

HELLENBRAND RABIDEAUX CHIROPRACTIC

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NUTRITION EVALUATION: 10/26/2023

PATIENT INFORMATION

Jane Doe
507 W Main St.
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6088495550
info@hrcwaunakee.com
Sex: Female
Birth Date: 01/01/1966
Age: 57
Blood Type: A+

DATA USED FOR ANALYSIS

Vitals	10/11/2023
PSS	10/11/2023
Medication	10/11/2023
Stool	04/12/2023
Blood	10/18/2023
Hair	10/19/2023

VITALS

Height: 5'5"
Weight: 140
Blood Pressure: 139 / 95
O2 Level: 93%
Heart Rate: 89

SAMPLE REPORT

PRIMARY SYMPTOMS

1. Hypercholesterolemia (High Cholesterol) E78.0
2. Hypertension (High Blood Pressure) I10
3. Tachycardia (High Heart Rate) R00.0
4. Diabetes Mellitus E11.9

PRESENTING SYMPTOMS

Diabetes Mellitus E11.9 • Hypercholesterolemia (High Cholesterol) E78.0 • Hypertension (High Blood Pressure) I10 • Tachycardia (High Heart Rate) R00.0 • Had childhood vaccinations • Appendix removed • Family history of Cancer • Family history of Heart Disease • Exaggerated Hangover Symptoms • Energy level is worse than 5 years ago • Sleeps less than 6 hours per night • Somewhat Overweight • Craves Sugars/starches • Drinks less than 8 glasses of water per day • Had 4 alcoholic drinks in one day less than 3 months ago • Drinks caffeinated coffee • Drinks caffeinated pop/soda • Amalgam dental fillings • Drinks beverages from a can • Home has city water • Home pipes are

copper • Tick exposure • Uses cast iron cookware • Uses hair coloring or bleach • Brain Fog • Difficulty falling asleep • Difficulty staying asleep • Poor memory • Too little sleep • Cold feet • Cold hands • High blood pressure • Tendency of High Blood Pressure • Frequently feels cold • 3 or less bowel movements per week • Abdominal gas • Acid reflux • Belching and burping after eating • Bloating after eating • Has constipation • Indigestion in 2 hours or more after meals • Tends to constipation • Upset stomach • Uses laxatives • Bitter taste in the mouth in the morning • Frequent fever blisters • Frequent sore throats • Have had root canals • Tongue has grooves or fissures • Tongue is coated • Frequent headaches • Frequent muscle soreness • Joint pain • Joint stiffness • Low back pain • Muscle pain • Pain between the shoulders • Rheumatoid Arthritis • Problems with Eczema • Frequent bladder infections • Frequent urination, female • Abnormal cycle >29 days and/or <26 days • Breast Fibroids • Excessive menstrual flow • Menstrual cramps • Retains fluid during periods

PRIMARY FINDINGS SUGGESTIVE OF

- Possible Cardiovascular Effect
- Gastrointestinal Dysfunction
- Vitamin D Deficiency
- Possible Lactate Dehydrogenase Deficiency
- Anemia and Possible Hemochromatosis
- Noted Blood Values
- Noted Hair Values
- Diabetic Factors
- Low Minerals
- Inflammation of Liver
- Thyroid Considerations
- Possible Infection and/or Inflammation
- High Hair Cadmium
- Stool Findings

The purpose for this nutrition and lifestyle program is to create an optimum environment in which your body can heal and repair itself. This is achieved by eliminating foods and toxins, which adversely affect the body, and by providing nutrients that the body may be lacking.

MEDICATIONS

- Acetaminophen - Occasional.
- Glucophage - 6 months - 2 years.
- Naproxen Oral - 6 months - 2 years.
- Zetia - More than 2 years.
- Diflucan - 6 months - 2 years.
- Lipitor - Less than 6 months.
- Prilosec - More than 2 years.

SIDE EFFECTS OF MEDICATIONS

- **Acetaminophen** (Otherwise known as Tylenol) is indicated for use in treating minor aches and pains for pain/arthritis & Panadol.
Side Effects: hepatitis; hives; decreased blood platelets; decreased white blood cells; discolored spots and small elevations of the skin.
Possible Nutrients Depleted: Glutathione.

- **Fluconazole Oral**(Otherwise Known As: Diflucan) is used to treat fungal and yeast

infections.

Side Effects: nausea; vomiting; diarrhea; stomach pain; headache; dizziness; and hair loss.

Possible Nutrients Depleted: Magnesium and Potassium.

- **Glucophage** (Otherwise known as Metformin) is indicated as an adjunct to diet to lower blood glucose.
Side Effects: diarrhea; nausea; vomiting; abdominal bloating; flatulence; anorexia; unpleasant or metallic taste; rash/dermatitis; & subnormal serum vitamin B12 levels.
Possible Nutrients Depleted: Coenzyme Q10, Magnesium, Folic Acid, Vitamin B12 and B1.
- **Lipitor (also known as Atorvastatin)** is used to treat cholesterol problems.
Side Effects: liver dysfunction; adrenal failure; diffused muscle pain; muscle tenderness; weakness; malaise, fever; myopathy; muscle disease; edema; digestive problems; gastritis; colitis; vomiting; ulcers; bleeding gums; bleeding ulcers; hepatitis, pancreatitis; gall bladder disease; asthma; decreased libido; leg cramps; bursitis; itching; alopecia; dry skin; acne; cystitis; hematuria; kidney stone; breast tenderness; various hemorrhage; loss of taste; palpitations; migraines; arrhythmia; and gout.
Possible Nutrients Depleted: Vitamin A, Vitamin D, Vitamin E, Vitamin K, Vitamin B12, Calcium, Folic Acid, Iron, Magnesium, Potassium, and CoQ10.
- **Naproxen Oral** (Otherwise known as Anaprox & Naprosyn) is used to relieve pain and inflammation associated with various conditions.
Side Effects: constipation; heartburn; abdominal pain; nausea; dyspepsia; diarrhea; stomatitis; headache; dizziness; drowsiness; lightheadedness; vertigo; skin eruptions; ecchymosis; sweating; purpura; tinnitus; hearing disturbances; visual disturbances; edema; dyspnea; palpitations; thirst; abnormal function liver tests; colitis; gastrointestinal bleeding and/or perforation; hematemesis; jaundice; pancreatitis; melena; vomiting; glomerular nephritis, hematuria; hyperkalemia; interstitial nephritis; nephrotic syndrome; renal disease; renal failure; renal papillary necrosis; agranulocytosis; eosinophilia; granulocytopenia; leukopenia; thrombocytopenia; depression; dream abnormalities; inability to concentrate; insomnia; malaise; myalgia; muscle weakness; alopecia; photosensitive dermatitis; urticaria; skin rashes; hearing impairment; congestive heart failure; eosinophilic pneumonitis; anaphylactic reactions; angioneurotic edema; menstrual disorders; chills and fever; aplastic anemia; hemolytic anemia; aseptic meningitis; cognitive dysfunction; epidermal necrolysis; erythema multiforme; Steven-Johnson syndrome; non-peptic gastrointestinal ulceration; ulcerative stomatitis; vasculitis; hyperglycemia; hypoglycemia.
Possible Nutrients Depleted: Folic Acid, Iron.
- **Prilosec** (Otherwise known as Omeprazole) is used to treat acid related stomach and throat problems.
Side Effects: gastric tumors; cancer; and impairment of fertility; headache; diarrhea; abdominal pain; nausea; dizziness; vomiting; rash; constipation; cough; fever; pain; fatigue; malaise; chest pain; tachycardia; bradycardia; palpitation; high blood pressure; edema; elevated liver enzymes (SGOT and SGPT); hepatitis; pancreatitis; anorexia, dry mouth; hypoglycemia; weight gain; muscle cramps; muscle and joint pain; muscle weakness; depression; hallucinations; confusion; insomnia; nervousness; tremors; apathy; anxiety; vertigo; skin inflammation; toxic epidermal

necrolysis; alopecia; tinnitus; gynecomastia; and various anemia's.

Possible Nutrients Depleted: Vitamin B12, Folic Acid, Vitamin D, Calcium, Iron and Zinc.

- **Ezetimibe** (Otherwise known as Zetia) is used to help lower cholesterol.

Side Effects: acute infection of the nose; throat or sinus; gall stones; chest pains; joint pain; muscle pain; back pain; low energy; cough; diarrhea; stomach cramps; muscle disease; hepatitis; inflammation of the gall bladder; acute inflammation of the pancreas; erythema multiform; hives; rash; abnormal liver function tests; depression; decreased blood platelets; dizziness; nausea; numbness; & tingling sensations.

Possible Nutrients Depleted: Vitamin A, Vitamin D, Vitamin E, Vitamin B12, Calcium, Folic Acid, Iron, Magnesium, Potassium, and CoQ10.

INTERPRETING ALL TEST RESULTS

Your test results are color coded for ease of analysis:

Yellow = values are outside the healthy range but still within the clinical range

Red = values are outside the clinical range

Blue = values extremely higher or lower than the clinical range limits

INTERPRETING BLOOD LAB RESULTS

On the blood test results page found later in the report, you'll notice two columns on the right side of the page labeled "Healthy Range" and "Clinical Range". The clinical range is used by the medical community. Any values outside this range are indicative of a disease process. The healthy range is more narrow than the clinical range. Test values outside of the healthy range indicate results which are not as good as they should be. The tighter guidelines of the healthy range allows us to see signs of any developing diseases/conditions.

INTERPRETING HAIR LAB RESULTS

The hair analysis screening is looking for essential, nonessential and potentially toxic elements. These elements are irreversibly incorporated into growing hair. The amount of each element found in the hair is proportional to levels in other body tissues. This makes the hair analysis a suitable indirect screening for physiological excess, deficiency or maldistribution of elements in the body. All screening tests have limitations which must be taken into consideration. Scalp hair is vulnerable to external contamination by water, hair treatments and other products. The data provided by a hair analysis should be considered in conjunction with symptoms, diet analysis, occupation and lifestyle, water source, physical examination and the results of other laboratory tests. However, accepting these limitations, hair analysis can provide useful insights into the toxic load and biochemical condition of the body.

For each elevated toxic element in the hair, the most common sources of exposure are listed in the report. Due to pollution, our industrial culture and other environmental factors, it is impossible to completely eliminate your exposure to some toxic elements. However by knowing the sources of toxins elevated in your body, you can work to reduce your exposure, thus lessening the total toxic burden on your body.

DIAGNOSTIC FINDINGS

CORONARY RISK ASSESSMENT

- **Total Cholesterol:** 188
- **LDL Cholesterol:** 87
- **HDL Cholesterol:** 63
- **VLDL Cholesterol:** 18

Coronary Risk Assessment: 2.98 Probably Protected

The Total Cholesterol / HDL ratio is one method of determining coronary risk. To reduce your risk of cardiovascular problems a Total Cholesterol / HDL Ratio value below 4 is recommended. A high or very high Total Chol/HDL ratio is considered as an elevated coronary risk. The higher the ratio, the higher the coronary risk.

POSSIBLE CARDIOVASCULAR EFFECT

The Creatine Kinase (CK) is a little high. This is commonly associated with a mild breakdown of muscle and is commonly seen with exercise. Make sure the diet has sufficient high quality protein. Elevated CK can also be seen with hypothyroidism. NOTE: several medications, especially statin drugs, can cause muscle breakdown causing the CK to elevate.

This finding is supported by:

High Blood Glucose • Low Blood Phosphorus • Low Blood Total Protein • Low Blood Albumin • High Blood Creatine Kinase • High Blood SGOT (AST) • High Blood SGPT (ALT) • High Blood GGT (r-GTP) • High Blood Ferritin • Low Blood Hematocrit

This finding is associated with:

Presenting symptoms - Hypercholesterolemia (High Cholesterol) E78.0 • Hypertension (High Blood Pressure) I10 • Tachycardia (High Heart Rate) R00.0 • Energy level is worse than 5 years ago • High blood pressure • Family history of Heart Disease

Medications Taken - Lipitor • Prilosec • Naproxen Oral • Zetia

DIABETIC FACTORS

The Glucose is a little high and the Hemoglobin A1-C is high. Don't be misled by the glucose, this is still diabetes. The Hemoglobin A1-C indicates diabetes and the severity of diabetes. At this time, with the recommended vitamins and the Category 2 Diabetic Diet (found later in this report), the body should be able to regulate the glucose better to the point that the need for medication can be avoided or at least reduced. **WARNING:** If you are on medication for diabetes you should not stop your medication without contacting the doctor. Be sure and get retested. Significant change can occur within days.

This finding is supported by:

High Blood LDL Cholesterol • Low Blood Chloride • High Blood Magnesium • Low Blood Phosphorus • Low Blood Total Protein • High Blood SGPT (ALT) • High Blood GGT (r-GTP) • High Blood Ferritin • High Blood Total Cholesterol • Low Hair Chromium

This finding is associated with:

Medications Taken - Naproxen Oral

Science Based Nutrition Nutrients Recommended:

Glucose Support • Opti EPA • Vital Trace Minerals

GASTROINTESTINAL DYSFUNCTION

The Chloride is low and the A/G Ratio, Albumin, Globulin, and Total Protein are a little low. This is most likely due to poor digestion and/or low protein/high carbohydrate diet and seen in edema, malnutrition and malabsorption. Digestive enzymes with Chloride might be of benefit. Chloride, an electrolyte, is necessary for proper metabolism and digestion, especially the digestion of protein. A low Chloride is often due to loss of fluids from vomiting, diarrhea, sweating or high fevers but also drugs such as bicarbonates, corticosteroids, diuretics and laxatives can cause a loss of Chloride. Various vague symptoms of malaise or just not feeling well might occur. Chloride is regulated by the kidneys and helps control the acid and base balance in the body. Avoiding caffeine and alcohol is advised, stay well hydrated and digestive enzymes containing Chloride might be of benefit.

Many drugs or medications can cause or contribute toward any of these findings. Globulin, a type of protein, is important for a strong immune system and to fight disease. Albumin, another type of protein, helps with the transport of nutrients and is important for healing and repair. One out of every four bites of food you eat (25%) should be of a protein source, preferably more plant based protein such as seeds, nuts, beans and sprouts. Eggs and even some fish, chicken, turkey and possibly small amounts of red meat may be beneficial.

This finding is supported by:

Low Blood Albumin • High Blood SGOT (AST)

This finding is associated with:

Presenting symptoms - Tachycardia (High Heart Rate) R00.0 • Drinks less than 8 glasses of water per day • Tongue has grooves or fissures • Tongue is coated • Bitter taste in the mouth in the morning • Bloated after eating • Abdominal gas • Belching and burping after eating • Indigestion in 2 hours or more after meals • 3 or less bowel movements per week • Has constipation • Uses laxatives • Drinks caffeinated pop/soda • Tends to constipation • Craves Sugars/starches • Upset stomach • Acid reflux

Medications Taken - Lipitor • Prilosec • Naproxen Oral • Zetia • Diflucan • Acetaminophen • Glucophage

Science Based Nutrition Nutrients Recommended:

Betaine Plus • Probiotic G.I.

LOW MINERALS

The Phosphorus is low, which will affect calcium metabolism, availability and many other functions. The low phosphorus is also commonly associated to a Vitamin D deficiency. Correlate with serum Vitamin D levels.

This finding is associated with:

Presenting symptoms - Tongue has grooves or fissures • Craves Sugars/starches • Joint pain • Muscle pain

Medications Taken - Prilosec

VITAMIN D DEFICIENCY

The Vitamin D 25 Hydroxy blood test is a little low. Levels less than 32 ng/mL have been shown to significantly reduce intestinal calcium absorption, reduced bone density, reduced immune system, increased insulin resistance and risk of many types of cancer. This is the best way to determine true Vitamin D status. Minimal levels should be at

least 50 ng/mL. Increase sun exposure and/or take Vitamin D.

This finding is supported by:

Low Blood Phosphorus

This finding is associated with:

Presenting symptoms - Energy level is worse than 5 years ago • Sleeps less than 6 hours per night • Frequent fever blisters • Frequent sore throats • Low back pain • Frequent muscle soreness • Joint stiffness • Rheumatoid Arthritis • Problems with Eczema • Frequent bladder infections • Diabetes Mellitus E11.9 • Menstrual cramps • Difficulty falling asleep • Difficulty staying asleep • Abnormal cycle >29 days and/or <26 days • Breast Fibroids • Too little sleep • Joint pain • Muscle pain

Science Based Nutrition Nutrients Recommended:

Vitamin D 5000IU

INFLAMMATION OF LIVER

The SGOT (AST) and GGT are a little high and the SGPT (ALT) is high. The liver is a little hypermetabolic or a little inflamed. Many drugs or alcohol can cause or contribute to this.

This finding is supported by:

High Blood Glucose • Low Blood Albumin • Low Blood A/G Ratio • Low Blood LDH • High Blood SGOT (AST) • High Blood GGT (r-GTP) • High Blood Serum Iron • High Blood Ferritin

This finding is associated with:

Presenting symptoms - Craves Sugars/starches • Upset stomach • Joint pain • Muscle pain

Medications Taken - Lipitor • Prilosec • Naproxen Oral • Acetaminophen

Science Based Nutrition Nutrients Recommended:

Lipogen • Natural C 1000mg

POSSIBLE LACTATE DEHYDROGENASE DEFICIENCY

The LDH is low. Lactate dehydrogenase (LDH) is a key enzyme that converts sugar into cellular energy, particularly in muscle cells. Two types of LDH deficiency exist: lactate dehydrogenase-A and lactate dehydrogenase-B. Muscle pain, fatigue, and cramping during exercise are common with LDH-A deficiency however, there are typically no signs or symptoms associated with LDH-B deficiency. Consuming large amounts of ascorbic acid (vitamin C) can also be tied to decreased LDH levels.

This finding is supported by:

Low Blood Total Protein • Low Blood Albumin

This finding is associated with:

Presenting symptoms - Energy level is worse than 5 years ago • Joint pain • Muscle pain

Science Based Nutrition Nutrients Recommended:

MagMalic

THYROID CONSIDERATIONS

The TSH is high, the T7 and T4 are low, and the T3 Uptake is optimal. These findings

could be due to thyroid or other medications. Regardless, the thyroid metabolism appears low due to the level of T4. TSH will usually elevate with low thyroid function. The elevated TSH should push or stimulate the thyroid to produce more thyroid hormones but the thyroid is not responding properly.

If thyroid symptoms are present then further testing and retesting is indicated. The thyroid gland controls your basal metabolic rate. This is the rate at which your body heals and repairs itself. It also determines how fast chemical reactions occur in the body. With a low-functioning thyroid, your immune system is going to be low, digestion is going to be slow and energy will be reduced. It is difficult to have a good cholesterol level with a low functioning thyroid. Large amounts of cauliflower, sauerkraut (cabbage), and asparagus do lower thyroid function; so do not eat these foods more than a couple of times per week. Note: poor digestion, low vitamin D, low protein, lack of exercise, infection, inflammation, liver and kidney dysfunction, deficiencies of minerals and vitamins as well as exposure to toxic elements and chemicals can cause or contribute to thyroid dysfunction and caffeine lowers thyroid function. Use of nutrients to support the thyroid and changes in diet can change thyroid function can alter the need or dosage of medications. Improving diet and correcting the problems mentioned above might have the best effect. Interestingly, most cancers are seen in people with low thyroid function.

This finding is supported by:

Low Blood Total Protein • Low Blood Vitamin D 25-Hydroxy (total) • Low Hair Iodine

This finding is associated with:

Presenting symptoms - Hypercholesterolemia (High Cholesterol) E78.0 • Energy level is worse than 5 years ago • Cold hands • Cold feet • Frequently feels cold • Excessive menstrual flow • Somewhat Overweight • Abnormal cycle >29 days and/or <26 days

Medications Taken - Lipitor

Science Based Nutrition Nutrients Recommended:

ThyroAdvance

ANEMIA AND POSSIBLE HEMOCHROMATOSIS

The Ferritin is very high, Serum Iron is a little high and the Red Blood Count (RBC), Hemoglobin, and Hematocrit are a little low. This may be an inflammatory condition possibly involving the liver or a more serious disease. This may also be a condition associated with improper utilization of iron known as Hemochromatosis. More serious conditions might be developing as noted below but it is also possible that the Ferritin is so high that it is affecting the ability to produce RBC's. A single trial phlebotomy is recommended as long as there is no history of cancer, liver disease or serious inflammation.

Hemochromatosis is excess iron stores. The solution for Hemochromatosis is periodic phlebotomies (blood letting) in order to pull excess iron out of your system and lower your iron stores. Ferritin is a blood test that detects the level of iron stores and iron reserves. The Ferritin test determines the severity of Hemochromatosis and can be used to monitor the need for therapeutic phlebotomies. In the early stages there are no symptoms or only vague symptoms such as painful joints, fatigue, weakness, a loss of libido/sex drive, abdominal pains and swelling, auto immune thyroid problems, auto immune disease, and various heart problems, such as a-fib and heart futters. If left untreated, the excess iron (Ferritin) builds up in the organs for hemochromatosis patients - especially in the liver, heart, spleen, and pancreas - it tends to destroy cells. Eventually, the iron builds up in the organs similar to rust. Long term excess iron can cause hormonal problems in men and women as well as

frequent infections, skin bronzing or hair loss. Hemochromatosis can be a significant cause of early death especially in men who are being treated for heart, liver, kidney disease, cancer, high blood pressure, diabetes, stroke or other chronic problems. Liver cirrhosis (liver scarring), spleen enlargement (splenomegaly), liver cancer, heart failure, diabetes, and arthritis are all possibilities for advanced untreated hemochromatosis sufferers as the excess iron builds up to cause tissue damage.

Hemochromatosis is rare in women who are having monthly periods. However, as a woman enters menopause, women develop it at the same rate as men once menses stops. Various extensive drugs, hormones and treatments might be tried when the most important thing to do is to get rid of some iron using phlebotomies on a regular basis. Genetic or not, this is a familial condition- if one person in the family has it, more than likely other members and extended family are also affected.

There is anemia indicated with the mild low RBC, Hemoglobin, and Hematocrit that is likely due to the Hemochromatosis. If there is no advanced kidney or liver disease, cancer or diabetes, then one phlebotomy (having blood taken or drawn) of one pint of blood at least 2-4 weeks before your next blood test is recommended but only if cancer or other contraindications for phlebotomy are absent.

This finding is associated with:

Presenting symptoms - Hypercholesterolemia (High Cholesterol) E78.0 • Hypertension (High Blood Pressure) I10 • Tachycardia (High Heart Rate) R00.0 • Energy level is worse than 5 years ago • High blood pressure • Frequent muscle soreness • Joint stiffness • Rheumatoid Arthritis • Diabetes Mellitus E11.9 • Excessive menstrual flow • Poor memory • Tendency of High Blood Pressure • Brain Fog • Family history of Cancer • Family history of Heart Disease • Joint pain • Muscle pain • Uses cast iron cookware

Medications Taken - Acetaminophen

Science Based Nutrition Nutrients Recommended:

Methyl B12 Plus • Silymarin 80

POSSIBLE INFECTION AND/OR INFLAMMATION

The Platelets are a little low. This is probably associated with chronic infection. This may also be due to drugs or vaccines.

This finding is supported by:

Low Blood Phosphorus • Low Blood Total Protein • Low Blood Albumin • Low Blood Globulin • Low Blood A/G Ratio • High Blood Creatine Kinase • High Blood SGOT (AST) • Low Blood Platelets

This finding is associated with:

Presenting symptoms - Tongue has grooves or fissures • Tongue is coated • Abdominal gas • Rheumatoid Arthritis • Problems with Eczema • Frequent bladder infections • Craves Sugars/starches • Joint pain

Medications Taken - Lipitor • Prilosec • Naproxen Oral • Zetia • Acetaminophen • Glucophage

Science Based Nutrition Nutrients Recommended:

Methyl B12 Plus

NOTED BLOOD VALUES

The Magnesium is high. This is seen with kidney involvement, use of antacids containing magnesium, hypotension and central nervous system depression and poor utilization of magnesium.

The Total Cholesterol and the LDL Cholesterol are a little high. This is not critical but it could be better. Excess weight, poor diet, caffeine intake and lack of exercise can all contribute to these elevated levels.

The Glomerular Filtration Rate Estimated (eGFR) is optimal. The eGFR is a calculated estimate of the actual glomerular filtration rate and is based on your serum Creatinine concentration. The calculation uses formulas that may also include your age, gender, height, and weight. In some formulas, race may also be used in the calculation. The kidneys filter blood and help control blood pressure. They remove waste and water and produce urine. eGFR is one of the best tests to indicate how healthy your kidneys are. It is important to know your eGFR because one may not be able to feel kidney damage.

Over 59-preferred

35 to 58-early kidney damage

16 to 34-moderate kidney damage

1 to 15 severe kidney damage

* Please note that if your test result is less than 15, dialysis or transplant may be needed soon.

This finding is associated with:

Medications Taken - Glucophage

Science Based Nutrition Nutrients Recommended:

B6 100mg • Opti EPA

HIGH HAIR CADMIUM

The Cadmium level in the hair is high. Cadmium (Cd) is a toxic, heavy metal with no positive metabolic function in the body. It is relatively rare but it is more toxic than lead. Hair cadmium levels provide an excellent indication of body burden. Moderately high cadmium levels are consistent with hypertension, while very severe cadmium toxicity can cause hypotension. Recent studies have shown associations with cadmium and tumors of the lung, kidney, breast and prostate.

Cadmium also affects the kidneys, lungs, testes, arterial walls, and bones. It interferes with many enzymatic systems, leads to anemia, proteinuria and glucosurea and depletes glutathione, calcium, phosphorus and zinc. Cadmium absorption is reduced by zinc, calcium and selenium. Alkaline phosphatase is commonly elevated with cadmium toxicity. One of the things that you should do to help your overall long-term health is to reduce your cadmium intake.

The most common sources of cadmium are: refined foods (white flour, white sugar, etc.), acid drinks left in galvanized pails or ice trays, superphosphate fertilizers, gluten flour, some cola drinks, tap water, atmospheric pollution in the burning of coal and petroleum products, seafood, plastic water pipes, margarine, canned fruits and beverages, sugar and molasses, alcoholic drinks, cigarette smoke, zinc smelters, cadmium plating used in soft drink dispensing machines. Cadmium toxicity is common among welders and construction workers (cement dust).

Contamination may come from perms, dyes, bleach and some hair sprays, and can cause false highs for cadmium.

Symptoms of Contamination: hypertension; fatigue; muscle and joint pain/osteomalacia; anemia; lumbar pain; learning disabilities, dyslexia, delinquency, schizophrenia, high anxiety, atherosclerosis; kidney damage with associated urinary loss of essential minerals, amino acids and protein.

Science Based Nutrition Nutrients Recommended:

Chlorella Caps • SBN Calcium MCHC 250mg

NOTED HAIR VALUES

The Calcium level in the hair is a little high. High levels of calcium in the hair is most often associated with an imbalance of the calcium to phosphorus ratio in the body. Other causes include hyperparathyroidism and excess vitamin A or D intake. Excess calcium may depress nervous functions, and lead to depression, irritability, memory impairment, and psychosis. Another consideration, especially, if calcium is optimal in the serum is that calcium is a buffer and helps to neutralize toxic elements. It is possible that an elevated calcium in the hair indicates good calcium reserves and that the body is eliminating other heavy metals or toxins through or in the hair. This is why calcium is still recommended even though it is high in the hair. If calcium were to be elevated in the serum, then calcium would not be recommended.

The nickel level in the hair is a little high. The most common sources of nickel are: atmospheric pollution by burning of coal and petroleum products, cigarette smoking, nickel coins, eyeglass frames, costume jewelry, kitchen appliances, pins, scissors, hair clips, hydrogenated oils and margarine, electronics and computers. Its widespread presence in environmental pollution and its toxic effects on human health warrant its classification as toxic. High nickel tissue levels have been associated with myocardial infarction, and are often present in patients who suffered strokes, dermatitis, chronic rhinitis, hypersensitivity reactions, hypersensitize the immune system, hyperallergenic responses to many different substances, pulmonary inflammation (due to smoke and dust), liver necrosis and toxemia. It is well established to be nephrotoxic and carcinogenic. Early symptoms of toxicity include: apathy, diarrhea, dermatitis, dyspnea, fever, insomnia, tachypnea, vertigo, vomiting, headaches, gastro-intestinal pain and eczema. Other symptoms include allergies, immunosuppression and vitiligo.

The germanium level in the hair is low. Germanium is an essential microelement, and its deficiency can result in numerous diseases, particularly oncogenic conditions. However, supplementing Germanium should only be done under close supervision of a health professional.

The Aluminum level in the hair is a little high. Any aluminum is too much. Aluminum toxicity is associated with Alzheimer's and Parkinson's disease, behavioral/learning disorders such as ADD, ADHD and autism. Aluminum has neurotoxic effects at high levels, but low levels of accumulation may not elicit immediate symptoms. Early symptoms of aluminum burden may include fatigue, headache, and other symptoms. Aluminum is a heavy metal that displaces your other good minerals, such as magnesium, calcium, zinc and phosphorus. One of the things that you should do to help your overall long-term health is to reduce your aluminum intake. The most common sources of aluminum to avoid are: antiperspirants, aluminum cookware, antacids, some baking sodas, baking powder, some breath mints, pickles, some skin lotion, some cosmetics, aluminum foil, canned goods, emulsifiers in some processed cheese, table salt - anti-caking compound, bleaching agent used in white flour, buffered aspirin, some toothpaste, dental amalgams, cigarette filters, and drinking water (tap

water). Do not eat or drink anything that comes in a can. Read your labels before you purchase. Aluminum has also been found in a granola bar. Prosthetic devices produced by Zimmer Company and Johnson and Johnson typically are made of aluminum, vanadium, and titanium, which might cause increased levels in the hair and/or urine.

Aluminum rods are commonly used in hot water tanks in area of acidic water. These rods will dissolve neutralizing the water, thus protecting the hot water tank. A rod of magnesium is an option for the same purpose.

Note: Fluoride and fluoridation increases the absorption of aluminum.

Chlorella and magnesium with malic acid have been reported to be quite effective in lowering aluminum.

The Arsenic level in the hair is a little high. Chronic arsenic exposure is known to cause: Bone marrow depression; leukopenia; normochromic anemia; exfoliation and pigmentation of skin; neurological symptoms; polyneuritis; altered hematopoiesis; liver degeneration; kidney degeneration; skin cancer; cancers of the respiratory tract; agitation; learning impairment; and confusion. Delayed toxicity symptoms include abdominal pain, nausea, vomiting, hematuria, and jaundice. Ingestion of relatively large amounts of soluble arsenic compounds, especially on an empty stomach, affect the myocardium, causing death within a few hours. Ingesting smaller amounts of arsenic can cause epigastric pain, vomiting and diarrhea, followed by inflammation of the conjunctiva and respiratory mucous membranes, epistaxis, transient jaundice, cardiomyopathy, erythematous or visceral rashes, and sweating. Other symptoms: malaise; muscle weakness; eczema; dermatitis; increased salivation; strong "garlic breath", alopecia totalis, vomiting, diarrhea and skin cancer. Hematological, renal, or pancreatic dysfunction may be observed. Symptoms of neuropathy are experienced typically appear as with tingling and paresthesia in the extremities. Proteinuria and methemoglobinemia are frequently observed, causing renal failure and death.

Arsenic can be absorbed by the human body through the respiratory and gastrointestinal tracts and through the skin. Arsenic is found in tobacco smoke and is a suspected causative factor in lung cancer. Metal smelting and the production of glass, ceramics, insecticides, fungicides and herbicides mobilize environmental arsenic. Drinking water may also be a source of arsenic, and the use of arsenic-containing paints is a known source of arsenic poisoning. Elevated hair levels are seen long before acute clinical signs of arsenic toxicity are obvious.

Therapeutic consideration for chronic overexposure: antioxidant therapy, especially ascorbic acid or calcium ascorbate, vitamin E (all tocopherols), increased intake of sulfur-containing amino acids, vitamin B6. Note: arsenic suppresses iodine and selenium.

Research: the relationship between cognitive functions and hair mineral concentrations of lead, arsenic, cadmium, and aluminum was examined for a random selection of 69 children. The data obtained showed a significant correlation between reading and writing skill and elevated arsenic levels, as well as interaction between arsenic and lead. Children with reduced visual-motor skills, had clearly elevated aluminum and lead levels.

Science Based Nutrition Nutrients Recommended:

Chlorella Caps • Germanium 150mg • MagMalic • SBN Calcium MCHC 250mg • Ultra Preventive III • Vital Trace Minerals

STOOL FINDINGS

The test was negative for blood in the stool.

This finding is supported by:
Low Blood Red Blood Count

LIFESTYLE & DIETARY RECOMMENDATIONS

DIET FOCUS

Food can be broken down into basically two categories:

1. Energy (calories from fat, carbohydrates and protein)
2. Nourishment (the nutrient density of the food; vitamin and mineral content).

When planning your meals, use this thought process:

1. Get at least 2 vegetables with each meal. Fruit should be limited only if you have glucose handling issues. However, always consume more vegetables than fruits.
2. Proteins: 25-35% of the meal needs to be of a protein source.
 - > Focus on good quality protein and not the processed protein bars, drinks, and powders.
 - > Most desirable proteins: meats (like chicken, fish, turkey and even red meat), eggs, beans, seeds, nuts, sprouts, quinoa, nut butters (ie. peanut butter, cashew butter, almond butter).
 - > Eliminate these least desirable proteins: processed soy, processed dairy, pork, processed luncheon meats (those that contain "nitrates" or "nitrites").
3. Carbohydrates: 40-60% of your meal needs to be carbohydrate.
 - > Most desirable carbohydrates sources: whole grain breads, pastas (including egg noodles), and rice, whole vegetables, whole fruit
 - > Eliminate these least desirable carbohydrates: white sugar, white flour, fruit juice, high fructose corn syrup, chips, French fries, pop/soda
4. Fats: Your meal should contain anywhere from 15-25% fat.
 - > Most desirable fat sources: nuts (cashews, almonds, pecans, walnuts, Brazil nuts (raw and unsalted are preferred), seeds (sunflower seeds, pumpkin seeds), avocados, coconut oil, fish, nut butters (peanut butter, almond butter, etc)
 - > Desirable Cooking Oils: Grape Seed Oil, Olive Oil, Coconut Oil, Palm Oil
 - > Eliminated these least desirable fat sources: anything with trans-fat (AKA: hydrogenated fat), interesterified fat or Olestra. Bacon, sausage, etc.
 - > Strictly avoid hydrogenated/trans-fats: About 80% of trans fats in your diet come from processed foods, fast food, primarily snack foods and desserts.
5. Special instructions may be given based upon certain metabolic conditions such as cancer, diabetes, kidney disorders etc.

FOODS AND INGREDIENTS TO AVOID

Below is a list of foods and items that will help you identify low nutrient dense foods and cooking/storage processes that lower the nutrient density in foods. Pay close attention to the ingredient labels. The following are recommended to avoid.

1. Artificial Sweeteners: "aspartame", "saccharin", "sucralose", "acesulfame potassium", "sorbitol", "maltitol", etc.
2. Flavor Enhancers and Preservatives: "MSG", "monosodium glutamate", "nitrate" or "nitrite" ingredients found in many dressings, sauces, Chinese foods, processed meats,

pork products, bologna, some wieners, and many luncheon meat. HVP (hydrolyzed vegetable protein) and processed soy proteins can contain up to 40% MSG.

3. Artificial colors and dyes: look for terms such as "FD&C", "lake", "red", "yellow", etc. Read your supplement labels carefully.

4. Canned Foods and Drinks: choose fresh or frozen varieties. Limit canned food consumption to canned beans and tuna. Foods stored in glass are acceptable.

5. Microwave Cooking and Deep Frying lower the nutrient density more so than stove top cooking.

6. Artificial Fats: "hydrogenated" [a.k.a. "trans fat"] and "interesterified" fats are found in margarine, many pre-packaged foods, supplements, and dressings; avoid "Olestra" containing products.

7. Refined Carbohydrates: processed foods such as white sugar, white flour, corn syrup, "enriched" foods, etc.

8. Commercial Meats: Try to get the cleanest, freshest meat you can find. Look for meat that is labeled with terms such as "No Hormones", "No Antibiotics", "Free Range", "Organic", etc.

9. Shellfish and Bottom-feeders: crab, shrimp, lobster, oyster, catfish, etc.

10. Dairy Products: cottage cheese, yogurt, cheese, sour cream, etc. (anything with cow's milk). This does not include eggs.

11. Coffee (regular & chemically decaffeinated), Liquor (distilled), All sodas, Tea (black decaf & black regular). Organic herbal teas are acceptable.

12. Soy Products: isolated soy protein, texturized vegetable protein, soy supplements, soy protein powder, soy protein bars, tofu, etc. Limited fermented soy products (tempeh and miso) and whole soy beans are acceptable. Don't make soy your main protein source, limit to 3-4 servings per week.

13. Chlorine and Fluoride Sources: tap water, heavy chlorine exposure in swimming pools, fluoride toothpaste, fluoride supplements, fluoride mouthwash, etc.

14. Bioengineered (BE) and Genetically Modified Foods (GMO): "BE" foods contain "detectable modified genetic material" and must disclose the presence of BE ingredients on their labels either by using a BE symbol, stating BE ingredients are contained or placing a QR code for you to investigate for yourself. This issue with BE and/or GMO food is ever evolving as many products made with new GMO techniques such as CRISPR, TALEN and RNAi are currently undetectable. Without a commercially available test, the modified genetic material is undetectable and thus those foods wouldn't require a BE label. While organic foods are not "absolutely" free of BE/GMO material, it is still your best chance of greatly reducing exposure to BE and GMO.

Bioengineered foods to avoid include: BE potato varieties: Ranger Russet, Russet Burbank and Atlantic (may be sold under the trade name "White Russet"); Canola Oil; Golden Delicious, Granny Smith and Fuji apples; Corn; Soy; Sugar Beets (these are not

red or gold table beets; sugar beets are used to make sugar; try to source your sugar made from sugar cane); Papaya grown in US; Pineapple (pink flesh varieties); Summer squash (green zucchini, yellow straight-neck and yellow crookneck squash); AquAdvantage™ Salmon.

LOW GLYCEMIC RECOMMENDATIONS

Refer to the Diabetic Factors section earlier in the report to determine which "Category" to follow. If no "Category" is mentioned, simply follow steps 1-6 for now.

1. Initially, you will be on a protein/veggie diet.
2. Avoid all fruit juices and any other caloric or sugary drinks. Drink only water.
3. Eat only one fruit and at least four fresh vegetables per day.
4. Eat a snack every hour and a half to two hours.
 - > Eat by the clock. This is going to help take stress off your liver and maintain your glucose at a good level so it doesn't fluctuate so much.
 - > The snack should be 4 to 5 bites of a vegetable snack, protein or foods that have healthy fats in them such as: sunflower seeds, pumpkin seeds, nuts, carrots with hummus or a few bites of chicken would be fine to eat.
5. Avoid all breads, crackers, pasta, rice, and/or other grains even if they are whole grain, until you receive approval.
6. Do this for at least the next two months or until your re-evaluation.

Please note: Some foods (even foods listed as desirable) may cause your glucose to rise that possibly would not affect someone else. You need to check your glucose regularly and make note of the foods you have eaten if your glucose is registering too high.

Most Desirable Protein Sources

Eggs; Almond Butter; Cashew Butter; Peanut Butter; Nuts (all); Seeds (all); Fresh fish; Chicken; Turkey; Beef (avoid if iron is high)

Category 1 (Hgb A1C >8 UA Glucose > 500mg/dl)

Vegetables: Fresh or Frozen

Vegetables with lowest carbohydrate content: Asparagus*; Avocado; Bean sprouts; Beans, string; Beet greens; Broccoli; Brussel Sprouts; Cabbage*; Carrots; Cauliflower*; Celery; Chard; Collards; Cucumber; Dandelion Greens; Eggplant; Endive; Kale; Kohlrabi; Leeks; Lettuce; Mushrooms; Mustard Greens; Okra; Onions; Parsley; Peppers, any; Pimento; Pumpkin; Radishes; Rutabagas; Sauerkraut*; Spinach; Squash; Tomatoes; Turnips; Water Cress

*Have these only once/twice per week if you have directed to do so as a result of a low thyroid.

Fruits: Fresh or Frozen. Choose 1 per day; 1 cup = 1 serving.

Fruits with lowest carbohydrate content.

Cantaloupe; Rhubarb; Strawberries; Watermelon

Category 2 (Hgb A1C = 6-8 UA Glucose 100-250mg/dl)

Vegetables: Fresh or Frozen

You may choose from the Category 1 list, in addition to the following which are allowed twice weekly, for a change: Artichokes; Beans, dried; Beans, kidney; Beans, Lima; Corn; Hominy; Parsnips; Peas, green; Potato, sweet; Potato, white; Yams

Fruits: Fresh or Frozen Choose 1 per day; 1 cup = 1 serving.

You may choose from the Category 1 list, in addition to the following which are allowed twice weekly, for a change: Apple; Apricots; Blackberries; Cranberries; Currants; Gooseberries; Grapes; Grapefruit; Guava; Melons; Lemons; Limes; Oranges; Papayas; Peaches; Plums; Raspberries; Tangerines.

Category 3 (Hgb A1C <6 UA Glucose <50mg/dl)

Vegetables: Fresh or Frozen

You may choose from the categories 1&2 lists.

Fruits: Fresh or Frozen Choose 1 per day; 1 cup = 1 serving.

You may choose from the Categories 1&2 lists, in addition to the following: Bananas; Blueberries; Cherries; Figs; Kumquats; Loganberries; Mangoes; Mulberries; Pears; Pineapple; Pomegranates; Prunes.

EXERCISE

Examples of aerobic exercise are jogging, cycling, elliptical trainer, fast-paced walking, etc. It is recommended that you build up to at least 40 minutes a day. If at first you do not have the energy to exercise this much, it is recommended that you start slowly by exercising 10 minutes two or three times a day until you can gradually build up to 40 minutes a day.

STRENGTH TRAINING

If you are not currently on a weight training program, a muscle building exercise (i.e. step exercise) 10 minutes a day is encouraged. If at first you do not have the energy or physical ability to perform this exercise, it is recommended that you start slowly by setting a goal to do this exercise 2 minutes two or three times a day until you can gradually build up to 10 minutes a day.

WATER CONSUMPTION

Drink 1 quart of clean, filtered water per 50lbs of body weight per day. Do not go over 3 quarts regardless of your weight. More water might be necessary depending on exercise, environment and perspiration. We recommend using a multiple filtration system for your drinking and cooking water. There are several types of these, which include reverse osmosis. Distilled water is not recommended. Since distilled water has little or no mineral content, it acts like a vacuum that can actually leach minerals from your system.

A word of caution -**anytime you make drastic changes in diet, vitamin intake, or exercise, realize that you may feel somewhat worse before you feel better.** It doesn't happen often, but as your body detoxifies, you may feel worse if it occurs too fast. If you do feel worse, don't panic, it will pass in a few days. If this problem does occur, take half of what is recommended for three days and slowly over two weeks progress to taking the complete program.

Everything that has been recommended is very important and many of these things work together. In order to get the most effective results, it is important that you follow the program exactly as outlined. Following the diet may not be easy, but if you do, you will get the best outcome. Likewise, if you don't take the vitamins, or only take part of them, you may not see the expected results. Many people with some very serious problems

have been helped using this program. The purpose of this analysis is to benefit you. This is for your well being, so please do the program as recommended so that you will achieve the best results.

Attached is a list of supplements that have been carefully selected for your specific problems. All supplement dosages should be spread throughout the day and taken with food unless otherwise suggested. These supplement brands are recommended because they are of the highest quality. It might seem that a lot of vitamins are recommended, but the number of vitamins is only an indication of how sick you are. It is unreasonable to need this number of vitamins very long, but you need them now. The closer you follow the program, the better results you will likely have and the number of vitamins will go down with improvement.

Occasionally, you will hear rumors regarding vitamin toxicity. Rest assured that these issues have been researched and the risk of significant side effects is extremely low. Historical data and experience have shown these supplements, along with the dietary changes, to be the best in helping you achieve the necessary improvements needed on your test results.

Please keep this report for future reference and bring it with you to your next evaluation.

If we can be of any further assistance to you or your family please do not hesitate to ask.

Yours in Health,

Dr. Nicholas Hellenbrand, D.C.

Name: Jane Doe

Lab: LabCorp

Blood Test Results

Legend: ■ Warning ■ High Risk ■ Critical ★ Optimal 😊 Improvement 😞 Worse ∅ No Improvement

Test Description	Current Rating 10/18/2023		Prior 10/12/2023	Delta	Healthy	Clinical	Units
Glucose	93.000	high	178.000	😊	79.600 - 89.400	70.000 - 99.000	mg/dL
Hemoglobin A1C (Gly-Hgh)	6.700	High	8.700	😊	4.800 - 5.605	4.500 - 6.405	%
Uric Acid	5.300	★	5.600	😊	3.500 - 5.500	2.500 - 6.200	mg/dL
BUN (Blood Urea Nitrogen)	17.000	★	20.000	😊	8.000 - 18.000	6.000 - 24.000	mg/dL
Creatinine	0.790	★	1.000	😊	0.700 - 0.870	0.570 - 1.000	mg/dL
GFR Est.	66.000	★	70.000		59.000 - 145.000	45.000 - 150.000	μL/min/1.7
BUN / Creatinine Ratio	18.480	★	21.000	😊	12.000 - 19.000	9.000 - 23.000	ratio
Sodium	141.000	★	139.000		139.000 - 143.000	134.000 - 144.000	mmol/L
Potassium	4.110	★	4.100		3.800 - 4.500	3.500 - 5.200	mmol/L
Chloride	96.000	Low	90.000	😊	102.000 - 105.000	96.000 - 106.000	mmol/L
Calcium	9.400	★	9.300		9.200 - 9.710	8.700 - 10.200	mg/dL
Phosphorus	0.000	Very Low	3.900	😞	3.400 - 3.900	3.000 - 4.300	mg/dL
Magnesium	2.300	High	2.200	😞	1.900 - 2.200	1.600 - 2.300	mg/dL
Total Protein	6.200	low	5.950	😊	7.100 - 7.610	6.000 - 8.500	g/dL
Albumin	4.000	low	3.550	😊	4.200 - 4.500	3.800 - 4.900	g/dL
Globulin	2.200	low	1.400	😊	2.800 - 3.510	1.500 - 4.500	g/dL
A/G Ratio	1.230	low	1.220	😊	1.530 - 1.870	1.200 - 2.200	ratio
Total Bilirubin	0.440	★	0.520		0.300 - 0.900	0.000 - 1.200	mg/dL
Alk. Phosphatase	77.000	★	67.000		64.740 - 91.260	39.000 - 117.000	IU/L
Creatine Kinase	134.000	high	150.000	😊	81.500 - 132.500	32.000 - 182.000	U/L
LDH	87.000	Low	224.000	😞	138.880 - 190.700	119.000 - 226.000	IU/L
SGOT (AST)	32.000	high	65.000	😊	10.000 - 26.000	0.000 - 40.000	IU/L
SGPT (ALT)	40.000	High	70.000	😊	8.000 - 26.000	0.000 - 32.000	IU/L
GGT (r-GTP)	50.000	high	66.000	😊	10.000 - 35.000	0.000 - 60.000	IU/L
Total Cholesterol	188.000	high	227.000	😊	150.000 - 180.000	100.000 - 199.000	mg/dL
Triglyceride	84.000	★	85.000		50.000 - 150.000	0.000 - 200.000	mg/dL
HDL Cholesterol	63.000	★	43.000	😊	50.000 - 150.000	40.000 - 200.000	mg/dL
VLDL Cholesterol	18.000	★	17.000		6.000 - 20.000	5.000 - 40.000	mg/dL
LDL Cholesterol	87.000	high	111.000	😊	50.000 - 75.000	0.000 - 99.000	mg/dL
Total Cholesterol / HDL Ratio	3.000	★	5.200	😊	0.000 - 4.000	0.000 - 4.400	ratio
TSH	5.200	High	2.300	😞	0.500 - 3.500	0.450 - 4.500	uIU/mL
T4 Thyroxine	4.200	Low	9.800	😞	7.100 - 9.000	4.500 - 12.000	ug/dL
T3 Uptake	31.000	★	29.000		29.000 - 35.000	24.000 - 39.000	%
T7 (Free T4 Index) (FTI)	1.100	Low	2.800	😞	2.610 - 3.600	1.200 - 4.900	
CRP C-Reactive Protein	1.400	★	13.000	😊	0.000 - 6.700	0.000 - 10.000	mg/L
Ferritin	320.000	Very High	430.000	😊	45.000 - 110.000	15.000 - 150.000	NG/ML
Serum Iron	121.000	high			71.000 - 115.000	27.000 - 159.000	ug/dL
White Blood Count	5.800	★	3.800	😊	5.700 - 8.500	3.400 - 10.800	k/cumm
Red Blood Count	4.200	low	3.800	😊	4.270 - 4.780	3.770 - 5.280	m/cumm
Hemoglobin	11.700	low	10.200	😊	12.600 - 14.500	11.100 - 15.900	g/dL
Hematocrit	37.000	low	32.400	😊	38.000 - 42.000	34.000 - 46.600	%
MCV	91.000	★	89.000		84.000 - 92.000	79.000 - 97.000	fL
MCH	30.200	★	30.900		28.600 - 31.000	26.600 - 33.000	pg
MCHC	34.500	★	37.000	😊	33.200 - 34.500	31.500 - 35.700	g/dL
RDW	14.000	★			12.900 - 14.200	11.700 - 15.400	%
Platelets	220.000	low	170.000	😊	250.000 - 350.000	150.000 - 450.000	x10E3/uL
Polys/Neutrophils (SEGS-PMNS)	52.000	★	68.000	😊	51.000 - 63.000	40.000 - 74.000	%
Lymphocytes	24.000	★	23.000	😊	24.000 - 36.000	14.000 - 46.000	%
Monocytes	6.200	★	6.000		5.000 - 7.000	4.000 - 13.000	%
Eosinophils	3.200	★	3.620	😊	0.000 - 3.500	0.000 - 5.000	%
Basophils	0.090	★	1.000		0.000 - 2.000	0.000 - 3.000	%
ESR-Erythrocyte Sed Rate, Westergren	8.000	★	38.000	😊	0.000 - 10.000	0.000 - 40.000	mm/hr
Vitamin D 25-Hydroxy (total)	45.000	low	12.000	😊	50.000 - 90.000	30.000 - 100.000	ng/mL

Name: Jane Doe

Lab: Doctor's Data #1, (with Ranges)

Hair Test Results

Legend: Warning High Risk Critical ★ Optimal 😊 Improvement 😞 Worse ∅ No Improvement

Test Description	Current Rating 10/19/2023		Prior 04/12/2023	Delta	Healthy	Clinical	Units
Toxic Elements							
Aluminum	2.600	high	3.800	😊	0 - 2.200	2.210 - 7.000	ug/g
Antimony	0.010	★	0.020		0 - 0.022	0.032 - 0.050	ug/g
Arsenic	0.036	high	0.040	😊	0 - 0.032	0.042 - 0.060	ug/g
Barium	1.400	★	2.000	😊	0 - 1.501	1.511 - 2.001	ug/g
Beryllium	0.000	★	0.000		0 - 0.015	0.025 - 0.021	ug/g
Bismuth	0.100	★	0.100		0 - 1.000	1.010 - 2.000	ug/g
Cadmium	0.060	High	0.080	😊	0 - 0.031	0.041 - 0.051	ug/g
Lead	0.300	★	0.490	😊	0 - 0.401	0.411 - 0.601	ug/g
Mercury	0.500	★	0.770	😊	0 - 0.500	0.510 - 0.801	ug/g
Platinum	0.000	★	0.000		0 - 0.003	0.013 - 0.005	ug/g
Thallium	0.000	★	0.000		0 - 0.001	0.011 - 0.002	ug/g
Thorium	0.000	★	0.000		0 - 0.001	0.011 - 0.002	ug/g
Uranium	0.010	★	0.010		0 - 0.020	0.030 - 0.060	ug/g
Nickel	0.260	high	0.210	😞	0 - 0.251	0.261 - 0.301	ug/g
Silver	0.100	★	0.090		0 - 0.101	0.111 - 0.151	ug/g
Tin	0.200	★	0.220		0 - 0.291	0.301 - 0.301	ug/g
Titanium	0.200	★	0.300		0 - 0.401	0.411 - 0.701	ug/g
Total Toxic Representation	2.000	★	2.000		0 - 2.004	2.014 - 3.000	
Essential Elements							
Calcium	950.000	high	1000.000	😊	663.000 - 753.000	300.000 - 1200.000	ug/g
Magnesium	98.000	high	98.000	∅	53.000 - 62.000	35.000 - 120.000	ug/g
Sodium	92.000	low	60.000	😊	95.001 - 174.001	20.001 - 250.001	ug/g
Potassium	35.000	★	17.000	😊	30.001 - 53.001	8.001 - 75.001	ug/g
Copper	25.000	★	19.000		18.001 - 29.001	11.001 - 37.001	ug/g
Zinc	154.000	★	142.000	😊	150.001 - 170.001	140.001 - 220.001	ug/g
Manganese	0.600	high	0.500	😞	0.281 - 0.401	0.081 - 0.601	ug/g
Chromium	0.450	low	0.280	😊	0.481 - 0.571	0.401 - 0.651	ug/g
Vanadium	0.042	★	0.040		0.035 - 0.045	0.018 - 0.065	ug/g
Molybdenum	0.039	★	0.040		0.031 - 0.041	0.021 - 0.051	ug/g
Boron	1.200	★	1.400	😊	0.761 - 1.201	0.250 - 1.501	ug/g
Iodine	0.650	low	0.450	😊	0.761 - 1.301	0.250 - 1.801	ug/g
Lithium	0.012	★	0.010		0.010 - 0.016	0.007 - 0.020	ug/g
Phosphorus	196.000	★	189.000		173.001 - 197.001	150.001 - 220.001	ug/g
Selenium	1.100	high	1.200	😊	0.621 - 1.031	0.551 - 1.101	ug/g
Strontium	2.600	★	2.500		2.000 - 2.900	0.500 - 7.600	ug/g
Sulfur	49000.000	high	45252.000	😞	46000.000 - 48000.000	44000.000 - 50000.000	ug/g
Cobalt	0.024	★	0.020		0.018 - 0.028	0.004 - 0.041	ug/g
Iron	12.000	★	7.800	😊	9.001 - 13.001	7.001 - 16.001	ug/g
Germanium	0.030	Low	0.050	😊	0.031 - 0.039	0.030 - 0.040	ug/g
Rubidium	0.028	★	0.030		0.020 - 0.032	0.007 - 0.096	ug/g
Zirconium	0.080	★	0.110		0.070 - 0.250	0.020 - 0.420	ug/g

Legend: ■ Warning ■ High Risk ■ Critical

	10/18/2023	Prior Results			
Toxic Elements					
Aluminum	3.800				
Antimony	0.020				
Arsenic	0.040				
Barium	2.000				
Beryllium	0.000				
Bismuth	0.100				
Cadmium	0.080				
Lead	0.490				
Mercury	0.770				
Platinum	0.000				
Thallium	0.000				
Thorium	0.000				
Uranium	0.010				
Nickel	0.210				
Silver	0.090				
Tin	0.220				
Titanium	0.300				
Total Toxic Representation	2.000				
Essential Elements					
Calcium	1000.000				
Magnesium	98.000				
Sodium	60.000				
Potassium	17.000				
Copper	19.000				
Zinc	142.000				
Manganese	0.500				
Chromium	0.280				
Vanadium	0.040				
Molybdenum	0.040				
Boron	1.400				
Iodine	0.450				
Lithium	0.010				
Phosphorus	189.000				
Selenium	1.200				
Strontium	2.500				
Sulfur	45252.000				
Cobalt	0.020				
Iron	7.800				
Germanium	0.050				
Rubidium	0.030				
Zirconium	0.110				

VITAMIN AND SUPPLEMENT RECOMMENDATIONS

SUPPLIER: Science Based Nutrition

PATIENT: Jane Doe

SEX: F

AGE: 57

WEIGHT: 140

Supplement

Dosage

B6 100mg	2 per day
Betaine Plus	3 per day
Chlorella Caps	4 per day
Germanium 150mg	0.5 every 4 days
Glucose Support	4 per day
Lipogen	2 per day
Methyl B12 Plus	3 per day
Natural C 1000mg	3 per day
Opti EPA	1 per day
Probiotic G.I.	1 per day
SBN Calcium MCHC 250mg	2 per day
Silymarin 80	4 per day
ThyroAdvance	4 per day
Ultra Preventive III	2 per day
Vital Trace Minerals	2 per day
Vitamin D 5000IU	1 per day