio 2.2 -*- 0.0 3.6 Ratio CRP-hs 0.8 -*- 0.0 1.9 mg/L Lipoprotein (a) 23 -*- 0 30 mg/dL Homocysteine 7.1 -*- 5.0 15.0 umol/I	HDL Cholesterol	42	_ * _	29	72	mg/dL
LDL92 -*- 50100mg/dLCholesterol/HDL Ratio3.8 -*- 0.05.0RatioLDL/HDL Ratio2.2 -*- 0.03.6RatioCRP-hs0.8 -*- 0.01.9mg/LLipoprotein (a)23 -*- 030mg/dLHomocysteine7.1 -*- 5.015.0umol/I	VLDL	26	- * -	5	30	mg/dL
Cholesterol/HDL Ratio 3.8 -*- 0.0 5.0 Ratio LDL/HDL Ratio 2.2 -*- 0.0 3.6 Ratio CRP-hs 0.8 -*- 0.0 1.9 mg/L Lipoprotein (a) 23 -*- 0 30 mg/dL Homocysteine 7.1 -*- 5.0 15.0 umol/I	LDL	92	- * -	50	100	mg/dL
LDL/HDL Ratio2.2 -*- 0.03.6RatioCRP-hs0.8 -*- 0.01.9mg/LLipoprotein (a)23 -*- 030mg/dLHomocysteine7.1 -*- 5.015.0umol/I	Cholesterol/HDL Ratio	3.8	- * -	0.0	5.0	Ratio
CRP-hs 0.8 -*- 0.0 1.9 mg/L Lipoprotein (a) 23 -*- 0 30 mg/dL Homocysteine 7.1 -*- 5.0 15.0 umol/I	LDL/HDL Ratio	2.2	- * -	0.0	3.6	Ratio
Lipoprotein (a) 23 -*- 0 30 mg/dL Homocysteine 7.1 -*- 5.0 15.0 umol/I	CRP-hs	0.8	_ * _	0.0	1.9	mg/L
Homocysteine 7.1 -*- 5.0 15.0 umol/I	Lipoprotein (a)	23	- * -	0	30	mg/dL
	Homocysteine	7.1	- * -	5.0	15.0	umol/I

Check Your Health



Protective Medicine for Your Optimal Health

Results For Peter Pan4 Specimen obtained 03/19/2014

Test Index

Cholesterol
Coenzyme Q10
CRP-hs 16
Folic Acid (Folate) 5
HDL Cholesterol
Homocysteine
LDL/HDL Ratio
LDL
Lipoprotein (a)
Lycopene
Magnesium, RBC 11
Selenium, RBC 12
Iriglycerides 13
Vit. B5-Pantothenic Acid 9
Vit. B6-Pyridoxine 10
Vitamin A
Vitamin C, Plasma 4
Vitamin C, Urine
Vitamin D (25-OH-D) 6
Vitamin E
VLDL

FOOD SOURCES FOR PROTECTIVE MEDICINE

Beta Carotene

Natural beta carotene is converted to vitamin A in the body and concentrated amounts of beta carotene are found in carrot juice, sweet potato, pumpkin, carrots, squash, lamb's quarters, shallot, red chili pepper, mango, spinach, dandelion greens, turnip greens, kale, cantaloupe, borage, beet greens, persimmon, broccoli, apricot, papaya, prune, peach, and watermelon, taro leaves, mustard greens, purslane, potato.

Vitamin C

Foods with high concentrations of vitamin C include guava, papaya, red bell pepper, peach, red chili pepper, orange, apricot, black currant, strawberry, kale, kiwi, lamb's quarters, longans, grapefruit, lychee, cranberry, broccoli, vine spinach, cassava root, tangerine, mango, cantaloupe, potato, brussel sprouts, watermelon, sapote, kohlrabi, snow peas, sweet potato, cabbage, liver, soybeans.

Vitamin A

Foods with high concentrations of vitamin A include liver, liverwurst, cod liver oil, eel, tuna, goat cheese, egg, kidney, mackerel, sturgeon, mozzarella cheese, milk, clam, Limburger cheese, Muenster cheese, bluefish, cheddar cheese, pate (goose liver), salmon, whipping cream, American cheese, oyster, mackerel, Swiss cheese, Camembert cheese.

Vitamin E

Foods with high concentrations of vitamin E include black currant seed oil, evening primrose oil, wheat germ oil, sunflower oil, sweet potato, almond, purslane, hazelnut oil, cottonseed oil, almond oil, mayonnaise, peanut, shrimp, mango, peanut oil, spinach, olive oil, oyster, perch, butter, salmon, asparagus, avocado, hamburger, cabbage, apricot.

Recommended Educational Material

Audio and videotapes only available at the Center:

Vitamin A by Ronald E. Hunninghake, M.D. #2181

Which Supplements are Best For Me? by Donald R. Davis, Ph.D. #2114

The Whole Foods Diet by Ronald E. Hunninghake, M.D. #2063

Vitamin Takers: Quacks, Kooks, or Cutting Edge? by James A. Jackson, Ph.D. #2113

Healthy Healing Test for Vegetarians and Meat Eaters by Donald A. Davis, Ph. D. #2183

Vitamin C by Ronald E. Hunninghake, M.D. #2148

Is Pyconogenol a Super Antioxidant? by Ronald E. Hunninghake, M.D. #2145

The Third Face of Vitamin C by Robert Cathcart III, M.D. #2164

Anitoxidant and Aging: Fact or Fallacy by James A. Jackson, Ph.D. #2205

Vitamin E - the Circulation "Superstar" by Ronald E. Hunninghake, M.D. #2111

Fatty Acids and Essential Oils by Ronald E. Hunninghake, M.D. #2136

Nuts About Nuts by Donald R. Davis, Ph.D. #2085

Antioxidant, Free Radicals and Disease by James A. Jackson, Ph.D. #2170 Books available at the Center:

Wonderful World Within You 20th Anniversary Special Edition (Highly Recommended to be read first!!!) by Dr. Roger J. Williams

Eat Right for Your Type by Peter J. D'Adamo with Catherine Whitney

Smart Nutrients by Dr. Abram Hoffer and Dr. Morton Walker

Antioxidants Your Complete Guide by Carolyn Reuben

A Taste of Health from the Heart recipes from The Taste of Health Restaurant

Vitamin E Update by Len Mervyn, Ph.D.

To obtain a complete list of education materials available or to place an order: Call (800) 447-7276 The Center for the Improvement of Human Functioning International

Phone: 316-682-3100 Fax: 316-682-2062 http://riordanclinic.org





Now that you have participated in the first opportunity to promote your own better health through Check Your Health, you are part of a growing group stimulating an epidemic of health.

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If you have any questions about your tests please contact your personal physician or come in and use our very excellent Mabee Library to learn more in regards to those tests. We believe that the better informed you are, the better you will be able to maintain your health and vigor.

The following Lunch & Lecture video tapes are available to purchase in the Riordan Clinic store. They are also available to view in the Mabee library.

- #2181 Know Your Nutrients: Vitamin A Ron Hunninghake, M.D.
- #3058 Know Your Nutrients: Vitamin E Rebecca Kirby, M.D., R.D.
- #3062 Know Your Nutrients: Vitamin C Hugh Riordan, M.D.
- #3040 Know Your Nutrients: Vitamin B1 Ron Hunninghake, M.D.
- #3044 Know Your Nutrients: Vitamin B2 Tim Lawton, M.D.
- #3046 Know Your Nutrients: Vitamin B3 Rebecca Kirby, M.D., R.D.
- #3042 Know Your Nutrients: Vitamin B6 Hugh Riordan, M.D.
- #3052 Know Your Nutrients: Vitamin B12 Ron Hunninghake, M.D.
- #2954 Keys to Staying Healthy: Why is Folic Acid Important Hugh Riordan, M.D.
- #3056 Know Your Nutrients: Vitamin D Rebecca Kirby, M.D., R.D.
- #2961 Keys to Staying Healthy: Why is Vitamin D Important? Hugh Riordan, M.D.
- #2828 Lycopene: Or Will a Tomato a Day Keep Cancer Away? James Jackson, Ph.D.
- #3208 CoQ10 The Energy Nutrient Chad Krier, N.D., D.C.
- #3181 Magnesium: The Bone Strengthening Mineral (..and More!) Ron Hunninghake, M.D.
- #2242 Know your Nutrients: Copper a Double Edged Sward Ron Hunninghake, M.D.
- #2331 Know Your Nutrients: Manganese Ron Hunninghake, M.D.
- #2958 Keys to Staying Healthy: Why is Selenium Important? Hugh Riordan, M.D.
- #2802 Know Your Nutrients: Zinc Ron Hunninghake, M.D.
- #2402 Zinc: Brains, Bugs, and Better Skin Ron Hunninghake, M.D.
- #2477 Boron: For Better Bones Ron Hunninghake, M.D.
- #2363 Calcium: The Many Ways "It Does a Body Good" Ron Hunninghake, M.D.
- #2096 Know Your Nutrients: The Amino Acids Ron Hunninghake, M.D.
- #2290 Know Your Nutrients: Glutamine Ron Hunninghake, M.D.
- #2842 T3: The Missing Piece in Optimal Thyroid Function Ron Hunninghake, M.D.
- #2136 Know Your Nutrients: Fatty Acids and Essential Oils Ron Hunninghake, M.D.
- #2180 DHEA: What Doesn't It Do? Ron Hunninghake, M.D.
- #3211 C-Reactive Protein Ron Hunninghake, M.D.
- #2894 Breast Biomarkers Ron Hunninghake, M.D.
- #2901 Eye Health Hugh Riordan, M.D.
- #3019 Aging and Vision Loss: Can Nutrients Help? James Jackson, Ph.D.
- #3210 Improve Your Eyes and Save your Sight Rebecca Kirby, M.D., R.D.
- #2896 Heart Biomarkers Ron Hunninghake, M.D.