EVEXIA DIAGNOSTICS, INC

# Functional Health Report

## Clinician Copy

## JANE DOE

Lab Test on Jun 21, 2025
Conventional US Units

# Table of Contents


**Health Improvement Plan** ..... 5
This report shows customized recommendations based on the blood test results.

**Product Summary Report** ..... 3
This report provides a summary of the nutritional supplement recommendations.

**Blood Test Results Report** ..... 13
This report lists the blood test results and shows whether or not an individual element is outside of the optimal range and/or outside of the clinical lab range.

**% Deviation from Optimal Report** ..... 15
This report shows the elements on this blood test that are farthest from optimal expressed as a % deviation from the median.

**Out Of Optimal Range Report** ..... 17
This report will give you background details about the elements on this blood test that are outside the optimal range high and low.

**Functional Index Report** ..... 22
This report presents the 20 Indices of Functional Health.

**Nutrient Index Report** ..... 25
This report presents the 6 Indices of Nutrient Health and areas of nutrient need.

**Clinical Dysfunctions Report** ..... 33
This report shows the likely health concerns and dysfunctions based on an analysis of this blood test.

**Blood Test History Report** ..... 30
This report gives an historical view of the last 7 blood tests side by side highlighting elements that are outside the optimal range.

**Recommended Further Testing** ..... 29
A report showing areas that may require further evaluation, testing and investigation.

**Disclaimer Page** ..... 37

# Product Summary Report

The Product Summary Report takes all the information on this report and provides a summary of the nutritional supplements recommended to help bring the systems of the body back into balance. This plan focuses on the top areas of need as presented in this report.

| Protocols | Primary Product | Dosage | ✓ |
|---|---|---|---|
| Metabolic Syndrome | Support for Healthy Glucose Metabolism* | Use as directed by your healthcare practitioner. | ☐ |
| Endothelial Dysfunction | Nutritional Support for Homocysteine Metabolism* | Use as directed by your healthcare practitioner. | ☐ |
| Increased Cardiovascular Risk | Nutritional Support for Metabolic Syndrome and Cardiovascular Function* | Use as directed by your healthcare practitioner. | ☐ |
| Inflammation | Nutrient Support for Inflammation* | Use as directed by your healthcare practitioner. | ☐ |
| Intestinal Hyperpermeability | Nutritional Support for the Gastrointestinal Lining* | Use as directed by your healthcare practitioner. | ☐ |
| Vitamin D Need | Vitamin D Support* | Use as directed by your healthcare practitioner. | ☐ |
| B Vitamin Need | Advanced B-Complex* | Use as directed by your healthcare practitioner. | ☐ |
| DHEA Need | DHEA Support* | Use as directed by your healthcare practitioner. | ☐ |

## Other Potential Product Recommendations

| Protocols | Additional Product | Dosage | ✓ |
|---|---|---|---|
| Metabolic Syndrome | Blood Sugar Regulation Support* | Use as directed by your healthcare practitioner. | ☐ |
| Endothelial Dysfunction | Omega-3 Fatty Acid Support* | Use as directed by your healthcare practitioner. | ☐ |
| Increased Cardiovascular Risk | Omega 7 and 3 Fatty Acids* | Use as directed by your healthcare practitioner. | ☐ |

| Protocols | Additional Product | Dosage | ✓ |
|---|---|---|---|
| Inflammation | Concentrated Flavonoid Support for Inflammation* | Use as directed by your healthcare practitioner. | ☐ |
| | Nutrient Joint Relief* | Use as directed by your healthcare practitioner. | ☐ |
| Intestinal Hyperpermeability | Nutritional Support for Leaky Gut* | Use as directed by your healthcare practitioner. | ☐ |
| | Probiotic Support* | Use as directed by your healthcare practitioner. | ☐ |
| B Vitamin Need | Phytonutrient Support* | Use as directed by your healthcare practitioner. | ☐ |

This Product Summary Report has been prepared for your patient based upon current algorithms. Additional personalized recommendations for nutritional support may be applicable based on this laboratory evaluation, your patient's history and your clinical practice experience.

* These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.

# Health Improvement Plan

The Health Improvement Plan takes all the information on this report and creates unique customized recommendations to help bring the systems of your body back into balance. This plan focuses on the top areas of need as presented in this report.

## Metabolic Syndrome

The results of this blood test indicate a tendency towards metabolic syndrome and a need for blood sugar support. The following provide personalized nutritional support for blood sugar regulation*:

**Rationale:**
Glucose ↑, Triglycerides ↑, Insulin - Fasting ↑, Uric Acid, female ↑, DHEA-S, Female ↓

**Product Name**
Support for Healthy Glucose Metabolism*

**Dosage and Directions**
Use as directed by your healthcare practitioner.

**Details**
Support for Healthy Glucose Metabolism* is a low glycemic index medical food formulated to provide specialized nutritional support to promote healthy glucose metabolism, and health heart and insulin function.*

**Product Name**
Blood Sugar Regulation Support*

**Dosage and Directions**
Use as directed by your healthcare practitioner.

**Details**
Blood Sugar Regulation Support* features a unique combination of green tea extract, cinnamon, and alpha-lipoic acid, along with a broad foundation of nutrients to be used as part of a healthy diet for maintaining healthy blood sugar levels already in the normal range.

* These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.

## Endothelial Dysfunction

The results of this blood test indicate a higher than optimal risk of this patient developing cardiovascular disease and shows a need for cardiovascular support, especially support for the endothelium. The following provide key nutrients to improve endothelial and cardiovascular health.

**Rationale:**
Fibrinogen ↑, Hs CRP, Female ↑, Homocysteine ↑, Glucose ↑

**Product Name**
Nutritional Support for Homocysteine Metabolism*

**Dosage and Directions**
Use as directed by your healthcare practitioner.

**Details**
Nutritional Support for Homocysteine Metabolism* provides key nutrients involved in homocysteine metabolism: beneficial levels of folate, vitamins B12 and B6, trimethylglycine, choline for enhanced methylation. and intrinsic factor to promote absorption of vitamin B12.*

**Product Name**
Omega-3 Fatty Acid Support*

**Dosage and Directions**
Use as directed by your healthcare practitioner.

**Details**
Omega-3 Fatty Acid Support* provides a highly concentrated source of health-promoting omega-3 essential fatty acids. Each softgel provides a total of 750 mg of EPA and DHA in a balanced ratio to support healthy blood lipids, cardiovascular health, a positive mood, and overall health.

* These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.

## Increased Cardiovascular Risk

The results of this blood test indicate a higher than optimal risk of this patient developing cardiovascular disease and shows a need for cardiovascular support. The following provide key nutrients to improve cardiovascular health and lower the risk of developing cardiovascular disease.*

**Rationale:**
Glucose ↑, LDH ↑, Triglycerides ↑, Fibrinogen ↑, Hs CRP, Female ↑, Homocysteine ↑, Insulin - Fasting ↑, Vitamin D (25-OH) ↓

**Product Name**
Nutritional Support for Metabolic Syndrome and Cardiovascular Function*

**Dosage and Directions**
Use as directed by your healthcare practitioner.

**Details**
Nutritional Support for Metabolic Syndrome and Cardiovascular Function* is a medical food formulated to provide specialized nutritional support for patients with metabolic syndrome and cardiovascular disease by supplying a combination of Acacia nilotica extract, reduced iso-alpha acids (RIAA), plant sterols, and heart-healthy soy protein and isoflavones.*

**Product Name**
Omega 7 and 3 Fatty Acids*

**Dosage and Directions**
Use as directed by your healthcare practitioner.

**Details**
Omega 7 and 3 Fatty Acids* is the more complete omega formula for heart health. It delivers a powerful combination of purified omega-7 and omega-3 fatty acids to provide targeted, enhanced support for overall cardiovascular health.*

* These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.

## Inflammation

The results of this blood test indicate a tendency towards inflammation and shows a need for anti-inflammatory support. The following provide key nutrients to help lower inflammation.

**Rationale:**
Hs CRP, Female ↑, Uric Acid, female ↑, LDH ↑, Fibrinogen ↑, Homocysteine ↑, Globulin, total ↑, Alk Phos ↑, Vitamin D (25-OH) ↓

**Product Name**
Nutrient Support for Inflammation*

**Dosage and Directions**
Use as directed by your healthcare practitioner.

**Details**
Nutrient Support for Inflammation* is a medical food formulated to provide specialized nutritional support for patients with compromised gut function reflective of an inflammatory response.*

**Product Name**
Concentrated Flavonoid Support for Inflammation*

**Dosage and Directions**
Use as directed by your healthcare practitioner.

**Details**
Concentrated Flavonoid Support for Inflammation* is a blend of select Ayurvedic herbs traditionally used to relieve minor pain, including boswellia, turmeric, and ginger.

**Product Name**
Nutrient Joint Relief*

**Dosage and Directions**
Use as directed by your healthcare practitioner.

**Details**
Nutrient Joint Relief* provides a safer option for effective joint relief. This proprietary combination of selected plant components influences kinase signaling and the formation of certain substances, such as PGE2, that are associated with minor pain.

* These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.

## Intestinal Hyperpermeability

The results of this blood test indicate a tendency towards intestinal hyperpermeability and a need for support for the GI mucosa. The following provide personalized nutrient support for the GI mucosa*:

**Rationale:**
Uric Acid, female ↑, Alk Phos ↑

**Product Name**
Nutritional Support for the Gastrointestinal Lining*

**Dosage and Directions**
Use as directed by your healthcare practitioner.

**Details**
Nutritional Support for the Gastrointestinal Lining* features three key ingredients--glutamine, deglycyrrhizinized licorice (DGL), and aloe--that are designed to support the integrity and healthy function of the gastrointestinal lining . A healthy gastrointestinal lining is essential for proper digestion, immune function, and overall health.

**Product Name**
Nutritional Support for Leaky Gut*

**Dosage and Directions**
Use as directed by your healthcare practitioner.

**Details**
Nutritional Support for Leaky Gut* is a medical food formulated to provide specialized nutritional support, including amino acids and prebiotic fiber, combined with readily digestible, low-allergenic-potential macronutrients for patients with leaky gut syndrome.*

**Product Name**
Probiotic Support*

**Dosage and Directions**
Use as directed by your healthcare practitioner.

**Details**
Probiotic Support* provides multidimensional support for both the upper and lower GI tract for digestive and immune health . This concentrated formula supplies a proprietary blend of 7 beneficial probiotic strains.

* These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.

This Health Improvement Plan has been prepared for your patient based upon current algorithms. Additional personalized recommendations for nutritional support may be applicable based on this laboratory evaluation, your patient's history and your clinical practice experience.

# Suggested Individual Nutrient Recommendations

Your Health Improvement Plan takes all the information on this report and creates unique customized recommendations to help bring the systems of your body back into balance. This plan focuses on the top areas of need as presented in this report.

## Vitamin D Need

The results of this blood test indicate that this patient's vitamin D levels might be lower than optimal and shows a need for vitamin D supplementation. The following provide a good source of vitamin D to bring levels back into the optimal range.*

**Rationale:**
Vitamin D (25-OH) ↓

**Product Name**
Vitamin D Support*

**Dosage and Directions**
Use as directed by your healthcare practitioner.

**Details**
Vitamin D Support* features high potency vitamin D3—the most bioactive form of supplemental vitamin D—in easy-to-swallow microtablets. Vitamin D is important for maintaining healthy bone strength and immune function.*

* These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.

## B Vitamin Need

The results of this blood test indicate that this patient's B vitamin levels might be lower than optimal and shows a need for B complex supplementation. The following provide a good source of B vitamins to bring levels back into the optimal range.*

**Rationale:**
Anion gap ↑, CO2 ↓, Glucose ↑, Hemoglobin, Female ↓

**Product Name**
Advanced B-Complex*

**Dosage and Directions**
Use as directed by your healthcare practitioner.

**Details**
Advanced B-Complex* features L-5-methyl tetrahydrofolate, a body-ready, nature-identical folate. This innovative formula also provides a balanced blend of other high potency B vitamins and supportive nutrients. B-complex supports healthy homocysteine metabolism, healthy energy levels, and a healthy stress response.*

**Product Name**
Phytonutrient Support*

**Dosage and Directions**
Use as directed by your healthcare practitioner.

**Details**
Phytonutrient Support* takes you beyond basic wellness support. It has a proprietary blend of 13 concentrated extracts and phytonutrients to protect your cells and maintain DNA stability. Phytomulti recharges, nourishes, and defends cells like no other foundation nutrition formula.*

* These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.

## DHEA Need

The results of this blood test indicate that this patient's DHEA levels might be lower than optimal and shows a need for DHEA supplementation. The following provide a good source of DHEA to bring levels back into the optimal range.*

**Rationale:**
DHEA-S, Female ↓

**Product Name**
DHEA Support*

**Dosage and Directions**
Use as directed by your healthcare practitioner.

**Details**
DHEA Support* is a bio-available form of dehydroepiandrosterone (DHEA), which may promote DHEA and DHEA sulfate levels associated with healthy adrenal function.*

* These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.

This Health Improvement Plan has been prepared for your patient based upon current algorithms. Additional personalized recommendations for nutritional support may be applicable based on this laboratory evaluation, your patient's history and your clinical practice experience.

# Blood Test Results Report

The Blood Test Results Report lists the results of the patient's Chemistry Screen and CBC and shows you whether or not an individual element is outside of the optimal range and/or outside of the clinical lab range. The elements appear in the order in which they appear on the lab test form.

**Above Optimal Range** ↑
14 Current 0 Previous

**Above Standard Range** ↑
3 Current 0 Previous

**Alarm High**
1 Current 0 Previous

**Below Optimal Range** ↓
9 Current 0 Previous

**Below Standard Range** ↓
2 Current 0 Previous

**Alarm Low**
0 Current 0 Previous

| Element | Current Jun 21 2025 | Previous Not Available | Impr | Optimal Range | Standard Range | Units |
|---|---|---|---|---|---|---|
| Glucose | 94.00 ↑ | | | 72.00 - 90.00 | 65.00 - 99.00 | mg/dL |
| Hemoglobin A1C | 5.50 | | | 5.00 - 5.50 | 0.00 - 5.60 | % |
| Insulin - Fasting | 16.70 ↑ | | | 2.00 - 5.00 | 2.00 - 19.00 | µIU/ml |
| BUN | 11.00 | | | 10.00 - 16.00 | 7.00 - 25.00 | mg/dL |
| Creatinine | 0.68 ↓ | | | 0.80 - 1.10 | 0.40 - 1.35 | mg/dL |
| BUN/Creatinine Ratio | 16.17 ↑ | | | 10.00 - 16.00 | 6.00 - 22.00 | Ratio |
| eGFR | 120.00 | | | 90.00 - 120.00 | 60.00 - 90.00 | mL/min/1.73m2 |
| Sodium | 138.00 | | | 135.00 - 142.00 | 135.00 - 146.00 | mEq/L |
| Potassium | 4.50 | | | 4.00 - 4.50 | 3.50 - 5.30 | mEq/L |
| Sodium/Potassium Ratio | 30.66 | | | 30.00 - 35.00 | 30.00 - 35.00 | ratio |
| Chloride | 101.00 | | | 100.00 - 106.00 | 98.00 - 110.00 | mEq/L |
| CO2 | 20.00 ↓ | | | 25.00 - 30.00 | 19.00 - 30.00 | mEq/L |
| Anion gap | 21.50 ↑ | | | 7.00 - 12.00 | 6.00 - 16.00 | mEq/L |
| Uric Acid, female | 6.50 ↑ | | | 3.00 - 5.50 | 2.50 - 7.00 | mg/dL |
| Protein, total | 7.70 ↑ | | | 6.90 - 7.40 | 6.10 - 8.10 | g/dL |
| Albumin | 4.50 | | | 4.00 - 5.00 | 3.60 - 5.10 | g/dL |
| Globulin, total | 3.20 ↑ | | | 2.40 - 2.80 | 2.00 - 3.50 | g/dL |
| Albumin/Globulin Ratio | 1.40 | | | 1.40 - 2.10 | 1.00 - 2.50 | ratio |
| Calcium | 9.70 | | | 9.40 - 10.10 | 8.60 - 10.40 | mg/dL |
| Calcium/Albumin Ratio | 2.15 | | | 0.00 - 2.60 | 0.00 - 2.70 | ratio |
| Phosphorus | 2.80 ↓ | | | 3.50 - 4.00 | 2.50 - 4.50 | mg/dL |
| Calcium/Phosphorous Ratio | 3.46 ↑ | | | 2.30 - 2.80 | 1.90 - 4.20 | ratio |
| Magnesium | 1.90 ↓ | | | 2.20 - 2.50 | 1.50 - 2.50 | mg/dl |
| Alk Phos | 101.00 ↑ | | | 70.00 - 100.00 | 35.00 - 115.00 | IU/L |
| AST (SGOT) | 20.00 | | | 10.00 - 26.00 | 10.00 - 35.00 | IU/L |
| ALT (SGPT) | 24.00 | | | 10.00 - 26.00 | 6.00 - 29.00 | IU/L |
| LDH | 236.00 ↑ | | | 140.00 - 200.00 | 120.00 - 250.00 | IU/L |
| Bilirubin - Total | 0.60 | | | 0.10 - 0.90 | 0.20 - 1.20 | mg/dL |
| Bilirubin - Direct | 0.21 ↑ | | | 0.00 - 0.19 | 0.00 - 0.20 | mg/dL |

| | | | | | | |
|---|---|---|---|---|---|---|
| Bilirubin - Indirect | 0.39 | | | 0.10 - 0.70 | 0.20 - 1.20 | mg/dL |
| GGT | 13.00 | | | 10.00 - 30.00 | 3.00 - 70.00 | IU/L |
| Iron - Serum | 110.00 | | | 85.00 - 130.00 | 40.00 - 160.00 | µg/dL |
| Ferritin | 77.00 | | | 40.00 - 150.00 | 10.00 - 232.00 | ng/mL |
| TIBC | 384.00 ↑ | | | 250.00 - 350.00 | 250.00 - 425.00 | µg/dL |
| Cholesterol - Total | 187.00 | | | 180.00 - 239.00 | 125.00 - 200.00 | mg/dL |
| Triglycerides | 108.00 ↑ | | | 70.00 - 100.00 | 0.00 - 150.00 | mg/dL |
| LDL Cholesterol | 105.00 | | | 65.00 - 130.00 | 0.00 - 100.00 | mg/dL |
| HDL Cholesterol | 63.00 | | | 60.00 - 75.00 | 46.00 - 100.00 | mg/dL |
| Cholesterol/HDL Ratio | 3.00 | | | 0.00 - 3.00 | 0.00 - 5.00 | Ratio |
| Triglyceride/HDL Ratio | 1.71 | | | 0.00 - 2.00 | 0.00 - 3.30 | ratio |
| TSH | 2.07 | | | 1.00 - 3.00 | 0.40 - 4.50 | µU/mL |
| Total T3 | 127.00 | | | 90.00 - 168.00 | 76.00 - 181.00 | ng/dL |
| Total T4 | 6.50 | | | 6.00 - 11.90 | 4.50 - 12.00 | µg/dL |
| T3 Uptake | 25.00 ↓ | | | 27.00 - 35.00 | 22.00 - 35.00 | % |
| Free Thyroxine Index (T7) | 1.62 ↓ | | | 1.70 - 4.60 | 1.40 - 3.80 | Index |
| Hs CRP, Female | 11.64 ⚠ | | | 0.00 - 0.99 | 0.00 - 2.90 | mg/L |
| Homocysteine | 9.20 ↑ | | | 0.00 - 6.00 | 0.00 - 10.30 | µmol/L |
| Fibrinogen | 381.00 ↑ | | | 295.00 - 369.00 | 175.00 - 425.00 | mg/dl |
| Vitamin D (25-OH) | 28.30 ↓ | | | 50.00 - 90.00 | 30.00 - 100.00 | ng/ml |
| Vitamin B12 | 593.00 | | | 400.00 - 1100.00 | 200.00 - 1100.00 | pg/ml |
| DHEA-S, Female | 234.00 ↓ | | | 275.00 - 400.00 | 35.00 - 325.00 | µg/dl |
| Estradiol, Female | 29.80 | | | 19.00 - 357.00 | 19.00 - 357.00 | pg/ml |
| Testosterone, Total Female | 21.90 ↓ | | | 30.00 - 48.00 | 8.00 - 48.00 | ng/dl |
| Total WBCs | 6.40 | | | 5.30 - 7.50 | 3.80 - 10.80 | k/cumm |
| RBC, Female | 4.70 ↑ | | | 3.90 - 4.50 | 3.80 - 5.10 | m/cumm |
| Hemoglobin, Female | 13.20 ↓ | | | 13.50 - 14.50 | 11.70 - 15.50 | g/dl |
| Hematocrit, Female | 41.60 | | | 37.00 - 44.00 | 35.00 - 45.00 | % |
| MCV | 89.00 | | | 85.00 - 92.00 | 80.00 - 100.00 | fL |
| MCH | 28.10 | | | 27.00 - 31.90 | 27.00 - 33.00 | pg |
| MCHC | 31.70 ↓ | | | 32.00 - 35.00 | 32.00 - 36.00 | g/dL |
| Platelets | 373.00 | | | 150.00 - 400.00 | 140.00 - 400.00 | k/cumm |
| RDW | 13.00 | | | 11.70 - 13.00 | 11.00 - 15.00 | % |
| Neutrophils | 54.00 | | | 40.00 - 60.00 | 38.00 - 74.00 | % |
| Lymphocytes | 37.00 | | | 25.00 - 40.00 | 14.00 - 46.00 | % |
| Monocytes | 8.00 ↑ | | | 0.00 - 7.00 | 0.00 - 7.00 | % |
| Eosinophils | 1.00 | | | 0.00 - 3.00 | 0.00 - 3.00 | % |
| Basophils | 0.00 | | | 0.00 - 1.00 | 0.00 - 1.00 | % |

# % Deviation from Optimal Report

This report shows the elements on the blood test that are farthest from optimal expressed as a %. The elements that appear closest to the top and the bottom are those elements that are farthest from optimal and should be carefully reviewed.

| Element | % from Median | Lab Result | Low | High | Optimal Reference Ranges Low High |
|---|---|---|---|---|---|
| Hs CRP, Female | 1126 | **11.64** | 0.00 | 0.99 | |
| Insulin - Fasting | 440 | **16.70** | 2.00 | 5.00 | |
| Anion gap | 240 | **21.50** | 7.00 | 12.00 | |
| Calcium/Phosphorous Ratio | 182 | **3.46** | 2.30 | 2.80 | |
| Globulin, total | 150 | **3.20** | 2.40 | 2.80 | |
| Protein, total | 110 | **7.70** | 6.90 | 7.40 | |
| LDH | 110 | **236.00** | 140.00 | 200.00 | |
| Homocysteine | 103 | **9.20** | 0.00 | 6.00 | |
| Uric Acid, female | 90 | **6.50** | 3.00 | 5.50 | |
| TIBC | 84 | **384.00** | 250.00 | 350.00 | |
| RBC, Female | 83 | **4.70** | 3.90 | 4.50 | |
| Triglycerides | 77 | **108.00** | 70.00 | 100.00 | |
| Glucose | 72 | **94.00** | 72.00 | 90.00 | |
| Fibrinogen | 66 | **381.00** | 295.00 | 369.00 | |
| Monocytes | 64 | **8.00** | 0.00 | 7.00 | |
| Bilirubin - Direct | 61 | **0.21** | 0.00 | 0.19 | |
| Alk Phos | 53 | **101.00** | 70.00 | 100.00 | |
| BUN/Creatinine Ratio | 53 | **16.17** | 10.00 | 16.00 | |
| Potassium | 50 | **4.50** | 4.00 | 4.50 | |
| Cholesterol/HDL Ratio | 50 | **3.00** | 0.00 | 3.00 | |
| Hemoglobin A1C | 50 | **5.50** | 5.00 | 5.50 | |
| eGFR | 50 | **120.00** | 90.00 | 120.00 | |
| RDW | 50 | **13.00** | 11.70 | 13.00 | |
| Platelets | 39 | **373.00** | 150.00 | 400.00 | |
| ALT (SGPT) | 38 | **24.00** | 10.00 | 26.00 | |
| Triglyceride/HDL Ratio | 36 | **1.71** | 0.00 | 2.00 | |
| Calcium/Albumin Ratio | 33 | **2.15** | 0.00 | 2.60 | |
| Lymphocytes | 30 | **37.00** | 25.00 | 40.00 | |
| Neutrophils | 20 | **54.00** | 40.00 | 60.00 | |
| Hematocrit, Female | 16 | **41.60** | 37.00 | 44.00 | |
| Bilirubin - Total | 12 | **0.60** | 0.10 | 0.90 | |
| AST (SGOT) | 12 | **20.00** | 10.00 | 26.00 | |
| LDL Cholesterol | 12 | **105.00** | 65.00 | 130.00 | |
| MCV | 7 | **89.00** | 85.00 | 92.00 | |
| Iron - Serum | 6 | **110.00** | 85.00 | 130.00 | |

| | | | | | |
|---|---|---|---|---|---|
| TSH | 4 | **2.07** | 1.00 | 3.00 | |
| Albumin | 0 | **4.50** | 4.00 | 5.00 | |
| Total WBCs | 0 | **6.40** | 5.30 | 7.50 | |
| Bilirubin - Indirect | -2 | **0.39** | 0.10 | 0.70 | |
| Total T3 | -3 | **127.00** | 90.00 | 168.00 | |
| Calcium | -7 | **9.70** | 9.40 | 10.10 | |
| Sodium | -7 | **138.00** | 135.00 | 142.00 | |
| Ferritin | -16 | **77.00** | 40.00 | 150.00 | |
| Eosinophils | -17 | **1.00** | 0.00 | 3.00 | |
| Vitamin B12 | -22 | **593.00** | 400.00 | 1100.00 | |
| MCH | -28 | **28.10** | 27.00 | 31.90 | |
| HDL Cholesterol | -30 | **63.00** | 60.00 | 75.00 | |
| BUN | -33 | **11.00** | 10.00 | 16.00 | |
| Chloride | -33 | **101.00** | 100.00 | 106.00 | |
| GGT | -35 | **13.00** | 10.00 | 30.00 | |
| Sodium/Potassium Ratio | -37 | **30.66** | 30.00 | 35.00 | |
| Cholesterol - Total | -38 | **187.00** | 180.00 | 239.00 | |
| Total T4 | -42 | **6.50** | 6.00 | 11.90 | |
| Estradiol, Female | -47 | **29.80** | 19.00 | 357.00 | |
| Basophils | -50 | **0.00** | 0.00 | 1.00 | |
| Albumin/Globulin Ratio | -50 | **1.40** | 1.40 | 2.10 | |
| Free Thyroxine Index (T7) | -53 | **1.62** | 1.70 | 4.60 | |
| MCHC | -60 | **31.70** | 32.00 | 35.00 | |
| T3 Uptake | -75 | **25.00** | 27.00 | 35.00 | |
| Hemoglobin, Female | -80 | **13.20** | 13.50 | 14.50 | |
| DHEA-S, Female | -83 | **234.00** | 275.00 | 400.00 | |
| Creatinine | -90 | **0.68** | 0.80 | 1.10 | |
| Testosterone, Total Female | -95 | **21.90** | 30.00 | 48.00 | |
| Vitamin D (25-OH) | -104 | **28.30** | 50.00 | 90.00 | |
| Magnesium | -150 | **1.90** | 2.20 | 2.50 | |
| CO2 | -150 | **20.00** | 25.00 | 30.00 | |
| Phosphorus | -190 | **2.80** | 3.50 | 4.00 | |

# Out of Optimal Range Report

The following results show all of the elements that are out of the optimal reference range. The elements that appear closest to the top of each section are those elements that are farthest from optimal and should be carefully reviewed.

| Above Optimal Range | Below Optimal Range |
|---|---|
| 18 Total ↑ | 11 Total ↓ |

## Above Optimal

**Hs CRP, Female ↑ 11.64 mg/L (+ 1126 %)**

High Sensitivity C-Reactive Protein (Hs-CRP) is a blood marker that can help indicate the level of chronic inflammation in the body. Increased levels are associated with in increased risk of inflammation, cardiovascular disease, stroke, and diabetes.

**Insulin - Fasting ↑ 16.70 µIU/ml (+ 440 %)**

insulin is the hormone released in response to rising blood glucose levels and decreases blood glucose by transporting glucose into the cells. Often people lose their ability to utilize insulin to effectively drive blood glucose into energy-producing cells. This is commonly known as “insulin resistance” and is associated with increasing levels of insulin in the blood. Excess insulin is associated with greater risks of heart attack, stroke, metabolic syndrome and diabetes.

**Anion gap ↑ 21.50 mEq/L (+ 240 %)**

The anion gap is the measurement of the difference between the sum of the sodium and potassium levels and the sum of the serum $CO_2$/bicarbonate and chloride levels. Increased levels are associated with thiamine deficiency and metabolic acidosis.

**Calcium/Phosphorous Ratio ↑ 3.46 ratio (+ 182 %)**

The Calcium:Phosphorus ratio is determined from the serum calcium and serum phosphorus levels. This ratio is maintained by the parathyroid glands and is also affected by various foods. Foods high in phosphorus and low in calcium tend to disrupt the balance and shift the body toward metabolic acidity, depleting calcium and other minerals and increasing inflammation.

**Globulin, total ↑ 3.20 g/dL (+ 150 %)**

Total serum globulin is a measurement of all the individual globulin fractions in the blood. Globulins constitute the body's antibody system. A raised globulin level is associated with hypochlorhydria, liver dysfunction, immune activation, oxidative stress and inflammation. Decreased levels are associated with inflammation in the digestive system and immune insufficiency.

**Protein, total ↑ 7.70 g/dL (+ 110 %)**

Total serum protein is composed of albumin and total globulin. Conditions that affect albumin and total globulin readings will impact the total protein value. A decreased total protein can be an indication of malnutrition, digestive dysfunction due to HCl need, or liver dysfunction. Malnutrition leads to a decreased total protein level in the serum primarily from lack of available essential amino acids. An increased total protein is most often due to dehydration.

**LDH ↑ 236.00 IU/L (+ 110 %)**

LDH represents a group of enzymes that are involved in carbohydrate metabolism. Decreased levels of LDH often correspond to hypoglycemia (especially reactive hypoglycemia), pancreatic function, and glucose metabolism. Increased levels are used to evaluate the presence of tissue damage to the cell causing a rupture in the cellular cytoplasm. LDH is found in many of the tissues of the body, especially the heart, liver, kidney, skeletal muscle, brain, red blood cells, and lungs. Damage to any of these tissues will cause an elevated serum LDH level.

**Homocysteine ↑ 9.20 µmol/L (+ 103 %)**

Homocysteine is a molecule formed from the incomplete metabolism of the amino acid methionine. Deficiencies in Vitamins B6, B12 and folate cause methionine to be converted into homocysteine. Homocysteine increases the risk of cardiovascular disease by causing damage to the endothelial lining of the arteries, especially in the heart. Increased levels of homocysteine are associated with an increased risk of cardiovascular disease and stroke, as well as cancer, depression and inflammatory bowel disease.

**Uric Acid, female ↑ 6.50 mg/dL (+ 90 %)**

Uric acid is produced as an end-product of purine, nucleic acid, and nucleoprotein metabolism. Levels can increase due to over-production by the body or decreased excretion by the kidneys. Increased uric acid levels are associated with gout, atherosclerosis, oxidative stress, arthritis, kidney dysfunction, circulatory disorders and intestinal permeability. Decreased levels are associated with detoxification issues, molybdenum deficiency, B12/folate anemia, and copper deficiency.

**TIBC ↑ 384.00 µg/dL (+ 84 %)**

Total Iron Binding Capacity is an approximate estimation of the serum transferrin level. Transferrin is the protein that carries most of the iron in the blood. Elevated levels are associated with iron deficiency anemia.

**RBC, Female ↑ 4.70 m/cumm (+ 83 %)**

The red blood cell functions to carry oxygen from the lungs to the body tissues and to transfer carbon dioxide from the tissues to the lungs where it is expelled. The RBC Count determines the total number of cells or erythrocytes found in a cubic millimeter of blood. Increased levels are associated with dehydration, stress, a need for vitamin C and respiratory distress such as asthma. Decreased levels are primarily associated with anemia.

**Triglycerides ↑ 108.00 mg/dL (+ 77 %)**

Serum triglycerides are composed of fatty acid molecules that enter the blood stream either from the liver or from the diet. Patients that are optimally metabolizing their fats and carbohydrates tend to have a triglyceride level about one-half of the total cholesterol level. Levels will be elevated in metabolic syndrome, fatty liver, in patients with an increased risk of cardiovascular disease, hypothyroidism and adrenal dysfunction. Levels will be decreased in liver dysfunction, a diet deficient in fat, and inflammatory processes.

**Glucose ↑ 94.00 mg/dL (+ 72 %)**

Blood glucose levels are regulated by several important hormones including insulin and glucagon. Glucose is also directly formed in the body from carbohydrate digestion and from the conversion in the liver of other sugars, such as fructose, into glucose. Increased blood glucose is associated with type 1 & 2 diabetes, metabolic syndrome, and insulin resistance. Decreased levels of blood glucose are associated with hypoglycemia.

**Fibrinogen ↑ 381.00 mg/dl (+ 66 %)**

Fibrinogen is one of the principle blood clotting proteins. It is produced in the liver and liver disease and dysfunction can cause a decrease in the level of circulating fibrinogen. Levels increase with tissue inflammation or tissue destruction. Elevated fibrinogen levels are associated with an increased risk of cardiovascular disease, heart attack, and stroke. Fibrinogen levels are often elevated in patients suffering from cancer, especially colon cancer.

**Monocytes ↑ 8.00 % (+ 64 %)**

Monocytes are white blood cells that are the body's second line of defense against infection. They are phagocytic cells that are capable of movement and remove dead cells, microorganisms, and particulate matter from circulating blood. Levels tend to rise at the recovery phase of an infection or with chronic infection.

**Bilirubin - Direct ↑ 0.21 mg/dL (+ 61 %)**

Direct or conjugated bilirubin is the form of bilirubin that has been made water soluble in the liver so it can be excreted in the bile. An increase in direct or conjugated bilirubin may be associated with a dysfunction or blockage in the liver, gallbladder, or biliary tree.

**Alk Phos ↑ 101.00 IU/L (+ 53 %)**

Alkaline phosphatase (ALP) is a group of isoenzymes that originate in the bone, liver, intestines, skin, and placenta. It has a maximal activity at a pH of 9.0-10.0, hence the term alkaline phosphatase. Elevated levels of ALP in the serum can occur with any liver dysfunction, it is especially sensitive to any type of obstruction in the biliary tract, both intra and extra-hepatic, both severe and mild. The degree of ALP elevation is in direct correlation to the severity of the obstruction. Elevated levels not of liver origin are seen in normal bone growth in children and healing fractures.

**BUN/Creatinine Ratio ↑ 16.17 Ratio (+ 53 %)**

The BUN/Creatinine is a ratio between the BUN and Creatinine levels. An increased level is associated with renal dysfunction. A decreased level is associated with a diet low in protein.

## Below Optimal

**Phosphorus ↓ 2.80 mg/dL (- 190 %)**

Phosphorous levels, like calcium, are regulated by parathyroid hormone (PTH). Phosphate levels are closely tied with calcium, but they are not as strictly controlled as calcium. Plasma levels may be decreased after a high carbohydrate meal or in people with a diet high in refined carbohydrates. Serum phosphorous is a general marker for digestion. Decreased phosphorous levels are associated with hypochlorhydria. Serum levels of phosphorous may be increased with a high phosphate consumption in the diet, with parathyroid hypofunction and renal insufficiency.

**CO2 ↓ 20.00 mEq/L (- 150 %)**

Carbon Dioxide is a measure of bicarbonate in the blood. $CO_2$, as bicarbonate, is available for acid-base balancing. Bicarbonate neutralizes metabolic acids in the body. Elevated levels of CO2 are associated with metabolic alkalosis and hypochlorhydria. Decreased levels are associated with metabolic acidosis.

**Magnesium ↓ 1.90 mg/dl (- 150 %)**

Magnesium is important for many different enzymatic reactions, including carbohydrate metabolism, protein synthesis, nucleic acid synthesis, and muscular contraction. Magnesium is also needed for energy production and is used by the body in the blood clotting mechanism. An increased serum magnesium is associated with kidney dysfunction and thyroid hypofunction. A decreased magnesium is a common finding with muscle cramps.

**Vitamin D (25-OH) ↓ 28.30 ng/ml (- 104 %)**

This vitamin D test measures for levels of 25-OH vitamin D and is a very good way to assess vitamin D status. Vitamin D deficiency has been associated with many disorders including many forms of cancer, hypertension, cardiovascular disease, chronic inflammation, chronic pain, mental illness including depression, diabetes, multiple sclerosis to name just a few.

**Testosterone, Total Female ↓ 21.90 ng/dl (- 95 %)**

In women, total testosterone can help in the evaluation of polycystic ovarian syndrome, testosterone-producing tumors of the ovary, tumors of the adrenal cortices, and congenital adrenal hyperplasia.

Imbalances of testosterone in postmenopausal women are associated with various forms of coronary heart disease and cardiovascular events, including myocardial infarction.

**Creatinine ↓ 0.68 mg/dL (- 90 %)**

Creatinine is produced primarily from the contraction of muscle and is removed by the kidneys. A disorder of the kidney and/or urinary tract will reduce the excretion of creatinine and thus raise blood serum levels. Creatinine is traditionally used with BUN to assess for impaired kidney function. Elevated levels can also indicate dysfunction in the prostate.

**DHEA-S, Female ↓ 234.00 µg/dl (- 83 %)**

DHEA is produced primarily from the adrenals and is the most abundant circulating steroid in the human body and influences more than 150 known anabolic (repair) functions throughout the body and brain. It is the precursor for the sex hormones: testosterone, progesterone, and estrogen. Decreased levels are associated with many common age-related conditions, including diseases of the nervous, cardiovascular, and immune systems such as metabolic syndrome, coronary artery disease, osteoporosis, mood disorders and sexual dysfunction. Ideally, DHEA levels should be maintained at the level of a healthy 30-year-old to maximize the anti-aging effects.

**Hemoglobin, Female ↓ 13.20 g/dl (- 80 %)**

Hemoglobin is the oxygen carrying molecule in red blood cells. Measuring hemoglobin is useful to determine the cause and type of anemia and for evaluating the efficacy of anemia treatment. Hemoglobin levels may be increased in cases of dehydration.

**T3 Uptake ↓ 25.00 % (- 75 %)**

The T-3 uptake test has nothing to do with actual T-3 levels, as the name might suggest. Increased levels are associated with hyperthyroidism and people on thyroid hormone. Decreased levels are associated with hypothyroidism and deficiencies of iodine and selenium.

**MCHC↓ 31.70 g/dL (- 60 %)**

The Mean Corpuscular Hemoglobin Concentration (MCHC) measures the average concentration of hemoglobin in the red blood cells. It is a calculated value. It is elevated with B12/folate deficiency and hypochlorhydria. Decreased levels are associated with a vitamin C need, vitamin B6 and iron deficiencies, and a heavy metal body burden.

**Free Thyroxine Index (T7)↓ 1.62 Index (- 53 %)**

The Free Thyroxine Index is a calculated measurement used to determine how much active thyroid hormone (thyroxine/Free T4) is available.

# Functional Index Report

The indices shown below represent an analysis of this blood test. These results have been converted into your patient's individual Functional Index Report based on our latest research. This report gives you an indication of the level of dysfunction that exists in the various physiological systems in the body. Please use this report in conjunction with the " Practitioner's Only Clinical Dysfunctions Report" to identify which dysfunctions and conditions are causing changes in the Functional Index and to put together a unique treatment plan designed to bring their body back into a state of functional health, wellness and energy.

**Score Guide:** **90% - 100%** - Dysfunction Highly Likely, **70% - 90%** - Dysfunction Likely, **50% - 70%** - Dysfunction Possible, **< 50%** - Dysfunction Less Likely.

| Functional Index | 0% 100% |
|---|---|
| Inflammation Index | 100% |
| Acid-Base Index | 100% |
| Cardiovascular Risk Index | 93% |
| Blood Sugar Index | 76% |
| Electrolyte Index | 67% |
| Sex Hormone Index - Female | 50% |
| GI Function Index | 47% |
| Bone Health Index | 47% |
| Toxicity Index | 44% |
| Heavy Metal Index | 38% |
| Gallbladder Function Index | 33% |
| Red Blood Cell Index | 31% |
| Oxidative Stress Index | 29% |
| Thyroid Function Index | 29% |
| Kidney Function Index | 27% |
| Liver Function Index | 25% |
| Lipid Panel Index | 18% |
| Immune Function Index | 11% |
| Adrenal Function Index | 11% |
| Allergy Index | 0% |

## Inflammation Index

A high Inflammation Index reflects the degree of inflammation that your patient may be dealing with. A number of elements in the blood increase in the presence of dysfunctions and diseases associated with inflammation: cardiovascular disease, diabetes, hypertension, autoimmune diseases, and fibromyalgia to name a few. Based on this blood test, your patient's Inflammation Index is:

**[ 100% ] - Dysfunction Highly Likely. Much improvement required.**

**Rationale:**
Hs CRP, Female ↑, Uric Acid, female ↑, LDH ↑, Fibrinogen ↑, Homocysteine ↑, Globulin, total ↑, Alk Phos ↑, Vitamin D (25-OH) ↓

**Elements Considered:**
Hs CRP, Female, Uric Acid, female, LDH, Fibrinogen, Homocysteine, Sodium/Potassium Ratio, Globulin, total, Cholesterol - Total, Triglycerides, HDL Cholesterol, Iron - Serum, Ferritin, Platelets, Lymphocytes, Basophils, Alk Phos, RDW, Vitamin D (25-OH)

**Patient Result Not Available - Consider Running In Future Tests:**
ESR, Female, Creatine Kinase, C-Reactive Protein

## Acid-Base Index

A high Acid-Base Index indicates a functional imbalance in the body's pH system. Consider metabolic acidosis or metabolic alkalosis as a cause for this imbalance. Based on this blood test, your patient's Acid-Base Index is:

**[ 100% ] - Dysfunction Highly Likely. Much improvement required.**

**Rationale:**
Anion gap ↑, CO2 ↓

**Elements Considered:**
Anion gap, Potassium, Chloride, CO2, Calcium

## Cardiovascular Risk Index

The Cardiovascular Risk Index is based on the measurement of 15 elements in a blood test that indicate an increase risk of this patient developing cardiovascular disease (heart attack, coronary artery disease and stroke). A high Cardiovascular Risk Index indicates that your patient may have an increased risk of cardiovascular disease, atherosclerosis, endothelial dysfunction, and inflammation. Based on this blood test, your patient's Cardiovascular Risk Index is:

**[ 93% ] - Dysfunction Highly Likely. Much improvement required.**

**Rationale:**
Glucose ↑, LDH ↑, Triglycerides ↑, Fibrinogen ↑, Hs CRP, Female ↑, Homocysteine ↑, Insulin - Fasting ↑, Vitamin D (25-OH) ↓

**Elements Considered:**
Glucose, AST (SGOT), LDH, Cholesterol - Total, Triglycerides, LDL Cholesterol, HDL Cholesterol, Ferritin, Fibrinogen, Hs CRP, Female, Homocysteine, Hemoglobin A1C, Insulin - Fasting, Vitamin D (25-OH)

**Patient Result Not Available - Consider Running In Future Tests:**
Testosterone, Free Female

## Blood Sugar Index

A high Blood Sugar Index indicates that there is dysfunction in this patient's blood sugar regulation. Blood sugar dysregulation is affected by genetics, diet, lifestyle, nutrition and environment. Some factors to consider include hypoglycemia, metabolic syndrome, insulin resistance, hyperinsulinemia, and type 2 Diabetes. Based on this blood test, your patient's Blood Sugar Index is:

**[ 76% ] - Dysfunction Likely. Improvement required.**

**Rationale:**
Glucose ↑, Insulin - Fasting ↑, Triglycerides ↑, DHEA-S, Female ↓

**Elements Considered:**
Glucose, LDH, Hemoglobin A1C, Insulin - Fasting, Cholesterol - Total, Triglycerides, LDL Cholesterol, HDL Cholesterol, DHEA-S, Female

**Patient Result Not Available - Consider Running In Future Tests:**
Leptin, Female

## Electrolyte Index

A high Electrolyte Index indicates that there's a degree of dysfunction in the body's electrolytes: potassium, sodium, chloride, potassium and magnesium. View the Nutrient Index report to identify which electrolytes might be deficient. Based on this blood test, your patient's Electrolyte Index is:

**[ 67% ] - Dysfunction Possible. There may be improvement needed in certain areas.**

**Rationale:**
Phosphorus ↓, Magnesium ↓

**Elements Considered:**
Sodium, Potassium, Chloride, Calcium, Phosphorus, Magnesium

## Sex Hormone Index - Female

The Female Sex Hormone Index indicates an increasing level of sex hormone deficiencies in your patient. Review the individual levels of hormones to identify which hormones are causing the high index: testosterone, DHEA and estradiol. Based on this blood test, your patient's Female Sex Hormone Index is:

**[ 50% ] - Dysfunction Possible. There may be improvement needed in certain areas.**

**Rationale:**
DHEA-S, Female ↓, Testosterone, Total Female ↓

**Elements Considered:**
DHEA-S, Female, Estradiol, Female, Testosterone, Total Female

**Patient Result Not Available - Consider Running In Future Tests:**
Testosterone, Free Female, Progesterone, Female

# Nutrient Index Report

The indices shown below represent an analysis of your patient's blood test results. These results have been converted into their individual Nutrient Assessment Report based on our latest research. This report gives you an indication of their general nutritional status. Nutritional status is influenced by actual dietary intake, digestion, absorption, assimilation and cellular uptake of the nutrients themselves. You can use this information, along with information about individual nutrient deficiencies, to put together a unique treatment plan designed to bring their body back into a state of functional health, wellness and energy.

**Score Guide:** **90% - 100%** - Nutrient Status is Poor, **75% - 90%** - Nutrient Status is Low, **50% - 75%** - Moderate Nutrient Status, **< 50%** - Optimum Nutrient Status

| Nutrient Index | 0% 100% |
|---|---|
| Vitamin Index | 100% |
| Mineral Index | 58% |
| Carbohydrate Index | 50% |
| Protein Index | 24% |
| Hydration Index | 20% |
| Fat Index | 0% |

## Vitamin Index

The Vitamin Index gives us a general indication of the balance of certain vitamins in the body based on the results of this blood test. A high Vitamin Index indicates a level of deficiency or need in one or more of the vitamins reflected in this index, which includes vitamin B12, vitamin B6, folate, thiamin, vitamin D and vitamin C. Factors to consider are the amount in the diet, the ability to digest and breakdown individual vitamins from the food or supplements consumed, and the ability of those vitamins to be absorbed, transported and ultimately taken up into the cells themselves. Please use the information at the bottom of this report to identify which vitamin or vitamins may be in need. Based on this blood test, your patient's Vitamin Index is:

**[ 100% ] - Nutrient Status is Poor. Much improvement required.**

**Rationale:**
Anion gap ↑, Homocysteine ↑, Vitamin D (25-OH) ↓

**Elements Considered:**
Anion gap, Albumin, AST (SGOT), ALT (SGPT), GGT, Homocysteine, Vitamin D (25-OH), MCV

## Mineral Index

The Mineral Index gives us a general indication of the balance of certain minerals in the body based on the results of this blood test. A high Mineral Index indicates a level of deficiency or need in one or more of the minerals reflected in this index, which includes calcium, zinc, copper, potassium, molybdenum, selenium, magnesium, iodine and iron. Factors to consider include the amount in the diet, the ability to digest and breakdown individual minerals from food or supplements consumed, the ability of those minerals to be absorbed, transported and ultimately taken up by the cells themselves. In the case of certain minerals, such as iron and potassium, you must also consider the possibility of a mineral deficiency due to increased excretion or loss, such as increased bleeding causing an iron deficiency. Please use the information at the bottom of this report to identify which mineral or minerals may be deficient. Based on this blood test, your patient's Mineral Index is:

**[ 58% ] - Moderate Nutrient Status. There may be improvement needed in certain areas.**

**Rationale:**
Phosphorus ↓, TIBC ↑, Magnesium ↓

**Elements Considered:**
Potassium, Uric Acid, female, Calcium, Phosphorus, Alk Phos, GGT, Iron - Serum, Ferritin, TIBC, Total T3, MCV, Magnesium

**Patient Result Not Available - Consider Running In Future Tests:**
% Transferrin saturation, Free T3

### Carbohydrate Index

The Carbohydrate Index gives us an assessment of your patient's dietary intake of carbohydrates, especially refined carbohydrates and sugars. A diet high in refined carbohydrates and sugars will deplete phosphorus stores and other important co-factors for carbohydrate metabolism. It may also increase serum glucose and serum triglyceride levels. Follow up a high Carbohydrate Index with a thorough assessment of blood sugar regulation and also an investigation into this patient's dietary consumption of sugars and refined carbohydrates. Based on this blood test, your patient's Carbohydrate Index is:

**[ 50% ] - Moderate Nutrient Status. There may be improvement needed in certain areas.**

**Rationale:**
Glucose ↑, Phosphorus ↓, Triglycerides ↑

**Elements Considered:**
Glucose, Phosphorus, LDH, Cholesterol - Total, Triglycerides, LDL Cholesterol, HDL Cholesterol, Total WBCs

## Individual Nutrient Deficiencies

The values below represent the degree of deficiency for individual nutrients based on your patient's blood results. The status of an individual nutrient is based on a number of factors such as actual dietary intake, digestion, absorption, assimilation and cellular uptake of the nutrients themselves. All of these factors must be taken into consideration before determining whether or not your patient/client actually needs an individual nutrient. Use the information in this section to put together an individualized treatment plan to bring your patient back into a state of optimal nutritional function.

**Score Guide:** **90% - 100%** - Deficiency Highly Likely, **70% - 90%** - Deficiency Likely, **50% - 70%** - Deficiency Possible, **< 50%** - Deficiency Less Likely.

| Nutrient Deficiencies | 0% 100% |
|---|---|
| Vitamin D Need | 100% |
| Thiamine Need | 90% |
| DHEA Need | 80% |
| Magnesium Need | 75% |
| Vitamin B12/Folate Need | 56% |
| Calcium Need | 43% |
| Iron Deficiency | 36% |
| Selenium Need | 33% |
| Vitamin C Need | 30% |
| Vitamin B6 Need | 20% |
| Iodine Need | 18% |
| Zinc Need | 0% |
| Molybdenum Need | 0% |
| Glutathione Need | 0% |

## Vitamin D Need

The results of this blood test indicate that this patient's Vitamin D levels might be lower than optimal.

**[ 100% ] - Dysfunction Highly Likely. Much improvement required.**

**Rationale:**
Vitamin D (25-OH) ↓

**Elements Considered:**
Vitamin D (25-OH)

## Thiamine Need

Consider Thiamine deficiency with an **increased anion gap** along with a **decreased $CO_2$**. **Hemoglobin** and **hematocrit** levels may be normal or decreased. Due to thiamine's role in glycolysis, **LDH** levels may be decreased and **glucose** levels may be normal to increased.

**[ 90% ] - Dysfunction Highly Likely. Much improvement required.**

**Rationale:**
Anion gap ↑, CO2 ↓, Glucose ↑, Hemoglobin, Female ↓

**Elements Considered:**
Anion gap, CO2, Glucose, LDH, Hemoglobin, Female, Hematocrit, Female

## DHEA Need

The results of this blood test indicate that this patient's DHEA levels might be lower than optimal.

**[ 80% ] - Dysfunction Likely. Improvement required.**

**Rationale:**
DHEA-S, Female ↓

**Elements Considered:**
DHEA-S, Female

## Magnesium Need

A magnesium need is associated with a **decreased serum magnesium,** a **decreased GGTP** and a **decreased serum potassium.**

**[ 75% ] - Dysfunction Likely. Improvement required.**

**Rationale:**
Magnesium ↓

**Elements Considered:**
Magnesium, GGT, Potassium

## Vitamin B12/Folate Need

Consider a Vitamin B12 and folate need if the **MCV** is increased along with an increased **MCH**. If there is also an increased **RDW**, **MCHC**, and **LDH** (especially the LDH-1 isoenzyme fraction), and a decreased **uric acid** level the probability of vitamin B-12 or folic acid anemia is very high. Serum Vitamin B12 and serum folate may also decreased.

**[ 56% ] - Dysfunction Possible. There may be improvement needed in certain areas.**

**Rationale:**
LDH ↑, Homocysteine ↑, Hemoglobin, Female ↓

**Elements Considered:**
MCV, LDH, Homocysteine, Uric Acid, female, Albumin, Total WBCs, RBC, Female, Hemoglobin, Female, Hematocrit, Female, MCH, MCHC, RDW, Neutrophils, Vitamin B12

**Patient Result Not Available - Consider Running In Future Tests:**
Folate

# Recommended Further Testing

## Advanced Practitioner Only Report

Based on the results of the analysis of this blood test, the following areas may require further investigation. The suggestions for further testing are merely examples and do not attempt to provide you with an exhaustive list of further evaluation methods.

### DHEA Imbalance

The results of this blood test indicate that this patient may dealing with a DHEA deficiency. This may or may not be accompanied by an adrenal imbalance. A blood test can show a low DHEA level but it doesn't tell us why. You may want to do an Adrenal Salivary test to give you more information on the DHEA level in relation to cortisol levels and adrenal function.

**Rationale:**
DHEA-S, Female ↓

# Blood Test History Report

The Blood Test History Report lists the results of your patient's Chemistry Screen and CBC tests side by side with the latest test listed on the right hand side. This report allows you to compare results over time and see where improvement has been made and allows you to track progress.

| Element | Latest Test Result<br>Jun 21 2025 |
|---|---|
| Glucose | 94.00 ↑ |
| Hemoglobin A1C | 5.50 |
| Insulin - Fasting | 16.70 ↑ |
| Fructosamine | |
| C-Peptide | |
| BUN | 11.00 |
| Creatinine | 0.68 ↓ |
| Creatinine, 24-hour urine | |
| Creatinine Clearance | |
| eGFR | 120.00 |
| BUN/Creatinine Ratio | 16.17 ↑ |
| Sodium | 138.00 |
| Potassium | 4.50 |
| Sodium/Potassium Ratio | 30.66 |
| Chloride | 101.00 |
| CO2 | 20.00 ↓ |
| Anion gap | 21.50 ↑ |
| Uric Acid, female | 6.50 ↑ |
| Protein, total | 7.70 ↑ |
| Albumin | 4.50 |
| Globulin, total | 3.20 ↑ |
| Albumin/Globulin Ratio | 1.40 |
| Calcium | 9.70 |
| Calcium/Albumin Ratio | 2.15 |
| Phosphorus | 2.80 ↓ |
| Calcium/Phosphorous Ratio | 3.46 ↑ |
| Collagen Cross-Linked NTx | |
| Magnesium | 1.90 ↓ |
| Alk Phos | 101.00 ↑ |

| Element | Latest Test Result<br>Jun 21 2025 |
|---|---|
| LDH | 236.00 ↑ |
| AST (SGOT) | 20.00 |
| ALT (SGPT) | 24.00 |
| GGT | 13.00 |
| Bilirubin - Total | 0.60 |
| Bilirubin - Direct | 0.21 ↑ |
| Bilirubin - Indirect | 0.39 |
| Iron - Serum | 110.00 |
| Ferritin | 77.00 |
| TIBC | 384.00 ↑ |
| % Transferrin saturation | |
| Cholesterol - Total | 187.00 |
| Triglycerides | 108.00 ↑ |
| LDL Cholesterol | 105.00 |
| HDL Cholesterol | 63.00 |
| VLDL Cholesterol | |
| Cholesterol/HDL Ratio | 3.00 |
| Triglyceride/HDL Ratio | 1.71 |
| Leptin, Female | |
| TSH | 2.07 |
| Total T4 | 6.50 |
| Total T3 | 127.00 |
| Free T4 | |
| Free T3 | |
| T3 Uptake | 25.00 ↓ |
| Free Thyroxine Index (T7) | 1.62 ↓ |
| Thyroid Peroxidase (TPO) Abs | |
| Thyroglobulin Abs | |
| Reverse T3 | |
| C-Reactive Protein | |
| Hs CRP, Female | 11.64 ⚠ |
| ESR, Female | |
| Homocysteine | 9.20 ↑ |
| Fibrinogen | 381.00 ↑ |
| Creatine Kinase | |

| Element | Latest Test Result<br>Jun 21 2025 |
|---|---|
| Vitamin D (25-OH) | 28.30 ↓ |
| Vitamin B12 | 593.00 |
| Folate | |
| DHEA-S, Female | 234.00 ↓ |
| Cortisol - AM | |
| Cortisol - PM | |
| Testosterone, Free Female | |
| Testosterone, Total Female | 21.90 ↓ |
| Sex Hormone Binding Globulin, female | |
| Estradiol, Female | 29.80 |
| Progesterone, Female | |
| Total WBCs | 6.40 |
| RBC, Female | 4.70 ↑ |
| Reticulocyte count | |
| Hemoglobin, Female | 13.20 ↓ |
| Hematocrit, Female | 41.60 |
| MCV | 89.00 |
| MCH | 28.10 |
| MCHC | 31.70 ↓ |
| Platelets | 373.00 |
| RDW | 13.00 |
| Neutrophils | 54.00 |
| Bands | |
| Lymphocytes | 37.00 |
| Monocytes | 8.00 ↑ |
| Eosinophils | 1.00 |
| Basophils | 0.00 |

# Clinical Dysfunctions Report

## Advanced Practitioner Only Report

The Clinical Dysfunctions Report shows a list of likely Health Concerns and Nutrient Deficiencies that your patient may be suffering from based on an analysis of their Chemistry Screen and CBC results. Health Concerns that are most likely are listed at the top of the report and the least likely at the bottom.

**Score Guide:** **90% - 100%** - Dysfunction Highly Likely, **70% - 90%** - Dysfunction Likely, **50% - 70%** - Dysfunction Possible, **< 50%** - Dysfunction Less Likely.

| Health Concerns | 0% 100% |
|---|---|
| Metabolic Syndrome | 100% |
| Endothelial Dysfunction | 100% |
| Intestinal Hyperpermeability | 100% |
| Hyperinsulinemia | 86% |
| Dysglycemia | 71% |
| Metabolic Acidosis | 65% |
| Gastric Inflammation | 53% |
| Gout | 50% |
| Hypochlorhydria | 44% |
| Testosterone Deficiency | 40% |
| Viral Infection | 38% |
| Liver Cell Damage | 33% |
| Muscle Atrophy/Breakdown | 33% |
| Anemia | 31% |
| Liver Dysfunction | 30% |
| Biliary Obstruction | 29% |
| Fatty Liver/Steatosis | 29% |
| Biliary Insufficiency/Stasis | 27% |
| Adrenal Insufficiency | 20% |
| Intestinal Parasites | 20% |
| Pancreatic Insufficiency | 20% |
| Fatty Liver - Early Stage | 18% |
| Bacterial Infection | 18% |
| Liver Cirrhosis | 12% |
| Hypothyroidism - Secondary | 9% |
| Renal Insufficiency | 8% |
| Renal Disease | 6% |
| Immune Insufficiency | 6% |
| Adrenal Stress | 0% |
| Hypoglycemia | 0% |
| Hyperactive Thyroid | 0% |

| Health Concerns | 0% | 100% |
|---|---|---|
| Hypothyroidism - T4 under conversion | 0% | |
| Metabolic Alkalosis | 0% | |

## Metabolic Syndrome

Consider metabolic syndrome with an increased **triglyceride**, an increased **total cholesterol**, an increased **LDL** cholesterol, a decreased **HDL**, an increased fasting **blood glucose** and an increased **hemoglobin A1C**. Additional elements that may be out of range with metabolic syndrome include an increased fasting **insulin**, an increased **uric acid** and decreased **DHEA**.

**[ 100% ] - Dysfunction Highly Likely. Much improvement required.**

**Rationale:**
Glucose ↑, Triglycerides ↑, Insulin - Fasting ↑, Uric Acid, female ↑, DHEA-S, Female ↓

**Elements Considered:**
Glucose, Triglycerides, Hemoglobin A1C, Insulin - Fasting, Uric Acid, female, Cholesterol - Total, LDL Cholesterol, HDL Cholesterol, DHEA-S, Female

**Patient Result Not Available - Consider Running In Future Tests:**
Leptin, Female

## Endothelial Dysfunction

Consider endothelial dysfunction with an increased **homocysteine**, an increased **blood glucose**, an increased **fibrinogen**, an increased **HS-CRP**, a decreased **free serum testosterone**, and an increased **iron**. Some of the other causes of endothelial dysfunction include smoking, hypertension, nutrient deficiencies, a standard Western diet, and a lack of exercise.

**[ 100% ] - Dysfunction Highly Likely. Much improvement required.**

**Rationale:**
Fibrinogen ↑, Hs CRP, Female ↑, Homocysteine ↑, Glucose ↑

**Elements Considered:**
Fibrinogen, Hs CRP, Female, Homocysteine, Glucose, Iron - Serum

## Intestinal Hyperpermeability

Although there are no tests specifically for Leaky Gut Syndrome or intestinal hyperpermeability on a blood chemistry screen, it is associated with an increased **uric acid** and an increased **alkaline phosphatase**.

**[ 100% ] - Dysfunction Highly Likely. Much improvement required.**

**Rationale:**
Uric Acid, female ↑, Alk Phos ↑

**Elements Considered:**
Uric Acid, female, Alk Phos

## Hyperinsulinemia

Insulin resistance is the condition in which people lose sensitivity to the hormone insulin. As the cells become resistant to insulin, levels of insulin and blood glucose will rise. Consider insulin resistance with an increased **fasting insulin** and an increased **fasting blood glucose**, an increased **Hemoglobin A1C**, an increased **triglyceride** and an increased **Triglyceride/HDL ratio.** You may also see an increased **total cholesterol**, an increased **C-Peptide**, a decreased **HDL** and a decreased **phosphorous**.

**[ 86% ] - Dysfunction Likely. Improvement required.**

**Rationale:**
Glucose ↑, Phosphorus ↓, Triglycerides ↑, Insulin - Fasting ↑

**Elements Considered:**
Glucose, Phosphorus, Cholesterol - Total, Triglycerides, HDL Cholesterol, Insulin - Fasting, Triglyceride/HDL Ratio

**Patient Result Not Available - Consider Running In Future Tests:**
C-Peptide

## Dysglycemia

Dysglycemia is an imbalance in the ability of the body to regulate blood glucose levels causing unhealthy blood glucose levels that can lead to Diabetes, Metabolic Syndrome, Obesity, Insulin Resistance and Hyperinsulinemia. Consider dysglycemia with an **elevated blood glucose level** and an **elevated hemoglobin A1C level**.

**[ 71% ] - Dysfunction Likely. Improvement required.**

**Rationale:**
Glucose ↑

**Elements Considered:**
Glucose, Hemoglobin A1C

**Patient Result Not Available - Consider Running In Future Tests:**
Leptin, Female

## Metabolic Acidosis

Consider metabolic acidosis if the **anion gap** is increased along with an increased **potassium**, a decreased **$CO_2$** and an increased **chloride**.

**[ 65% ] - Dysfunction Possible. There may be improvement needed in certain areas.**

**Rationale:**
Anion gap ↑, CO2 ↓

**Elements Considered:**
Anion gap, Potassium, Chloride, CO2

## Gastric Inflammation

Gastric inflammation or gastritis is often secondary to hypochlorhydria where the pattern is similar but the total globulin level may be decreased unless inflammation is severe, which may lead to an increased **globulin** level due to the increased production of inflammatory immunoglobulins. Consider gastric inflammation or gastritis with a decreased **total globulin**, a decreased serum **protein**, a decreased **phosphorous**, a decreased **hemoglobin** and an increased **BUN**. Additional elements that may be out of range with gastric inflammation include an increased **basophil** count, an increased **ESR**, a decreased **albumin** and a decreased **creatinine**.

**[ 53% ] - Dysfunction Possible. There may be improvement needed in certain areas.**

**Rationale:**
Globulin, total ↑, Hemoglobin, Female ↓, Creatinine ↓, Phosphorus ↓

**Elements Considered:**
Globulin, total, Protein, total, Hemoglobin, Female, BUN, Creatinine, Albumin, Phosphorus, Basophils

**Patient Result Not Available - Consider Running In Future Tests:**
ESR, Female, Gastrin

## Gout

Gout is a condition in which uric acid crystals precipitate in the tissue, especially the big toe (tophi). Consider gout if there is an increased **uric acid**. The likelihood increases if there is also a decreased **phosphorous**, an increased **total cholesterol**, an increased **BUN** and a normal or increased **creatinine**.

**[ 50% ] - Dysfunction Possible. There may be improvement needed in certain areas.**

**Rationale:**
Uric Acid, female ↑, Phosphorus ↓

**Elements Considered:**
Uric Acid, female, BUN, Creatinine, Phosphorus, Cholesterol - Total

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