

Lab Analysis Report

Arizona Family Health Centre

James D. Reade, D.C.
2430 West Ray Rd., Ste. # 1
Chandler, AZ 85224

Patient

Patient : 301
Phil Better

Date of Analysis: March 1,
2018

Gender: Male

Age: 52

Blood type: Unknown

LabCorp Lab Summary

Phil Better	Lab: LabCorp		BLOOD TEST RESULTS		
Test description	Current result	Current rating	Lab Ranges	Optimal	Units
Glucose, Serum	98.0	High	65-99	75-89	mg/dl
Hemoglobin A1c	5.8	High	4.8-5.6	4.7-5.4	Pct
Uric Acid, Serum	5.1	Optimal	2.4-8.2	4-6.5	mg/dl
BUN	16.0	Optimal	5-26	12-19	mg/dl
Creatinine, Serum	1.08	Optimal	0.57-1	0.7-1.1	mg/dl
eGFR	60.0	Optimal	60-150	60-150	mL/min/1.73m ²
BUN / Creatinine Ratio	15.0	Optimal	6-25	12-18	Calc
Sodium, Serum	142.0	Normal	135-145	-	mmol/L
Potassium, Serum	4.0	Normal	3.5-5.2	-	mmol/L
Chloride, Serum	103.0	Optimal	97-108	100-107	mmol/L
Carbon Dioxide, Total	23.0	Optimal	20-32	22-28	mg/dl
Calcium, Serum	9.6	Optimal	8.6-10.2	9.2-9.8	mg/dl
Phosphorus, Serum	3.3	Optimal	2.5-4.5	3.2-4	mg/dl
Magnesium, Serum	6.0	High	1.6-2.6	2-2.5	mg/dl
Protein Total, Serum	7.0	Optimal	6-8.5	6.9-7.5	g/dl
Albumin, Serum	4.5	Optimal	3.6-4.8	4-4.7	g/dl
Globulin, Total	2.5	Optimal	1.5-4.5	2.5-3.2	g/dl
A/G Ratio	1.8	Optimal	1.1-2.5	1.4-1.8	Calc
Bilirubin, Total	0.9	Optimal	0-1.2	0.4-1	mg/dl
Bilirubin, Direct	0.15	Normal	0.1-0.3	-	mg/dl
Alkaline Phosphatase, Serum	87.0	Optimal	25-165	60-90	IU/L
Creatine Kinase, Total, Serum	125.0	Normal	44-196	-	U/L
LDH	181.0	High	100-250	125-175	IU/L
AST (SGOT)	28.0	High	0-40	12-27	IU/L
ALT (SGPT)	65.0	High	0-40	12-27	IU/L
GGT	50.0	High	3-55	10-40	U/L
Iron Binding Capacity (TIBC)	278.0	Optimal	250-450	275-375	µg/dl
UIBC	154.0	Optimal	150-375	150-375	µg/dl
Iron, Serum	124.0	Optimal	35-155	60-135	µg/dl

Iron Saturation	45.0	Optimal	15-55	15-50	Pct
Ferritin, Serum	907.0	High	13-150	25-170	ng/dl
Vitamin D, 25 OH, Total	20.3	Low	30-100	-	ng/ml
Cholesterol, Total	213.0	High	100-199	120-185	mg/dl
Triglycerides	194.0	High	0-149	30-75	mg/dl
HDL Cholesterol	42.0	Low	39-200	60-200	mg/dl
VLDL Cholesterol Calc	39.0	Normal	5-40	-	mg/dl
LDL Cholesterol Calc	132.0	High	0-99	0-90	mg/dl
LDL/HDL Ratio	3.1	High	0-3.2	0-3	number
C-Reactive Protein, Cardio	1.56	Normal	0-3	-	mg/L
Homocysteine, Plasma	10.4	Normal	0-15	-	μmol/L
TSH	1.02	Low	0.45-4.5	1.5-2.9	μU/ml
Thyroxine (T4)	5.9	Low	4.5-12	7.5-11	μg/dl
T3 Uptake	26.0	Low	24-39	27-33	Pct
Free Thyroxine Index	1.5	High	1.2-4.9	1-1.4	μg/dl
Triiodothyronine (T3)	123.0	Optimal	90-200	115-185	ng/dl
Triiodothyronine, Free, Serum	3.2	Normal	2-4.4	-	pg/ml
Reverse T3, Serum	10.2	Low	13.5-34.2	-	ng/dl
T4, Free (Direct)	0.93	Normal	0.82-1.77	-	ng/dl
Thyroid Peroxidase (TPO) Ab	5.0	Normal	0-34	-	ng/dl
Thyroglobulin, Antibody	1.0	Normal	0-40	-	10 ³ /μL
Sex Hormone Binding Globulin, Serum	19.6	Normal	13-71	-	ng/dl
RA Latex Turbid.	9.5	Normal	0-13.9	-	IU/ml
Fibrinogen	302.0	Normal	175-425	-	mg/dl
WBC	4.1	Low	4-10.5	5.5-8.5	10 ³ /μL
RBC	4.06	Low	3.8-5.1	4.1-4.7	10e6 c/μl
Hemoglobin	12.9	Low	11.5-15	14.5-16	g/dl
Hematocrit	39.3	Low	34-44	42-48	Pct
MCV	97.0	High	80-98	83-91	fl
MCH	31.8	High	27-34	28-31	pg
MCHC	32.8	Optimal	32-35	32.5-35	g/dl
RDW	13.7	High	11.7-15	11-13	Pct
Platelets	181.0	Optimal	140-415	165-340	10 ³ /μL
Neutrophils	59.0	Optimal	40-74	45-65	Pct
Lymphs	34.0	Optimal	14-46	25-35	Pct
Monocytes	5.0	Optimal	4-13	3-7	Pct
Eos	2.0	Optimal	0-7	1-3	Pct
Basos	0.0	Optimal	0-3	0-1	Pct
Sedimentation Rate, Westergren	8.0	Optimal	0-20	4-14	mm/hr

Lab Analysis

The summary of findings lead to the following considerations:

Anemia-B12/Folate Deficiency
 Cardiovascular Disease Risk
 Diabetes/Hyperglycemia
 Insulin Resistance
 Biliary Dysfunction
 Thyroid Hypofunction-Secondary Due to Anterior Pituitary Dysfunction
 Vitamin B12/Folate Deficiency
 Metabolic Syndrome

Thyroid Hypofunction-Primary
 Anemia-Iron Deficiency
 Hemochromatosis
 Biliary Obstruction/Calculi
 Liver Dysfunction
 Suppressed Bone Marrow Production
 Adrenal Hypofunction
 Copper Deficiency
 Fatty Liver-Early Stage
 Vitamin C Need
 Anemia-Hemolytic
 Infection: Chronic Viral
 Abnormal Bleeding
 Biliary Stasis/Insufficiency
 Parasites-Intestinal
 Anterior Pituitary/Secondary Thyroid Hypofunction

Anemia-B12/Folate Deficiency

Your lab results are strongly suggestive of the above consideration and is supported by:

High Analytes

LDH
 MCH
 MCV
 RDW

Low Analytes

Hematocrit
 Hemoglobin
 RBC
 WBC

Definition

Anemia involves a reduction in the amount of hemoglobin in the blood and/or a decrease in red blood cells, which are essential to transport oxygen from the lungs to the tissues in exchange for carbon dioxide. This reduction in oxygen results in decreased energy and inability to perform normal daily activities. The lack of vitamins and minerals can produce anemia, the most common of which are iron, folic acid and vitamin B-12. Iron deficiency is a common cause of anemia, which has been found to affect between 30 to 50% of the population in developed countries. When folic acid or vitamin B-12 deficiency occur, enlarged red blood cells are also detected, which is referred to as "macrocytic anemia." Folic acid deficiency anemia is the most common anemia in the world. Vitamin B-12 deficiency anemia is also known as "pernicious anemia," which occurs in individuals with an inherited inability of the stomach to secrete intrinsic factor (a factor necessary for the absorption of vitamin B-12 in the intestines). The values for both B-12 and Folate anemia are the same. A serum B-12 and folate test can determine which anemia it is, however, they are usually both given in supplementation because they are synergistic in metabolic pathways (especially methylation). It is best not to assume that anemia is iron deficiency anemia, because supplemental iron can have unhealthy results if one is not deficient in iron. Folic acid supplementation alone can mask a B-12 deficiency anemia.

Dietary and Lifestyle Applications

Brewer's yeast is a good source of B vitamins. Microwaving destroys even more B vitamins than cooking. Potassium-rich foods may help improve red blood cell count. They include bananas, sunflower seeds, vegetables, whole grains, and dried fruits. Mild exercise daily is important to enhance oxygen uptake. Sources of vitamin B-12 are found in meats, eggs, milk and milk products. Some vegetarian sources are reported to have a small amount of vitamin B-12, like tempeh, miso and soy. Eating cultured foods, such as yogurt, kefir, and soy, will encourage growth of friendly bacterial flora and B-12 formation. Asparagus is a good source of fructooligosaccharides which attract good bacteria to the gut. One of the best foods for any type of anemia is calf liver. It is rich in B-vitamins. Eat foods high in folic acid: cauliflower, liver, asparagus, oranges, root vegetables, dried beans, brewer's yeast, dark green leafy vegetables (high in chlorophyll which is similar to the hemoglobin molecule), and whole grains. Since folic acid is easily destroyed by heat and light, eat fruits and vegetables fresh or with very little cooking.

Product Recommendations

Total Leaky Gut
 Spleno-Lymph
 Methyl B-12 Lozenges

Nutrient Recommendations

Probiotics
 Spleen Glandular
 Vitamin B-12

Folic Acid
L-Glutamine
N-Acetyl Glucosamine

Cardiovascular Disease Risk

Your lab results are strongly suggestive of the above consideration and is supported by:

High Analytes

Cholesterol, Total
Glucose, Serum
LDH
LDL Cholesterol Calc
AST (SGOT)
Triglycerides

Low Analytes

HDL Cholesterol
Vitamin D, 25 OH, Total

Definition

Heart disease, or cardiovascular disease, accounts for over 50% of all deaths in the United States and over 50 billion dollars per year in medical expenses. It is the leading cause of death in the United States even though it is one of the most preventable degenerative diseases. Heart disease includes such problems as angina (chest pain), arteriosclerosis (hardening of the arteries), myocardial infarction (heart attack) and stroke (brain deprived of oxygen).

Dietary and Lifestyle Applications

Stress reduction is beneficial, including meditation, massage, biofeedback, yoga and any other forms of relaxation. Stress increases the production of cholesterol that is made by the body. Good dietary habits are essential. A vegetarian based diet, high in vegetables, fruits and grains and low in fat and cholesterol is good. Vegetarians demonstrate lower cholesterol levels than meat-eaters, although if lean meat is substituted into a vegetarian diet and enough fruits and vegetables are consumed, a beneficial effect on cholesterol is still seen. Recent research indicates that organic elk meat can lower cholesterol (Cordain, L. FASEB abstract, San Francisco, Ca. 1998). Also, vegetarian diets are low in methionine and homocysteine. Homocysteine comes from methionine. Methionine is not necessarily a "bad amino acid" to have around, especially in the presence of enough B-6, folic acid, B-12 and betaine to facilitate pathways, and make sure that it is metabolized and does not "stick" as homocysteine in the pathway. NOTE: High levels of homocysteine have been shown to increase free radical production, which in turn oxidizes cholesterol. Studies have shown that men with increased homocysteine in their blood have a three time greater risk of having a heart attack. (Peng, S.K. and Taylor, C.B. "Cholesterol Autooxidation, Health and arteriosclerosis. World Reviews of Nutrition and Diet. 1984; 44:117-154). Avoid saturated fats - they raise cholesterol levels more than dietary cholesterol does. Gamma linolenic acid, found in black currant seed oil, decreases stickiness of platelets. Fish oils (omega-3 fatty acids - i.e. EPA/DHA) found in salmon, mackerel and herring have been shown to: 1) decrease VLDL production. 2) decrease blood pressure. 3) increase prostaglandins (namely PGI3) that favor vasodilation. 4) lower blood cholesterol. 5) decrease triglyceride levels. These are the same effects that are reported with aspirin ingestion, but without the added risks, including ulcers (PGs control mucous production). A study done in the Netherlands suggested that two fish meals per week would lower risk of fatal heart attacks by 50%. Avoid chemical preservatives and additives. Crushed garlic and onions may also be helpful. They have been shown to lower triglyceride levels and decrease platelet aggregation. Garlic contains alliin, the substance partially responsible for garlic's potent odor. When garlic is crushed, alliinase (an enzyme), is released that combines with alliin to form ajoene. The ajoene is the isolated fraction of garlic responsible for prevention of the platelet aggregation. Garlic taken every day seems to be effective in reducing risk for heart disease. Fiber is very important, since fiber binds cholesterol and bile acids and promotes their excretion. Rice bran is an excellent source of fiber due to decreased risk of allergies. Avoid saturated fats and hydrogenated fats, which raise cholesterol. Also avoid trans fatty acids. On the other hand, monounsaturated fats (olive oil) and polyunsaturated fats (vegetable oils) have been shown to lower cholesterol levels. A detoxification program is beneficial. Acupuncture and chelation therapy may be beneficial in heart disease. Obtain optimal weight. Reduce weight if necessary. Avoid smoking. A dry brush massage will aid in increasing circulation. Avoid coffee. Epidemiological studies believe that coffee consumption increases cholesterol levels. In a recent nine week study, roasted, ground coffee showed a strong correlation to hypercholesterolemia. The drip filter method, made by boiling and steeping, did not show this correlation. (Bak, AA and Grobbee, DE: New England Journal of Medicine 1989; 321:1132). Avoid alcohol. Moderate amounts of alcohol have been associated with increased HDL levels, but this study has been refuted by other researchers. There are safer, more accepted methods for lowering cholesterol. Sugar and alcohol have been shown to increase natural cholesterol production by the body. Moderate exercise is important. Exercise has been shown to increase HDL.

Product Recommendations

Total Heart
Total Lipotropic
Complete Omega-3 Co-Factors
Complete Omega-3 Essentials

Nutrient Recommendations

Policosanol
 Vitamin E
 Beta Glucan
 Co-Enzyme Q 10
 Fish Oil
 Garlic
 Hawthorn Berries
 Heart Glandular
 Apple Pectin
 L-Carnitine

Diabetes/Hyperglycemia

Your lab results are strongly suggestive of the above consideration and is supported by:

High Analytes

Glucose, Serum
 Cholesterol, Total
 Hemoglobin A1c
 Triglycerides

Definition

In type 2 - non-insulin-dependent adult-onset diabetes, insulin is still produced by the pancreas but the cells become resistant to insulin and glucose cannot move into the cells; it results in high blood sugar, and is usually seen in adults. Insulin is secreted by the pancreas and regulates blood sugar levels by moving glucose from the blood into the cells. In the United States, diabetes is one of the leading causes of deaths and affects over six million people.

Dietary and Lifestyle Applications

Eliminate alcohol, caffeine and smoking. Follow an elimination/rotation diet to detect food allergies or sensitivities. Reduce weight if necessary. Reduce stress. Practice relaxation exercises. Regular, moderate exercise is essential. A healthy diet is essential. Avoid refined, processed foods, increase complex carbohydrates and fiber, and balance with enough high protein foods. Soluble fiber, found in fruits and vegetables, should be emphasized. Two servings of beans per day may help control blood sugar levels (soak beans in several drops of iodine (unless iodine sensitivity is present) to alleviate gas-producing effects). Beans and legumes are very low on the glycemic index. Moderate amounts of lean meat, fish and unsaturated fats are helpful. Small, frequent meals are suggested. A vegetarian diet can be helpful. Onions and garlic have blood sugar-lowering effects. (Murray, M., N.D. Natural Alternatives to Over-the-Counter and Prescription Drugs, William Morrow and Company, Inc. NY, 1994, p. 179).

Product Recommendations

Complete Gluco-D
 Carbo-Met
 NAC Renew

Nutrient Recommendations

Acetyl-L-Carnitine
 Pancreas Glandular
 B Vitamins
 Turmeric
 Vanadyl Sulfate
 Zinc
 Benfotiamine
 Chromium
 Alpha Lipoic Acid
 Fenugreek
 Gymnema Sylvestre
 Minerals

Insulin Resistance

Your lab results are strongly suggestive of the above consideration and is supported by:

High Analytes

Glucose, Serum
 Cholesterol, Total
 Hemoglobin A1c
 Triglycerides

Definition

Insulin resistance is a feature of Syndrome X; not everyone who has insulin resistance has Syndrome X, however, everyone who has Syndrome X does have insulin resistance. Syndrome X was first described by Gerald Reaven, MD, at Stanford University Medical Center. His theory is that the main characteristics of syndrome X, mainly hyperinsulinemia and insulin resistance, contribute to the secondary features of syndrome X, which include: high sugar levels, increased LDL and VLDL (the "bad" cholesterol), decreased HDL (the "good" cholesterol), elevated triglycerides, obesity and hypertension. Insulin resistance occurs when the cells lose the ability to utilize insulin correctly; sometimes the insulin receptors or the ability to mobilize receptors to the cell surface are affected. Since insulin is a fuel-regulating hormone that moves glucose into the cells for energy, insulin resistance can cause an increase in blood sugar and a decrease in available energy to the cells. Individuals with Syndrome X sometimes need 300-400% more insulin to maintain normal blood sugar levels, compared to healthy individuals.

Dietary and Lifestyle Applications

Low-fat, unrefined carbohydrate diet, i.e. mostly organic vegetables, legumes, yogurt, lean meats, and whole fruits (as opposed to juices) like apples and pears, that have a lower glycemic index (don't turn to sugar as quickly), which result in a more sustained release of insulin. Breads and potatoes are fairly high glycemic foods. Insulin resistance results from poor dietary and lifestyle habits that wear down the body's ability to take insulin into the cell, leaving in the bloodstream to elevate blood levels, but not allowing it in the cell where it can be utilized. Good dietary habits and exercise have been demonstrated to reverse many cases of Type 2 diabetes by increasing insulin sensitivity. Losing weight also increases sensitivity. Regular exercise is suggested (at least three days per week). Avoid fructose corn sweeteners. Avoid artificial sweeteners, such as aspartame (NutraSweet, Equal), and diet sodas. Avoid processed grains.

Product Recommendations

Complete Gluco-D
Carbo-Met
NAC Renew

Nutrient Recommendations

Acetyl-L-Carnitine
Pancreas Glandular
B Vitamins
Turmeric
Vanadyl Sulfate
Zinc
Benfotiamine
Chromium
Cinnamon
Alpha Lipoic Acid
Fenugreek
Gymnema Sylvestre
Minerals

Biliary Dysfunction

Your lab results are strongly suggestive of the above consideration and is supported by:

High Analytes

GGT
LDH
ALT (SGPT)

Definition

Biliary dysfunction is usually caused by problems with the gallbladder (stores bile) or the bile duct (carries bile to the small intestine). Biliary stasis, or cholestasis is a condition caused by rapidly developing (acute) or long-term (chronic) interruption in the excretion of bile (a digestive fluid that helps the body process fat).

Dietary and Lifestyle Applications

Carrot, beet and cucumber juice with a little garlic may be helpful. Consider doing a gallbladder flush. Use caution when recommending a flush because the stones may be larger than the bile duct and could cause biliary colic. See, "Liver Flush" under, Wellness Information." Eat regularly and do not overeat. Do not remove fat entirely from the diet. Studies have suggested that people who diet and eat less than three grams of fat per day have a tendency to develop gallstones. (Burton Goldberg Group, Alternative Medicine: The Definitive Guide, 1993, Future Medicine Publishing, Inc. WA, p. 924). Eat only good fats such as the omega 3's. Increase fiber, and decrease meat and fat to increase cholesterol solubility. Fiber binds and decreases the formation of deoxycholic acid, which is a culprit in decreased cholesterol solubility. Eliminate food allergies and food sensitivities, especially dairy products and eggs. Food allergies may cause the bile ducts to swell, creating bile flow problems. Prevention is best.

Product Recommendations

GB-Plus
Hypo-D

Lipotrophic-Plus
 LV Renew
 Methyl Renew

Nutrient Recommendations

Ox Bile Concentrate
 Pancreatin
 Red Beet Root
 Russian Black Radish Root
 Choline
 Collinsonia
 Hcl
 Lecithin
 Liver Glandular

Thyroid Hypofunction-Secondary Due to Anterior Pituitary Dysfunction

Your lab results are strongly suggestive of the above consideration and is supported by:

High Analytes

Cholesterol, Total
 Triglycerides

Low Analytes

Thyroxine (T4)
 TSH

Definition

Hypothyroidism is defined as low thyroid function, due to a deficiency of thyroid hormone. There are two classifications of hypothyroidism:

Subclinical or functional hypothyroidism: Blood levels in normal ranges, but temperature tests and other indicators show a mild deficiency state, which can still cause dramatic symptoms.

Clinical hypothyroidism: Blood level abnormalities of the thyroid hormones (T3 and T4) show up on standard diagnostic tests. Hypothyroidism can be primary, where it has to do with the thyroid gland (Hashimoto's or radioactive destruction of the gland, for instance) or secondary, where the pituitary gland is not secreting enough of the hormone that stimulates the thyroid to produce thyroid hormones, or tertiary, where the hypothalamus is not producing the hormone (TRH, or Thyrotropin-releasing hormone) that causes the pituitary to secrete its thyroid stimulating hormone (TSH).

Dietary and Lifestyle Applications

Eat a healthy diet. Avoid processed and refined foods. Consume foods high in iodine (fish, kelp, dulse, vegetables and potatoes), B vitamins (whole grains, nuts and seeds) and vitamin A (dark, green and yellow vegetables). Limit foods that slow down thyroid function including broccoli, brussel sprouts, cabbage, spinach, kale, peaches and pears. (Burton Goldberg Group, *Alternative Medicine: The Definitive Guide*, Future Medicine Publishing, Inc. WA, 1993 p. 937). Limit foods that prevent utilization of iodine (turnips, cabbage, mustard, soybean, peanuts, pine nuts and millet (when cooked these foods are inactivated)). These foods contain goitrogens, which prevent the utilization of iodine. (Murray, M. and Pizzorno, J. *Encyclopedia of Natural Medicine*, Prima Publishing, CA, 1991 p. 389). Use iodized salt. Mercury interferes with thyroid hormones. Drink plenty of filtered water, and eat organic foods high in fiber and detoxifying nutrients, such as broccoli, cauliflower, cabbage, etc. Estrogen-containing medications (the pill, tranquilizers) will decrease T-3 uptake. Avoid antihistamines and sulfa drugs which aggravate the problem. Thyroid medication will increase bone loss significantly, thus a calcium supplement should be taken to counteract bone loss. Mild exercise is important. It stimulates the thyroid gland. Drink filtered water. Chlorine and fluoride will compete with iodine and block iodine receptor sites in the thyroid gland.

Product Recommendations

Iodine Rescue
 Thyro Plus
 Total Thyroid #2

Nutrient Recommendations

Ashwagandha
 Potassium Iodide
 Blue Flag
 Coleus Forskohlii
 Eleuthero (Siberian Ginseng)
 Ginkgo Biloba
 Gotu Kola
 Hawthorn Berries
 Larch Arabinoglactan

Vitamin B12/Folate Deficiency

Your lab results are strongly suggestive of the above consideration and is supported by:

High Analytes

LDH
MCH
MCV

Low Analytes

Hematocrit
Hemoglobin
RBC
WBC

Definition

Vitamin B-12 and folate are important, synergistic B vitamins, necessary for a variety of functions, especially neurologically related. They are both necessary for normal red blood cell formation, tissue and cellular repair, DNA synthesis, and methylation processes. The body stores 3 to 5 years worth of B-12 and several months' supply of folate in the liver, so it can take months to years for a deficiency to manifest in adults. Infants and children will show signs of deficiency more rapidly, because the ability to establish extensive reserves comes with age. Over time, a deficiency in either B-12 or folate can lead to macrocytic anemia, a condition characterized by the production of fewer, but larger red blood cells and a decreased ability to carry oxygen. Due to the anemia, patients may be weak, light-headed, and short of breath. A deficiency in B-12 can also result in varying degrees of neuropathy, nerve damage that can cause tingling and numbness in the patient's hands and feet and mental changes that range from confusion and irritability to severe dementia. Pregnant women need increased amounts of folate for proper fetal development. If a woman has a folate deficiency prior to pregnancy, it will be intensified during gestation and may lead to premature birth and neural tube birth defects, such as spina bifida, in the child. Vitamin B-12 and folate are synergistic and usually given together in supplementation. Folic acid given alone can mask a B-12 anemia.

Dietary and Lifestyle Applications

Eat a healthy diet without processed foods or refined sugars; sugar depletes B vitamins quickly. One of the best foods for a B vitamin source is calf liver. Eat foods high in folic acid: cauliflower, liver, asparagus, oranges, root vegetables, dried beans, brewer's yeast, dark green leafy vegetables (high in chlorophyll which is similar to the hemoglobin molecule), and whole grains. Since folic acid is easily destroyed by heat and light, eat fruits and vegetables fresh or with very little cooking. Sources of vitamin B-12 are found in meats, eggs, milk and milk products. Some vegetarian sources are reported to have a small amount of vitamin B-12, like tempeh, miso and soy. Eating cultured foods, such as yogurt and kefir (if not dairy sensitive), will encourage growth of friendly bacterial flora and B-12 formation. Asparagus is a good source of fructooligosaccharides which attract good bacteria to the gut. Brewer's yeast is a good source of B vitamins. Microwaving destroys even more B vitamins than cooking. Potassium-rich foods may help improve red blood cell count. They include bananas, sunflower seeds, vegetables, whole grains, and dried fruits. Exercise aerobically at least 3 times per week, 20 minutes per day.

Product Recommendations

B-12 Lozenges (Vitamin)
Total Leaky Gut
B-Complex

Nutrient Recommendations

Probiotics
Vitamin B Complex
Vitamin B-12
Folic Acid
L-Glutamine
N-Acetyl Glucosamine

Metabolic Syndrome

Your lab results are strongly suggestive of the above consideration and is supported by:

High Analytes

Glucose, Serum
Cholesterol, Total
Hemoglobin A1c
LDL Cholesterol Calc
Triglycerides

Low Analytes

HDL Cholesterol

Definition

Insulin resistance is a feature of Syndrome X; not everyone who has insulin resistance has Syndrome X, however, everyone who has Syndrome X does have insulin resistance. Syndrome X was first described by Gerald Reaven, MD, at Stanford University Medical Center. His theory is that the main characteristics of syndrome X, mainly hyperinsulinemia and insulin resistance, contribute to the secondary features of syndrome X, which include: high sugar levels, increased LDL and VLDL (the "bad" cholesterol), decreased HDL (the "good" cholesterol), elevated triglycerides, obesity and hypertension. Insulin resistance occurs when the cells lose the ability to utilize insulin correctly; sometimes the insulin receptors or the ability to mobilize receptors to the cell surface are affected. Since insulin is a fuel-regulating hormone that moves glucose into the cells for energy, insulin resistance can cause an increase in blood sugar and a decrease in available energy to the cells. Individuals with Syndrome X sometimes need 300-400% more insulin to maintain normal blood sugar levels, compared to healthy individuals.

Dietary and Lifestyle Applications

Low-fat, unrefined carbohydrate diet, i.e. mostly organic vegetables, legumes, yogurt, lean meats, and whole fruits (as opposed to juices) like apples and pears, that have a lower glycemic index (don't turn to sugar as quickly), which result in a more sustained release of insulin. Breads and potatoes are fairly high glycemic foods. Insulin resistance results from poor dietary and lifestyle habits that wear down the body's ability to take insulin into the cell, leaving in the bloodstream to elevate blood levels, but not allowing it in the cell where it can be utilized. Good dietary habits and exercise have been demonstrated to reverse many cases of Type 2 diabetes by increasing insulin sensitivity. Losing weight also increases sensitivity. Regular exercise is suggested (at least three days per week). Avoid fructose corn sweeteners. Avoid artificial sweeteners, such as aspartame (NutraSweet, Equal), and diet sodas. Avoid processed grains.

Product Recommendations

Complete Gluco-D
Carbo-Met
NAC Renew

Nutrient Recommendations

Acetyl-L-Carnitine
Pancreas Glandular
B Vitamins
Turmeric
Vanadyl Sulfate
Zinc
Benfotiamine
Chromium
Cinnamon
Alpha Lipoic Acid
Fenugreek
Gymnema Sylvestre
Minerals

Thyroid Hypofunction-Primary

Your lab results are strongly suggestive of the above consideration and is supported by:

High Analytes

Cholesterol, Total
Triglycerides

Low Analytes

T3 Uptake
Thyroxine (T4)

Definition

Hypothyroidism is defined as low thyroid function, due to a deficiency of thyroid hormone. There are two classifications of hypothyroidism:

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Dietary and Lifestyle Applications

Eat a healthy diet. Avoid processed and refined foods. Consume foods high in iodine (fish, kelp, dulse, vegetables and potatoes), B vitamins (whole grains, nuts and seeds) and vitamin A (dark, green and yellow vegetables). Limit foods that slow down thyroid function including broccoli, brussel sprouts, cabbage, spinach, kale, peaches and pears. (Burton Goldberg Group, Alternative Medicine: The Definitive Guide, Future Medicine Publishing, Inc. WA, 1993 p.

937). Limit foods that prevent utilization of iodine (turnips, cabbage, mustard, soybean, peanuts, pine nuts and millet (when cooked these foods are inactivated)). These foods contain goitrogens, which prevent the utilization of iodine. (Murray, M. and Pizzorno, J. Encyclopedia of Natural Medicine, Prima Publishing, CA, 1991 p. 389). Use iodized salt. Mercury interferes with thyroid hormones. Drink plenty of filtered water, and eat organic foods high in fiber and detoxifying nutrients, such as broccoli, cauliflower, cabbage, etc. Estrogen-containing medications (the pill, tranquilizers) will decrease T-3 uptake. Avoid antihistamines and sulfa drugs which aggravate the problem. Thyroid medication will increase bone loss significantly, thus a calcium supplement should be taken to counteract bone loss. Mild exercise is important. It stimulates the thyroid gland. Drink filtered water. Chlorine and fluoride will compete with iodine and block iodine receptor sites in the thyroid gland.

Product Recommendations

Iodine Rescue
Thyro Plus
Total Thyroid #2

Nutrient Recommendations

Ashwagandha
Potassium Iodide
Blue Flag
Coleus Forskohlii
Eleuthero (Siberian Ginseng)
Ginkgo Biloba
Gotu Kola
Hawthorn Berries
Larch Arabinoglactan

Anemia-Iron Deficiency

Your lab results are strongly suggestive of the above consideration and is supported by:

Low Analytes

Hemoglobin

Definition

Anemia involves a reduction in the amount of hemoglobin in the blood and/or a decrease in red blood cells, which are essential to transport oxygen from the lungs to the tissues in exchange for carbon dioxide. This reduction in oxygen results in decreased energy and inability to perform normal daily activities. The lack of vitamins and minerals can produce anemia, the most common of which are iron, folic acid and vitamin B-12. Iron deficiency is a common cause of anemia, which has been found to affect between 30 to 50% of the population in developed countries. Iron is needed to make hemoglobin (the part of the red blood cell that carries oxygen in the blood). When folic acid or vitamin B-12 deficiency occur, enlarged red blood cells are also detected, which is referred to as 'macrocytic anemia.' Folic acid deficiency anemia is the most common anemia in the world. Vitamin B-12 deficiency anemia is also known as 'pernicious anemia,' which occurs in individuals with an inherited inability of the stomach to secrete intrinsic factor (a factor necessary for the absorption of vitamin B-12 in the intestines). It is important to determine the type of anemia, because supplemental iron can have unhealthy results if one is not deficient in iron, and folate supplementation can mask a B-12 deficiency anemia.

Dietary and Lifestyle Applications

One of the best foods for any type of anemia is calf liver. It is rich in iron and B-vitamins. Eat a diet rich in whole, unprocessed foods (high fiber), using organic whenever possible. Work in lots of darkly colored vegetables high in nutrients, and eat organic lean meats. Tea, coffee, red wine, phytate (phytic acid), found in unleavened wheat products such as matzoh, pita, and some rye crackers, cereal grains, wheat germ, oats, nuts, seeds, cacao powder, vanilla extract, beans, egg yolk, soy and many other foods. Whole wheat bran, independent of its phytate content, has been shown to inhibit iron absorption. Phytate is the salt form of IP-6, so IP-6 supplements can inhibit iron absorption, as well as oxalic acid containing foods such as spinach, Swiss chard, beets, chocolate, kale and rhubarb. Meat, poultry, fish, and vitamin C-containing foods (citrus fruit, kiwi, oranges, tomatoes) enhance iron absorption. Calcium from food and supplements interferes with heme-iron absorption. Mild aerobic exercise daily is important to enhance oxygen uptake.

Product Recommendations

Hemo-Lyph
C-1000-TR
Hypo-D
Greens Renew

Nutrient Recommendations

Pancreatin
Vitamin C
Hcl

Iron Peptonate
Liver Glandular

Hemochromatosis

Your lab results are strongly suggestive of the above consideration and is supported by:

High Analytes

Ferritin, Serum
AST (SGOT)

Definition

Hemochromatosis is a disorder of iron metabolism characterized by excess deposition of iron in the tissues, especially in the liver and pancreas, and by bronze pigmentation of the skin, cirrhosis, diabetes mellitus, and associated bone and joint changes. The hereditary form is called idiopathic (classic) hemochromatosis. The exogenous forms are observed in patients who have received transfusions and/or iron compounds over a prolonged period, resulting in iron overload. It is also referred to as bronze or bronzed diabetes, iron storage disease, and Recklinghausen-Applebaum disease. Hemosiderosis indicates an increase in iron stores without associated tissue trauma. The onset of hemochromatosis requires a very long time in order to produce organ damage and is delayed to the age of 40 to 60. It is seen in males earlier than in menstruating females.

Dietary and Lifestyle Applications

Avoid foods high in iron: cereals fortified with iron, Farina, Raisin Bran, 40% Bran, calves liver, chicken livers, kidney beans. Avoid European wines, which contain significant quantities of iron. Many foods, beverages and supplements have been shown to affect the absorption of iron. Foods, beverages and supplements that interfere with iron absorption include: Tea (including green tea), drinking green tea (*Camellia sinensis*) with meals has been shown to reduce the absorption of iron from food by about 70%. This effect may be desirable for people with iron overload diseases. Also inhibiting iron is coffee, red wine, phytate (phytic acid), found in unleavened wheat products such as matzoh, pita, and some rye crackers; wheat germ, oats, nuts, cacao powder, vanilla extract, beans and many other foods, and IP-6 supplements. Whole wheat bran, independent of its phytate content, has been shown to inhibit iron absorption. Calcium from food and supplements interferes with heme-iron absorption. Soy Protein and eggs also inhibit iron. Meat, poultry and fish increase iron absorption. Iron rich foods combined with foods high in vitamin C will increase iron absorption. Vitamin C is contraindicated in iron overload disease - vitamin C increases the absorption of minerals such as iron. Blood letting (donating blood) is one method of decreasing iron stores.

Product Recommendations

Total Chelate
Total Fiber
LV Renew

Nutrient Recommendations

Red Algae
EDTA
Garlic
Apple Pectin
Mineral Repletion

Biliary Obstruction/Calculi

Your lab results are suggestive of the above consideration and is supported by:

High Analytes

GGT
ALT (SGPT)

Definition

Gallstones are crystalline structures comprised mainly of cholesterol (80%) or calcium salts of bile pigment (20%). Usually no symptoms are present, but if the stone blocks the bile passageway (cystic duct), severe abdominal pain, nausea and vomiting may occur. Gallstones are also called calculi.

Dietary and Lifestyle Applications

Eat regularly and do not overeat. Prevention is best. Eliminate food allergies and food sensitivities, especially dairy products and eggs. Food allergies may cause the bile ducts to swell, creating bile flow problems. Do not remove fat entirely from the diet. Studies have suggested that people who diet and eat less than three grams of fat per day have a tendency to develop gallstones. (Burton Goldberg Group, *Alternative Medicine: The Definitive Guide*, Future Medicine Publishing, Inc. WA, 1993, p. 924). Consider doing a gallbladder flush. Use caution when recommending a flush because the stones may be larger than the bile duct and could cause biliary colic. See, "Liver Flush" under "Wellness Information." Carrot, beet and cucumber juice with a little garlic may be helpful. Castor oil packs are recommended. See, "Castor Oil Packs" under, "Wellness Information." Increase fiber, decrease meat and fat to increase cholesterol solubility. Fiber binds and decreases the formation of deoxycholic acid, which is a culprit in decreased cholesterol solubility.

Product Recommendations

Phos-Drops
 Calc-Acid
 Hypo-D
 GB-Plus

Nutrient Recommendations

Ox Bile Concentrate
 Pancreatin
 Phosphoric Acid
 Red Beet Root
 Russian Black Radish Root
 Acidifying Calcium; Ie Calcium Ascorbate Or Calcium Phosphate With Hcl
 Collinsonia
 Hcl
 Inositol

Liver Dysfunction

Your lab results are suggestive of the above consideration and is supported by:

High Analytes

LDH
 AST (SGOT)
 ALT (SGPT)

Definition

The liver is the main detoxification organ, as it takes most toxic substances and eliminates them by making them water-soluble. It is a storage house for vitamins and minerals, and plays an important role in the metabolism of proteins, fats and carbohydrates. Stress to the liver can cause inflammation of the liver cells. If the liver is not functioning properly, a myriad of symptoms will manifest. When the liver is not functioning optimally, instead of mobilizing fat, fat can accumulate in the liver, congesting it and causing "fatty liver". Dysfunction of the liver can cause a whole host of cascading problems.

Dietary and Lifestyle Applications

Avoid alcohol, coffee, smoking, salt, soft drinks, sugar, tea, spicy and fried foods. While on drugs, support the liver with herbs, such as milk thistle (silymarin). Drugs put a strain on the liver, which can induce hepatitis. A castor oil pack placed on the liver may be beneficial. Drink herbal teas, i.e. milk thistle, dandelion, fennel, peppermint and ginger. Others foods beneficial to the liver:

Olives and pomegranates Olives and pomegranates are sour foods that balance the liver.

Oily Nuts Most oily nuts are good for the liver if the liver is not too weak.

Rye Rye is an excellent grain for the liver.

Beets Beets build and cleanse the liver; also help discharge gallstones and kidney stones. NOTE: Peel them because the peel contains oxalic acid.

Artichokes Artichokes build the liver, as well as dark, green, leafy vegetables, such as kale, parsley, endive, and spinach; eat them lightly steamed or raw.

Vitamin A foods Apricots (dried), cantaloupe, sweet potatoes, raw chicory, raw carrot, carrot juice and Gazpacho soup.

Purple (Concord) grape Purple (Concord) grapes clean the liver--grapes and their juice have tartaric acid, which is good for production of liver secretions. Use only organic produce; grapes are one of the most heavily sprayed produce items.

Burdock Burdock is a very medicinal food to be used only if liver problems exist because it is very drying and contracting. Lemon, dandelion greens, black radish, saffron, grapefruit, parsnips, garlic, onion, horseradish, limes and wheat germ are also specifically helpful. Fatty acids and lecithin in soy products, pumpkin seeds, sesame seeds, chia seeds (especially good for the liver) and flax seeds--seeds are needed in the diet for good quality fatty acids to replace the old fat accumulation in the liver; raw seeds are better than roasted because roasted seeds overheat the liver; if seeds float in the water, they are rancid. NOTE: Sprouting seeds raise the protein content. Slow-cooked, sauted foods open up the bile duct; also good for the gallbladder. Cooked tomatoes, dairy fats and cooked oils are very detrimental to an unhealthy liver. Avoid at all costs if this is a problem. People with liver problems may crave sour foods, citrus foods and tomatoes. Avoid fried foods. They burden the liver. Avoid constipating foods, i.e. cheese, processed, low-fiber foods. The liver has to work twice as hard if the bowels are constipated and not eliminating toxins. Drink at least 8 glasses of filtered water daily. Lemon in water is very purifying for the liver. Avoid overeating. This creates excess work for the liver causing liver fatigue. This inhibits the liver's ability to detoxify harmful substances properly before they enter the blood stream. Increase consumption of high potassium foods: rice and wheat bran, almonds, raisins, prunes, bananas, seeds, kelp, dulse, blackstrap molasses and brewer's yeast (if not sensitive to yeast). A diet low in fat (but containing the good fats) and rich in dietary fiber, particularly the soluble fibers, such as beans, peas, lentils, oats and barley (unless gluten sensitive), will promote increased bile secretion from the liver. Eat whole, unprocessed foods (vegetables, fruits, whole grains, legumes, nuts and seeds).

Organic foods will help maximize liver function and take off the stress of having to detoxify what you are putting into the body. Reduce saturated fat - increases risk of developing fatty liver infiltration resulting in diminished bile flow. NOTE: Hydrogenated fats, or trans-fatty acids, act like saturated fats in the body. Read the ingredient list on labels to avoid hydrogenated fats as much as possible. Tomato juice (unless sensitive to night shades) mixed with 8 ounces of freshly prepared beet juice several times per day is beneficial for liver function.

Product Recommendations

Complete Glutathione
Lipotrophic-Plus
GB-Plus
Total Leaky Gut
Total Probiotics (60)
Hypo-D
LV Renew

Nutrient Recommendations

Selenium
Choline
Alpha Lipoic Acid
Lecithin
Liver Glandular
Milk Thistle
N-Acetyl Cysteine

Suppressed Bone Marrow Production

Your lab results are suggestive of the above consideration and is supported by:

Low Analytes

Hematocrit
Hemoglobin
RBC
WBC

Definition

Bone marrow is the flexible tissue found in the interior of bones that produces new blood cells. Suppression of bone marrow production results in low levels of platelets, red blood cells, and white blood cells. Suppression is most likely caused by disease or chemotherapy (or radiation).

Dietary and Lifestyle Applications

Eat a healthy diet that supports and builds a good immune system. One containing organic fresh vegetables, fruits, lean meats, whole grains, nuts and seeds. Avoid refined and processed foods, salt, saturated fats, sugar, caffeine, chocolate, alcohol and tobacco. Increase intake of good oils (i.e. fish oil, walnut oil, olive oil, etc.) and fiber. Focus especially on cruciferous vegetables like broccoli, cauliflower, cabbage, etc., and their sprouts, which are high in the nutrients that build the immune system. Cabbage and garlic are especially helpful, along with spices like turmeric (curcumin). Darkly colored fruits (and veggies) are the highest in antioxidants and proanthocyanidins, nutrients that are super-bioflavonoids. If not allergic to dairy, cultured organic yogurts can provide beneficial gut bacteria (probiotics), and probiotics help strengthen the immune system. Mild aerobic exercise daily increases circulation, lymphatic drainage, oxygen flow, and toxin release, and contributes to a healthy immune system.

Product Recommendations

Spleeno-Lyph
Glycan Renew

Nutrient Recommendations

Astragalus
Spleen Glandular
Thymus Glandular
Green Tea Extract
Maitake Mushroom

Adrenal Hypofunction

Your lab results are suggestive of the above consideration and is supported by:

High Analytes

Cholesterol, Total
Triglycerides

Definition

Low adrenal function

Dietary and Lifestyle Applications

Check for thyroid and/or pituitary imbalances. In any chronic inflammatory condition (any "itis"), hypoadrenia needs to be addressed. Eat a healthy diet, with no refined carbohydrates. Caffeine, the bromine in tea and chocolate all cause sodium excretion and interfere with the sodium/potassium balance, thus should be avoided. A diet rich in potassium foods (bananas, potatoes, dried fruit and asparagus) is suggested. Avoid alcohol, smoking and environmental toxins when possible. Relaxation exercises and de-stressing activities are a must. Biofeedback, meditation, massage and yoga are suggested. Moderate exercise is beneficial.

Product Recommendations

DSF Formula (60)
Adreno Plus

Nutrient Recommendations

B Vitamins
Adrenal Glandular
Dulse
Eleuthero (Siberian Ginseng)
Fo-Ti
Ginkgo Biloba
Gotu Kola
Grape Seed Extract
Korean Ginseng
L-Tyrosine

Copper Deficiency

Your lab results are mildly suggestive of the above consideration and is supported by:

High Analytes
MCV

Low Analytes

Hematocrit
Hemoglobin
Thyroxine (T4)

Definition

Copper deficiency is an inadequate amount of copper, most likely from not getting enough in the diet. Copper is a trace mineral responsible for processes such as energy metabolism, production of hemoglobin and the formation of connective tissue. Copper is an essential mineral, but like iron, has adverse effects in excess.

Dietary and Lifestyle Applications

Eat copper containing foods: shellfish, (especially clams and oysters), lobster; beef, veal, liver, lamb, duck, grape leaves, seaweed, mushrooms. Eat a healthy diet containing whole grains, organic, fresh fruits and vegetables, lean meats, nuts and seeds. Avoid refined and processed foods, salt, saturated fats, sugar, caffeine and chocolate. Increase intake of good oils (i.e. fish oil, walnut oil, olive oil, etc.) and fiber. Zinc binds to the same protein as copper and should not be taken in excess when correcting a copper deficiency.

Product Recommendations

Core Level Liver (60)

Nutrient Recommendations

Copper
Liver Glandular

Fatty Liver-Early Stage

Your lab results are mildly suggestive of the above consideration and is supported by:

High Analytes
Glucose, Serum
Cholesterol, Total
LDL Cholesterol Calc
Triglycerides

Low Analytes

HDL Cholesterol

Definition

The liver is the main detoxification organ, as it takes most toxic substances and eliminates them by making them water-soluble. It is a storage house for vitamins and minerals, and plays an important role in the metabolism of

proteins, fats and carbohydrates. Stress to the liver can cause inflammation of the liver cells. If the liver is not functioning properly, a myriad of symptoms will manifest. When the liver is not functioning optimally, instead of mobilizing fat, fat can accumulate in the liver, congesting it and causing "fatty liver". Dysfunction of the liver can cause a whole host of cascading problems.

Dietary and Lifestyle Applications

Avoid alcohol, coffee, smoking, salt, soft drinks, sugar, tea, spicy and fried foods. While on drugs, support the liver with herbs, such as milk thistle (silymarin). Drugs put a strain on the liver, which can induce hepatitis. A castor oil pack placed on the liver may be beneficial. Drink herbal teas, i.e. milk thistle, dandelion, fennel, peppermint and ginger. Others foods beneficial to the liver:

Olives and pomegranates Olives and pomegranates are sour foods that balance the liver.

Oily Nuts Most oily nuts are good for the liver if the liver is not too weak.

Rye Rye is an excellent grain for the liver.

Beets Beets build and cleanse the liver; also help discharge gallstones and kidney stones. NOTE: Peel them because the peel contains oxalic acid.

Artichokes Artichokes build the liver, as well as dark, green, leafy vegetables, such as kale, parsley, endive, and spinach; eat them lightly steamed or raw.

Vitamin A foods Apricots (dried), cantaloupe, sweet potatoes, raw chicory, raw carrot, carrot juice and Gazpacho soup.

Purple (Concord) grape Purple (Concord) grapes clean the liver--grapes and their juice have tartaric acid, which is good for production of liver secretions. Use only organic produce; grapes are one of the most heavily sprayed produce items.

Burdock Burdock is a very medicinal food to be used only if liver problems exist because it is very drying and contracting. Lemon, dandelion greens, black radish, saffron, grapefruit, parsnips, garlic, onion, horseradish, limes and wheat germ are also specifically helpful. Fatty acids and lecithin in soy products, pumpkin seeds, sesame seeds, chia seeds (especially good for the liver) and flax seeds--seeds are needed in the diet for good quality fatty acids to replace the old fat accumulation in the liver; raw seeds are better than roasted because roasted seeds overheat the liver; if seeds float in the water, they are rancid. NOTE: Sprouting seeds raise the protein content. Slow-cooked, sauted foods open up the bile duct; also good for the gallbladder. Cooked tomatoes, dairy fats and cooked oils are very detrimental to an unhealthy liver. Avoid at all costs if this is a problem. People with liver problems may crave sour foods, citrus foods and tomatoes. Avoid fried foods. They burden the liver. Avoid constipating foods, i.e. cheese, processed, low-fiber foods. The liver has to work twice as hard if the bowels are constipated and not eliminating toxins. Drink at least 8 glasses of filtered water daily. Lemon in water is very purifying for the liver.

Avoid overeating. This creates excess work for the liver causing liver fatigue. This inhibits the liver's ability to detoxify harmful substances properly before they enter the blood stream. Increase consumption of high potassium foods: rice and wheat bran, almonds, raisins, prunes, bananas, seeds, kelp, dulse, blackstrap molasses and brewer's yeast (if not sensitive to yeast). A diet low in fat (but containing the good fats) and rich in dietary fiber, particularly the soluble fibers, such as beans, peas, lentils, oats and barley (unless gluten sensitive), will promote increased bile secretion from the liver. Eat whole, unprocessed foods (vegetables, fruits, whole grains, legumes, nuts and seeds). Organic foods will help maximize liver function and take off the stress of having to detoxify what you are putting into the body. Reduce saturated fat - increases risk of developing fatty liver infiltration resulting in diminished bile flow. NOTE: Hydrogenated fats, or trans-fatty acids, act like saturated fats in the body. Read the ingredient list on labels to avoid hydrogenated fats as much as possible. Tomato juice (unless sensitive to night shades) mixed with 8 ounces of freshly prepared beet juice several times per day is beneficial for liver function.

Product Recommendations

Complete Glutathione
Lipotrophic-Plus
GB-Plus
Total Leaky Gut
Total Probiotics (60)
Hypo-D
LV Renew

Nutrient Recommendations

Selenium
Choline
Alpha Lipoic Acid
Lecithin
Liver Glandular
Milk Thistle
N-Acetyl Cysteine

Vitamin C Need

Your lab results are mildy suggestive of the above consideration and is supported by:

Low Analytes

Hematocrit
 Hemoglobin
 RBC
 WBC

Definition

Vitamin C is an essential element for various processes in the body, but its main function is the role it plays in building connective tissue/collagen. A frank deficiency of vitamin C causes scurvy. An insufficiency causes many problems to arise. One of the biggest problems of vitamin C insufficiency is that fibrinogen will increase to abnormal levels. Fibrinogen is involved in the clotting process, however abnormal levels contribute to the inflammatory response, with eventual tissue destruction. Vitamin C helps iron absorption, and is needed for the synthesis of carnitine, tyrosine and neurotransmitters.

Dietary and Lifestyle Applications

Eat a healthy diet that contains a lot of vitamin C containing foods. Include organic fresh vegetables, fruits, whole grains, nuts and seeds. Fruits, especially citrus, are known for their high content of vitamin C, however red peppers are very high in C, too. Avoid refined and processed foods, salt, saturated fats, sugar, caffeine, chocolate, alcohol and tobacco. Smoking depletes vitamin C so rapidly that the RDA is higher for smokers than it is for non-smokers. Increase intake of good oils (i.e. fish oil, walnut oil, olive oil, etc.) and fiber. Avoid any food allergens. Focus especially on cruciferous vegetables like broccoli, cauliflower, cabbage, etc., and their sprouts, which are high in vitamin C and other healthful nutrients. Refrain from using fruit juices as the main source of vitamin C, they are high in fruit sugar; the whole fruit is much lower on the glycemic index. If not allergic to dairy, cultured organic yogurts can provide beneficial gut bacteria (probiotics) which aid in nutrient assimilation. Mild aerobic exercise daily increases circulation, lymphatic drainage, oxygen flow, and toxin release, and contributes to a healthy immune system.

Product Recommendations

C-1000-TR
 Total Leaky Gut
 Phyto Renew

Nutrient Recommendations

Probiotics
 Vitamin C
 L-Glutamine
 N-Acetyl Glucosamine

Anemia-Hemolytic

Your lab results are mildly suggestive of the above consideration and is supported by:

High Analytes

LDH

Definition

Hemolytic anemia is anemia due to hemolysis, the abnormal breakdown of red blood cells (RBCs) either in the blood vessels (intravascular hemolysis) or elsewhere in the body (extravascular). It has numerous possible causes, ranging from relatively harmless to life-threatening. The general classification of hemolytic anemia is either inherited or acquired.

Dietary and Lifestyle Applications

Eat a healthy diet containing whole grains, organic, fresh fruits and vegetables (high in bioflavonoids and antioxidants that protect the RBC lipid cell membrane), lean meats and nuts and seeds, which are high in vitamin E. Avoid refined and processed foods, salt, saturated fats, sugar, caffeine and chocolate. Increase intake of good oils (i.e. fish oil, walnut oil, olive oil, etc.) and fiber. One to two teaspoons of high quality wheat germ oil is helpful, and very high in vitamin E. There is not much gluten to speak of in wheat germ oil, but those who are gluten intolerant might want to exercise caution. Potassium-rich foods may help improve red blood cell count. They include bananas, sunflower seeds, vegetables, whole grains, and dried fruits.

Product Recommendations

Super-Ox
 E-Tocotrienols
 Spleeno-Lyph

Nutrient Recommendations

Spleen Glandular
 Tocotrienols
 Vitamin C
 Vitamin E
 Grape Seed Extract
 Antioxidants

N-Acetyl Cysteine

Infection: Chronic Viral

Your lab results are mildly suggestive of the above consideration and is supported by:

Low Analytes

WBC

Definition

A viral infection is the colonization of a host organism by microscopic organisms known as viruses. A viral infection can be acute, or chronic.

Dietary and Lifestyle Applications

The biggest key to fighting infection is prevention, and building the body's immune system; however, good dietary and lifestyle habits are also helpful during the infectious process. Eat a healthy diet that supports and builds a good immune system. One containing organic fresh vegetables, fruits, lean meats, whole grains, nuts and seeds. Avoid refined and processed foods, salt, saturated fats, sugar, caffeine and chocolate. Increase intake of good oils (i.e. fish oil, walnut oil, olive oil, etc.) and fiber. Focus especially on cruciferous vegetables like broccoli, cauliflower, cabbage, etc., and their sprouts, which are high in the nutrients that build the immune system. Garlic and onions are good immune boosting foods, along with spices like turmeric (curcumin) and rosemary. Darkly colored fruits (and veggies) are the highest in antioxidants and proanthocyanidins, nutrients that are super-bioflavonoids. If not allergic to dairy, cultured organic yogurts can provide beneficial gut bacteria (probiotics), and probiotics help strengthen the immune system. Mild aerobic exercise daily increases circulation, lymphatic drainage, oxygen flow, and toxin release, and contributes to a healthy immune system.

Product Recommendations

Total VR-X (60)

Complete Immuno D3

Virex (Homeopathic)

Glycan Renew

Nutrient Recommendations

Olive Leaf

Quercetin

Astragalus

Rhus Tox

Sulforaphane

Vitamin C

Vitamin D3

Echinacea

Elderberry

Glycerol Monolaurate

Homeopathic Ingredients

Arsenicum Album

Nux Vomica

Abnormal Bleeding

Your lab results are mildly suggestive of the above consideration and is supported by:

High Analytes

RDW

Low Analytes

Hemoglobin

Definition

Internal bleeding is bleeding occurring inside the body. It can be mild, like when the bleeding causes a bruise, or it can be a cause for concern, such as when drugs wear away at the intestinal lining and cause bleeding, or it can be very serious, such as a popped blood vessel from high blood pressure, or when a trauma or illness causes a major hemorrhage. Internal bleeding can compress organs and cause their dysfunction (for instance hematoma), or cause hemorrhagic shock/death.

Dietary and Lifestyle Applications

Eat a healthy diet containing organic, fresh fruits and vegetables, lean meats, whole grains, nuts and seeds. Avoid refined and processed foods, salt, saturated fats, sugar, caffeine and chocolate. Increase intake of good oils (i.e. fish oil, walnut oil, olive oil, etc.) and fiber. Drink lots of filtered water, at least 8 glasses per day. Exercise aerobically at least 3 times a week for at least 20 minutes each time. Yoga or meditation classes are helpful for high blood pressure. If the internal bleeding is in the gastrointestinal tract and due to cellular damage from drugs, etc., then aloe vera juice and foods high in probiotics (organic yogurt) or glutamine (regenerates intestinal cells) can be helpful. Food sources of glutamine include cabbage, beets, beef, chicken, fish, beans, and dairy products. Don't

consume dairy if allergic, or inflammation will result.

Product Recommendations

Total FLM
Total Leaky Gut
Total Probiotics (60)

Nutrient Recommendations

Probiotics
Quercetin
Turmeric
Boswellia
Ginger
Jerusalem Artichoke
L-Glutamine
N-Acetyl Glucosamine

Biliary Stasis/Insufficiency

Your lab results are mildly suggestive of the above consideration and is supported by:

High Analytes

Cholesterol, Total
GGT

Definition

Biliary dysfunction is usually caused by problems with the gallbladder (stores bile) or the bile duct (carries bile to the small intestine). Biliary stasis, or cholestasis is a condition caused by rapidly developing (acute) or long-term (chronic) interruption in the excretion of bile (a digestive fluid that helps the body process fat).

Dietary and Lifestyle Applications

Carrot, beet and cucumber juice with a little garlic may be helpful. Consider doing a gallbladder flush. Use caution when recommending a flush because the stones may be larger than the bile duct and could cause biliary colic. See, "Liver Flush" under, Wellness Information." Eat regularly and do not overeat. Do not remove fat entirely from the diet. Studies have suggested that people who diet and eat less than three grams of fat per day have a tendency to develop gallstones. (Burton Goldberg Group, Alternative Medicine: The Definitive Guide, 1993, Future Medicine Publishing, Inc. WA, p. 924). Eat only good fats such as the omega 3's. Increase fiber, and decrease meat and fat to increase cholesterol solubility. Fiber binds and decreases the formation of deoxycholic acid, which is a culprit in decreased cholesterol solubility. Eliminate food allergies and food sensitivities, especially dairy products and eggs. Food allergies may cause the bile ducts to swell, creating bile flow problems. Prevention is best.

Product Recommendations

GB-Plus
Hypo-D
Lipotrophic-Plus
LV Renew
Methyl Renew

Nutrient Recommendations

Ox Bile Concentrate
Pancreatin
Red Beet Root
Russian Black Radish Root
Choline
Collinsonia
Hcl
Lecithin
Liver Glandular

Parasites-Intestinal

Your lab results are mildly suggestive of the above consideration and is supported by:

High Analytes

MCH
MCV

Definition

Two-phase life cycle:

Cyst Closed sacs that can be transmitted easily and are resistant to destruction by digestive juices.

Trophozite Mobile and active stage of a parasite. Parasites are single-celled organisms (protozoa), worms or insects that feed off another host organism. **Types of Parasites:**

Cestoda Tapeworms; largest parasites that attach to the intestinal wall and grow new worms. Tapeworms get their nourishment from partially digested foods in the host. Tapeworm infestation can occur by eating undercooked beef, pork or fish or by contact with dog fleas.

Nematoda Multi-cellular organisms known as worms; they multiply by producing eggs (ova or larvae). a) Roundworms - look like earthworms. b) Pinworms - most common in US; found mainly in children. Pinworms lay eggs outside the anus. c) Hookworms - found in moist soil. d) Trichinella - contamination is due to eating partially uncooked pork.

Trematoda Flukes, which are flatworms.

Protozoa Single-celled organisms that cannot be seen by the naked eye and can destroy tissue of the host organism. a) Giardia Lamblia - leading cause of parasitic infections in the US; found in contaminated water and can cause traveler's diarrhea; correlation found with decreased secretory IgA and giardiasis. b) Cryptosporidium - found mainly in animals, but has been identified in human stools. c) Trichomonas Vaginalis - sexually transmitted; causes foul-smelling vaginal discharge and inflammation. d) Entamoeba histolytic - transmitted by fecally contaminated food and/or water. It causes dysentery and mainly affects the lungs, liver, brain and heart. e) Blastocystis hominis - commonly detected in the stools.

Dietary and Lifestyle Applications

A good diet is essential. Avoid raw, uncooked meats and fish. Soak all vegetables in salt water (1 T. per 5 cups water) for 30 minutes, or use a good organic food wash. Eliminate sugar, coffee and dairy products. Taking lemon juice or bitters before eating stimulates Hcl production, and Hcl provides the right acidic environment for the prevention of parasitic invasion. Drink filtered water, especially when traveling. Pomegranate juice may be helpful against tapeworms. Ground pumpkin seeds aid in parasite elimination, as well as oregano oil and proteolytic enzymes (bromelain in pineapple and papain from papaya). Garlic can be used as a vermifuge. A healthy immune system is of primary importance in preventing parasitic infection. Maintain good hygiene. Always wash hands before eating, after handling diapers, playing with pets or using the bathroom. Also, always wash your hands and utensils after handling raw meats and fish. Always check ileocecal valve involvement.

Product Recommendations

Total Para
Hypo-D
Total Multimune

Nutrient Recommendations

Artemisia
Oregano Oil
Pancreatin
Astragalus
Thymus Glandular
Black Walnut
Bromelain
Grapefruit Seed Extract
Green Tea Extract
Hcl
Maitake Mushroom

Anterior Pituitary/Secondary Thyroid Hypofunction

Your lab results are mildly suggestive of the above consideration and is supported by:

High Analytes

Cholesterol, Total
Triglycerides

Low Analytes

TSH

Definition

The pituitary gland is known as the, "master gland," and regulates the functions of the other endocrine glands. It makes and/or stores most of the signalling hormones that act on the other glands to secrete their respective hormones. It is located at the base of the brain and helps regulate growth. The hypothalamus regulates the pituitary gland. If the pituitary gland is not functioning properly, a myriad of endocrine imbalances can occur. For instance, pituitary malfunction can cause secondary thyroid hypofunction.

Dietary and Lifestyle Applications

Avoid or reduce exposure to electromagnetic fields, including computer terminals, microwave ovens, cell phones, power lines and electric blankets. Take daily walks in the sunshine. Decrease stress in your life. Practice relaxation exercises. Eat a whole foods diet.

Product Recommendations

Pit-Lyph Whole
Total Thyroid #2
Complete Hi-Potency Omega-3 Liquid
Complete Omega-3 Co-Factors

Nutrient Recommendations

Ashwagandha
Pituitary Glandular
Coleus Forskohlii
Eleuthero (Siberian Ginseng)
Larch Arabinoglactan