



Lab Interpretation, LLC  
18124 Wedge Pkwy, Ste 432  
Reno, NV 89511

(775) 851-3337  
(775) 851-3363 Fax  
www.labinterpretation.com

**Anna Salanti**

Date: 7/16/2014

Next Test Due: 1/14/2015

## ***LabAssist™ Foundational Wellness Profile Report***

### ***Practitioner***

*Printed on Tuesday, August 5, 2014 for:*

**Anna Salanti**  
7619 SW 26th Ave.  
Portland, OR 97219  
503-977-2660  
503-244-9946 (fax)

---

The information contained in this report is for the exclusive use of addressee and contains confidential, privileged and non-disclosable information. If the recipient of this report is not the addressee or the person responsible for delivering the message to the addressee, such recipient is prohibited from reading or using this message in any way and such recipient is further notified that any dissemination, distribution or copying of this report is strictly prohibited. If you have received this report in error, please notify us immediately by telephone collect and return the original report to us at the address below via the U.S. Postal Service. We will reimburse you for postage. Thank you.

## Basic Status High/Low - Plasma Amino Acids on 7/16/2014

**Anna Salanti**

**Foundational Wellness Profile Date: 7/16/2014**

Female / Age: 62

Anna Salanti (2718)

Client ID:555986644 (8322)

503-977-2660

The % Status is the weighted deviation of the laboratory result.

### Low Results

-80	-60	-40	-20	0		% Status	Result	Low	High
					Glutamine	-72.22 L	30.00	36.00	63.00
					Phosphoserine	-66.67 L	0.01	0.01	0.03
					Asparagine/Aspartate	-55.73 L	2.20	7.50	100.00
					Asparagine	-55.00 L	3.30	3.50	7.50
					Glutamine/Glutamate	-51.97 L	6.70	8.50	100.00
					Anserine	-50.00 L	0.00	0.00	0.20
					Threonine	-46.43 L	8.50	8.00	22.00
					Phosphoethanolamine	-41.30 L	0.16	0.08	1.00
					3-Methylhistidine	-32.00 L	0.81	0.00	4.50
					Serine	-31.00 L	7.90	6.00	16.00
					Glutamic Acid	-30.77 L	4.50	2.00	15.00
					Tryptophan	-25.00 L	4.00	3.00	7.00
					Tyrosine	-25.00 L	5.50	4.00	10.00

-25%

### High Results

-50	0	50	100	150		% Status	Result	Low	High
					Hydroxyproline	187.04 H	6.40	0.00	2.70
					Ammonia	113.33 H	49.00	0.00	30.00
					Cystine	50.00 H	6.50	2.00	6.50
					Aspartic Acid	43.10 H	1.50	0.15	1.60
					Valine	33.33 H	28.00	13.00	31.00
					b-Aminoisobutyric Acid	30.00 H	0.40	0.00	0.50
					Methionine	27.27 H	2.50	0.80	3.00

-25%

25%

**Basic Status High/Low - Blood Test on 7/16/2014**

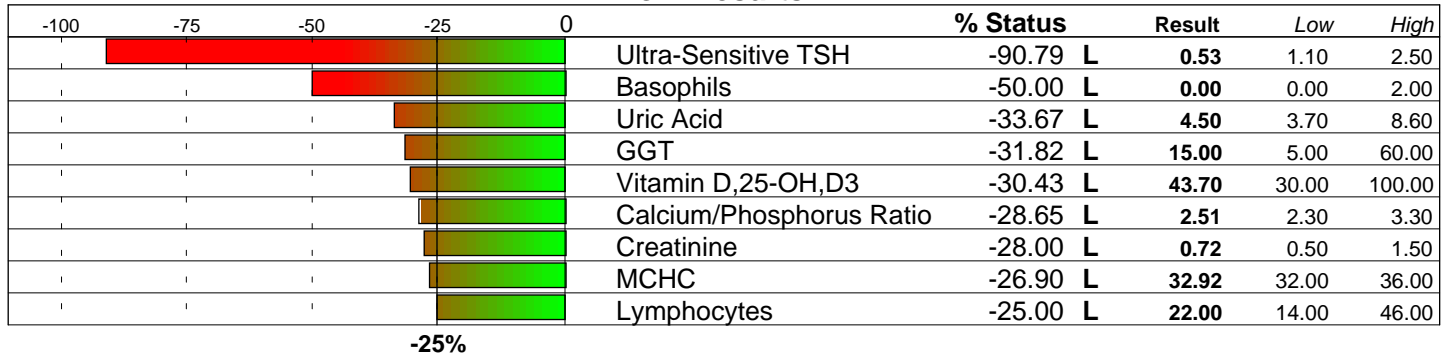
**Anna Salanti**  
Female / Age: 62

**Foundational Wellness Profile Date: 7/16/2014**

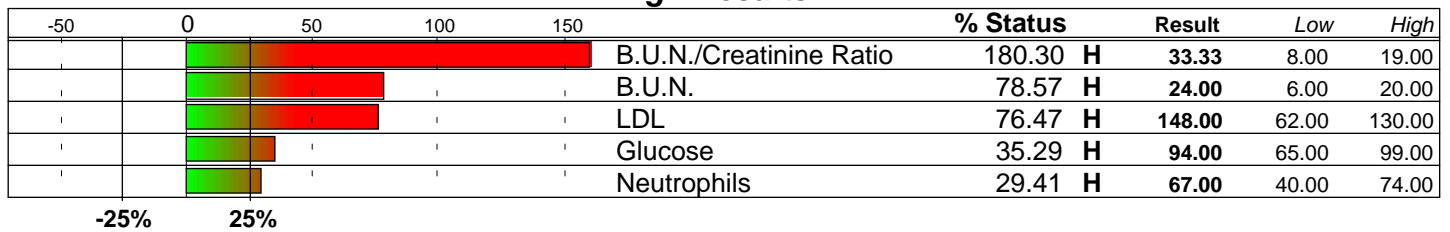
Anna Salanti (2718)

The % Status is the weighted deviation of the laboratory result.

**Low Results**



**High Results**



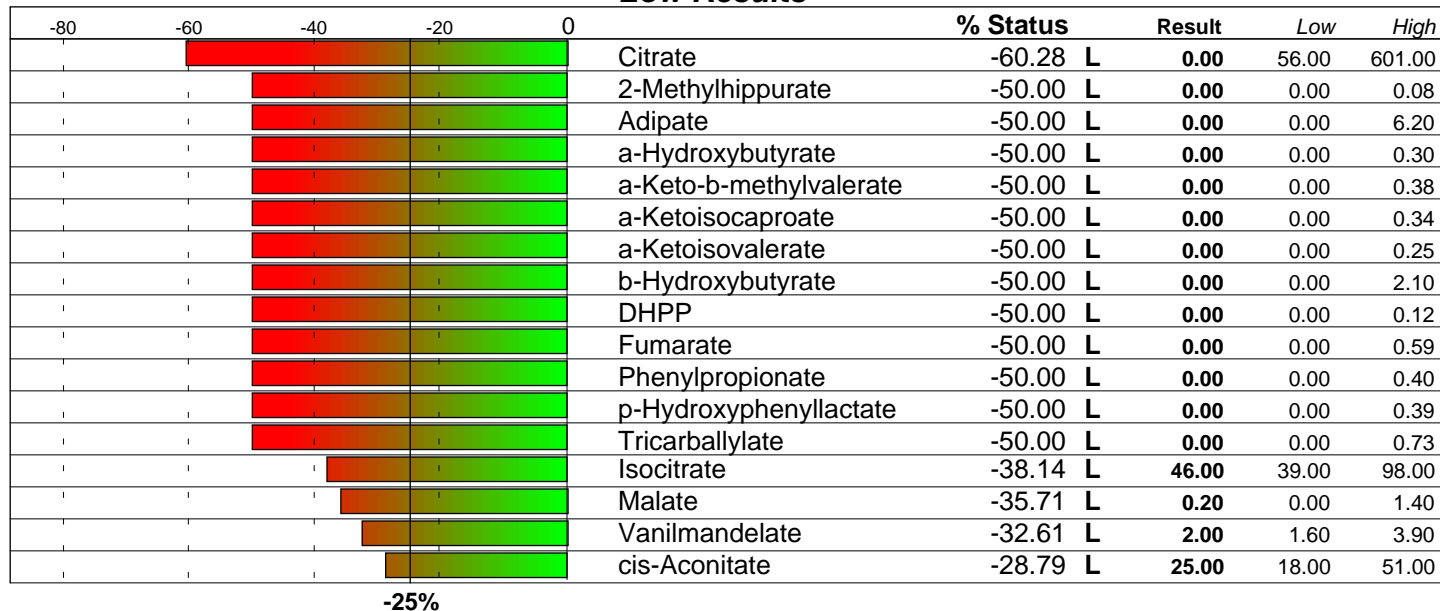
## Basic Status High/Low - Urine Organic Acids on 7/16/2014

Anna Salanti  
Female / Age: 62

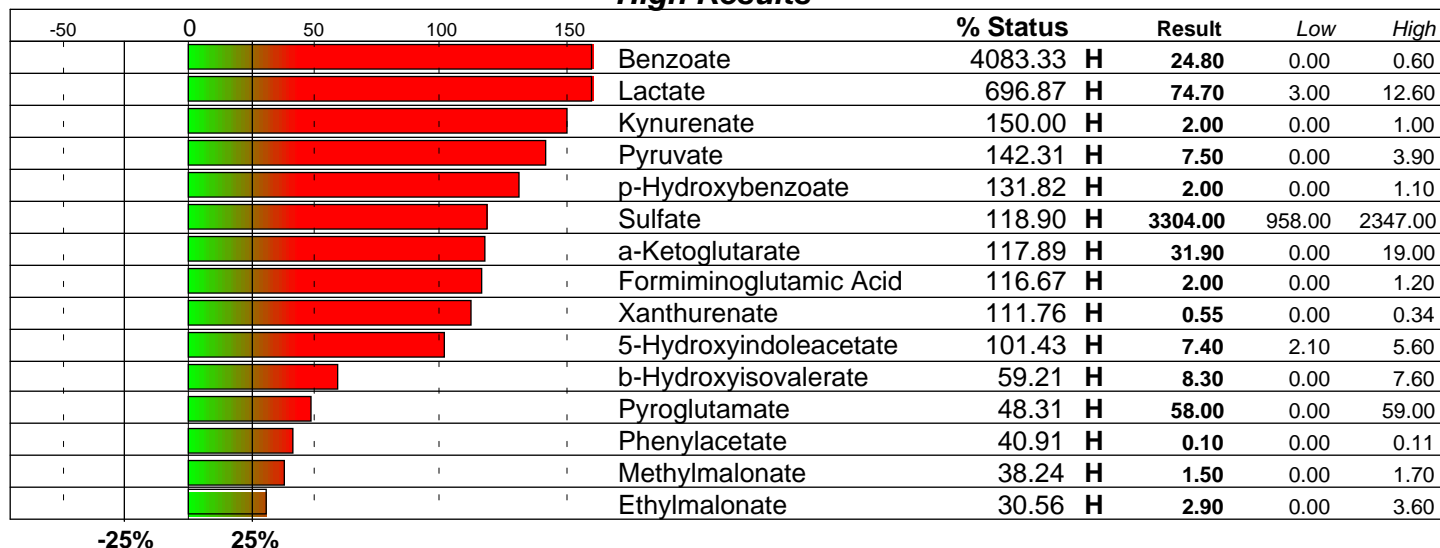
Foundational Wellness Profile Date: 7/16/2014  
Anna Salanti (2718)

The % Status is the weighted deviation of the laboratory result.

### Low Results



### High Results



Basic Status Alphabetic - Plasma Amino Acids on 7/16/2014

Anna Salanti  
Female / Age: 62

Foundational Wellness Profile Date: 7/16/2014

Anna Salanti (2718)

The % Status is the weighted deviation of the laboratory result relative to the range.

-100	-50	0	50	100		% Status	Result	Low	High
						-4.67	0.68	0.00	1.50
						<b>-32.00</b>	<b>L</b>	<b>0.81</b>	0.00 4.50
						3.33	0.16	0.00	0.30
						-2.00	2.00	0.80	3.30
						-11.54	37.00	22.00	61.00
						<b>113.33</b>	<b>H</b>	<b>49.00</b>	0.00 30.00
						<b>-50.00</b>	<b>L</b>	<b>0.00</b>	0.00 0.20
						-14.71	7.50	4.50	13.00
						<b>-55.00</b>	<b>L</b>	<b>3.30</b>	3.50 7.50
						<b>-55.73</b>	<b>L</b>	<b>2.20</b>	7.50 100.00
						<b>43.10</b>	<b>H</b>	<b>1.50</b>	0.15 1.60
						-14.00	0.36	0.00	1.00
						<b>30.00</b>	<b>H</b>	<b>0.40</b>	0.00 0.50
						0.00	0.10	0.00	0.20
						11.36	4.30	1.60	6.00
						0.00	0.10	0.00	0.20
						<b>50.00</b>	<b>H</b>	<b>6.50</b>	2.00 6.50
						22.73	1.00	0.20	1.30
						0.00	0.10	0.00	0.20
						<b>-30.77</b>	<b>L</b>	<b>4.50</b>	2.00 15.00
						<b>-72.22</b>	<b>L</b>	<b>30.00</b>	36.00 63.00
						<b>-51.97</b>	<b>L</b>	<b>6.70</b>	8.50 100.00
						10.00	36.00	15.00	50.00
						8.00	7.90	5.00	10.00
						-15.00	0.04	0.00	0.10
						<b>187.04</b>	<b>H</b>	<b>6.40</b>	0.00 2.70
						8.73	7.40	3.70	10.00
						-7.14	12.00	7.50	18.00
						-22.73	18.00	15.00	26.00
						<b>27.27</b>	<b>H</b>	<b>2.50</b>	0.80 3.00
						11.00	0.61	0.00	1.00
						-24.17	6.10	3.00	15.00
						-12.00	5.90	4.00	9.00
						<b>-41.30</b>	<b>L</b>	<b>0.16</b>	0.08 1.00
						<b>-66.67</b>	<b>L</b>	<b>0.01</b>	0.01 0.03
						-16.67	17.00	10.00	31.00
						-12.50	0.30	0.00	0.80
						<b>-31.00</b>	<b>L</b>	<b>7.90</b>	6.00 16.00
						-4.78	9.70	4.50	16.00
						<b>-46.43</b>	<b>L</b>	<b>8.50</b>	8.00 22.00
						<b>-25.00</b>	<b>L</b>	<b>4.00</b>	3.00 7.00
						<b>-25.00</b>	<b>L</b>	<b>5.50</b>	4.00 10.00
						5.56	550.00	200.00	830.00
						<b>33.33</b>	<b>H</b>	<b>28.00</b>	13.00 31.00
						<b>29.77</b>	<b>Total Status Deviation</b>		
						<b>-4.10</b>	<b>Total Status Skew</b>		

## Basic Status Alphabetic - Blood Test on 7/16/2014

**Anna Salanti**  
Female / Age: 62

**Foundational Wellness Profile Date: 7/16/2014**

Anna Salanti (2718)

The % Status is the weighted deviation of the laboratory result relative to the range.

-100	-50	0	50	100	% Status	Result	Low	High
		█			A/G Ratio	-16.33	1.57	1.10 2.50
		█			Albumin	19.23	4.40	3.50 4.80
		█			Alkaline Phosphatase	-10.71	80.00	25.00 165.00
		█	█	█	<b>B.U.N.</b>	<b>78.57 H</b>	<b>24.00</b>	6.00 20.00
		█	█	█	<b>B.U.N./Creatinine Ratio</b>	<b>180.30 H</b>	<b>33.33</b>	8.00 19.00
	█	█			<b>Basophils</b>	<b>-50.00 L</b>	<b>0.00</b>	0.00 2.00
		█			Bilirubin, Total	-22.73	0.40	0.10 1.20
		█			Calcium	-11.90	9.30	8.50 10.60
	█	█			<b>Calcium/Phosphorus Ratio</b>	<b>-28.65 L</b>	<b>2.51</b>	2.30 3.30
		█			Chloride	13.64	104.00	97.00 108.00
		█			Cholesterol	18.33	222.00	140.00 260.00
	█	█			<b>Creatinine</b>	<b>-28.00 L</b>	<b>0.72</b>	0.50 1.50
		█			Eosinophils	-21.43	2.00	0.00 7.00
	█	█			<b>GGT</b>	<b>-31.82 L</b>	<b>15.00</b>	5.00 60.00
		█			Globulin	-6.67	2.80	1.50 4.50
		█	█		<b>Glucose</b>	<b>35.29 H</b>	<b>94.00</b>	65.00 99.00
		█			HDL-Cholesterol	-12.00	54.00	35.00 85.00
		█			Hematocrit	17.00	40.70	34.00 44.00
		█			Hemoglobin	4.29	13.40	11.50 15.00
		█			Iron, Total	-7.50	86.00	35.00 155.00
		█			LDH	22.73	157.00	5.00 214.00
		█	█	█	<b>LDL</b>	<b>76.47 H</b>	<b>148.00</b>	62.00 130.00
		█			<b>Lymphocytes</b>	<b>-25.00 L</b>	<b>22.00</b>	14.00 46.00
		█			MCH	3.34	30.73	27.00 34.00
	█	█			<b>MCHC</b>	<b>-26.90 L</b>	<b>32.92</b>	32.00 36.00
		█			MCV	24.16	93.35	80.00 98.00
		█			Monocytes	5.56	9.00	4.00 13.00
		█	█		<b>Neutrophils</b>	<b>29.41 H</b>	<b>67.00</b>	40.00 74.00
		█			Phosphorus	10.00	3.70	2.50 4.50
		█			Potassium	-20.59	4.00	3.50 5.20
		█			Protein, Total	-2.00	7.20	6.00 8.50
		█			R.B.C.	-6.92	4.36	3.80 5.10
		█			sGOT	-12.86	18.00	5.00 40.00
		█			sGPT	-10.00	19.00	5.00 40.00
		█			Sodium	0.00	139.00	134.00 144.00
		█			Triglycerides	13.57	99.00	10.00 150.00
	█	█			<b>Ultra-Sensitive TSH</b>	<b>-90.79 L</b>	<b>0.53</b>	1.10 2.50
	█	█			<b>Uric Acid</b>	<b>-33.67 L</b>	<b>4.50</b>	3.70 8.60
	█	█			<b>Vitamin D,25-OH,D3</b>	<b>-30.43 L</b>	<b>43.70</b>	30.00 100.00
		█			W.B.C.	-22.31	5.80	4.00 10.50
	-25%	25%			<b>Total Status Deviation</b>	<b>26.70</b>		
					<b>Total Status Skew</b>	<b>-1.71</b>		

## Basic Status Alphabetic - Urine Organic Acids on 7/16/2014

**Anna Salanti**  
Female / Age: 62

**Foundational Wellness Profile Date: 7/16/2014**

Anna Salanti (2718)

The % Status is the weighted deviation of the laboratory result relative to the range.

-100	-50	0	50	100		% Status		Result	Low	High
						-50.00	L	0.00	0.00	0.08
						101.43	H	7.40	2.10	5.60
						2.83		2.80	0.00	5.30
						-50.00	L	0.00	0.00	6.20
						-50.00	L	0.00	0.00	0.30
						-50.00	L	0.00	0.00	0.38
						117.89	H	31.90	0.00	19.00
						-50.00	L	0.00	0.00	0.34
						-50.00	L	0.00	0.00	0.25
						4083.33	H	24.80	0.00	0.60
						-50.00	L	0.00	0.00	2.10
						59.21	H	8.30	0.00	7.60
						-28.79	L	25.00	18.00	51.00
						-60.28	L	0.00	56.00	601.00
						11.11		22.00	0.00	36.00
						-50.00	L	0.00	0.00	0.12
						2.63		1.00	0.00	1.90
						30.56	H	2.90	0.00	3.60
						116.67	H	2.00	0.00	1.20
						-50.00	L	0.00	0.00	0.59
						24.60		4.70	0.00	6.30
						13.14		346.00	0.00	548.00
						10.53		4.20	1.90	5.70
						8.33		2.10	0.00	3.60
						0.00		32.00	0.00	64.00
						-38.14	L	46.00	39.00	98.00
						150.00	H	2.00	0.00	1.00
						696.87	H	74.70	3.00	12.60
						-35.71	L	0.20	0.00	1.40
						38.24	H	1.50	0.00	1.70
						6.52		0.39	0.00	0.69
						40.91	H	0.10	0.00	0.11
						-50.00	L	0.00	0.00	0.40
						131.82	H	2.00	0.00	1.10
						-13.16		7.00	0.00	19.00
						-50.00	L	0.00	0.00	0.39
						48.31	H	58.00	0.00	59.00
						142.31	H	7.50	0.00	3.90
						22.50		2.90	0.00	4.00
						11.90		1.30	0.00	2.10
						-18.10		3.70	0.00	11.60
						118.90	H	3304.00	958.00	2347.00
						-50.00	L	0.00	0.00	0.73
						-32.61	L	2.00	1.60	3.90
						111.76	H	0.55	0.00	0.34
						136.66				
						93.62				

## Client Summary Review

Anna Salanti  
Female / Age: 62

Foundational Wellness Profile Date: 7/16/2014

Anna Salanti (2718)

### Nutritional Support

The following supplements may help to balance your biochemistry. Consult your practitioner.

- |  |  |
|--|--|
| <input type="checkbox"/> 1-5-HTP<br>3x daily 100 mg                                | <input type="checkbox"/> 1-B-Complex + Lipoic Acid<br>See Nutrition Detail             |
| <input type="checkbox"/> 1-Carbohydrate Metabolism Profile<br>See Nutrition Detail | <input type="checkbox"/> 1-Folic Acid<br>2x daily 800 mcg                              |
| <input type="checkbox"/> 1-Pantothenic Acid (B5)<br>2x daily 500 mg                | <input type="checkbox"/> 1-Pyridoxal-5-Phosphate<br>2x daily 50 mg                     |
| <input type="checkbox"/> 1-Vitamin B12<br>2x daily 1000 mcg                        | <input type="checkbox"/> 1-Vitamin D3<br>2x daily 1000 IU                              |
| <input type="checkbox"/> 1-Whey Protein<br>See Nutrition Detail                    | <input type="checkbox"/> 2-Glycine<br>2x daily 1000 mg                                 |
| <input type="checkbox"/> 2-Magnesium and Pyridoxine (B6)<br>2x daily see detail    | <input type="checkbox"/> 2-Magnesium and Zinc<br>2x daily see details                  |
| <input type="checkbox"/> 3-5-Hydroxy-Tryptophan (5-HTP)<br>2x daily 50 mg          | <input type="checkbox"/> 3-Magnesium Citrate<br>2x daily one-quarter tsp (After meals) |
| <input type="checkbox"/> 3-Molybdenum as Citrate or Glycinate<br>1x daily 25 mcg   | <input type="checkbox"/> H - Billberry<br>1 - 3 times daily                            |
| <input type="checkbox"/> H - Garlic<br>1 - 3 times daily                           | <input type="checkbox"/> H - Ginseng (Panax)<br>1 - 3 times daily                      |

### Food Recommendations

The following foods may help to balance or strengthen your biochemistry.

Apricots, Dried	Artichoke	Banana	Black Pepper
Blueberries	Bok Choy Cabbage	Boysenberries	Cantaloupe
Cherries	Eggplant	Eggs	Fava Beans
Filberts/Hazelnuts	Grapefruit	Green Beans	Guava
Kale	Kidney Beans	Mango	Mozarella Cheese
Mushrooms	Navy Beans	Onions	Oysters
Papaya	Pecans	Plantains	Potatoes
Prunes	Pumpkin	Red Peppers	Shad
Snapper	Spinach	Strawberries	Swiss Chard
Turkey	Walnuts	Wild Rice	Yams

### Foods to AVOID

The following foods may aggravate already out-of-balance biochemistry.

Green Tea                      Hydrogenated Fats



## Practitioner Summary Review

Anna Salanti  
Female / Age: 62

Foundational Wellness Profile Date: 7/16/2014  
Anna Salanti (2718)

### Results Missing From Test

A more comprehensive report would have been generated if the following results were provided.

CO2

### Out-Of-Balance Panel Values

The following panels have a PSD of greater than 25% indicating need for further review. PSD is the Panel Status Deviation, or the average imbalance of that subset of results. The PSS is the Panel Status Skew, or the direction, negative (deficiency) or positive (excess), of that subset of results.

Panel Name	PSD	PSS
Carbohydrate Metabolism	234.80%	184.80%
Thyroid Function	90.79%	-90.79%
Nitrogen	80.14%	49.30%
B-Complex Markers	67.98%	25.13%
Neurotransmitters	63.41%	50.37%
Biochemical Ratios	62.05%	39.56%
Connective Tissue	50.49%	34.55%
BCAA Catabolism	50.00%	-50.00%
Liver Detox Indicators	49.72%	16.39%
Energy Production	44.66%	-13.10%
Intestinal Dysbiosis	42.94%	-1.50%
Kidney Function	41.13%	24.28%
CAC Cycle Ratios	40.56%	-40.56%
Immune Metabolites	39.38%	-39.38%
Athletic Potential	35.49%	19.85%
Detoxification Markers	34.56%	8.90%
Inflammatory Process	32.98%	-5.12%
Urea Cycle Metabolites	32.30%	-15.15%
Carbohydrate Metabolism	31.13%	26.33%
Fatty Acid Metabolism	30.82%	-2.51%
Magnesium Dependents	30.68%	-15.65%
CNS Metabolism	30.14%	-16.35%
Lipid	30.09%	24.09%
Ammonia/Energy	26.40%	-16.72%
Hepatic Metabolism	25.83%	-3.75%
Cardiac Risk	25.44%	3.69%

### Lab Reported out-of-range Values

The following results are out-of-range (as reported by the lab), and should be carefully reviewed.

#### Benzoate (4083.33%)

An elevated reading of this organic acid may mean an overgrowth of certain intestinal microbiota, ingestions of excessive benzoic acid in the diet (preserved foods, pickles, lunch meats, cranberries), or poor Phase II detoxification capabilities as the conjugation of benzoate with glycine is very efficient. The presence of this compound may be due to the action of the bacteria on phenylalanine. Assessment of amino acid competency may be helpful especially plasma glycine.

#### Lactate (696.87%)

This metabolic precursor to the citric acid cycle, high lactate (lactic acid) may indicate a block in the production of energy, a Coenzyme Q10, biotin, thiamine or lipoic acid deficiency, an on-going infectious state, use of some recreational and/or pharmaceutical drugs, alcohol over consumption, poor blood sugar control (especially with diabetics), and a number of inborn errors of metabolism.

#### Hydroxyproline (187.04%)

May be indicative of bone resorption problems due to increased osteocalcin secretion. Hydroxyproline is a component of collagen. Vitamin C and iron are necessary cofactors.

**B.U.N./Creatinine Ratio ( 180.30%)**

This ratio is a good indicator of kidney and liver function. A high reading in this calculation is normally indicative of too much BUN being formed. Excessive protein intake, kidney damage, certain drugs, low fluid intake, intestinal bleeding, exercise, or heart failure can cause increases.

**Drugs which may have an adverse affect:**

Sildenafil, Tadalafil, Vardenafil

**Kynurenate ( 150.00%)**

A high reading of this by-product of the breakdown of the amino acid tryptophan is consistent with a vitamin B6 deficiency, possible inflammatory processes, interferon-gamma stimulated macrophages or excessive tryptophan supplementation (not 5-HTP). Abnormally high levels can cause an increase in pain sensations and may, in multiple sclerosis patients, be a marker for an exacerbation period.

**Pyruvate ( 142.31%)**

Pyruvate is the end product of glucose metabolism. An elevated level may be indicative of a fundamental deficiency of B-complex vitamins and lipoic acid. High results are also seen in anorexia and other undereating disorders.

**p-Hydroxybenzoate ( 131.82%)**

Elevated levels may be indicative of exposure to paraben's found in many cosmetics and to a lesser degree of overgrowth of intestinal bacterial or protozoa. This organic acid when high may be indicative of a tyrosine deficiency. A comprehensive amino acid test may be helpful.

**Sulfate ( 118.90%)**

High levels of sulfate in the urine may be indicative of a number of problems related to glutathione use and depletion. If urinary pyroglutamate and a-hydroxybutyrate are also elevated, this indicates an early stage of glutathione depletion as it suggests that the system is increasing the flow of sulfur compounds into the liver to meet a growing need for the antioxidant tri-peptide. If those two markers are not elevated, suspect a high intake of sulfur bearing foods or amino acids such as NAC (N-Acetyl-Cysteine), methionine or taurine.

**a-Ketoglutarate ( 117.89%)**

High levels of this organic acid may be indicative of poor amino acid metabolism or a need for both B-complex and lipoic acid.

**Formiminoglutamic Acid ( 116.67%)**

A high reading of this organic acid is suggestive of a folic acid deficiency. FIGLU is a compound derived from histidine and an insufficiency of folic acid leads to a high result.

**Drugs which may have an adverse affect:**

Ampicillin, Aspirin, Colchicine

**Foods which may have an adverse affect:**

Green Tea

**Ammonia ( 113.33%)**

A high ammonia result may indicate decay of the specimen due to improper handling and/or preservation. It may also indicate a bacterial infection of the G.I. tract or urinary tracts or metabolic hyperammonemia.

**Xanthurenate ( 111.76%)**

A high reading of this by-product of the breakdown of the amino acid tryptophan is consistent with a vitamin B6 deficiency.

**5-Hydroxyindoleacetate ( 101.43%)**

An elevation of this metabolite of the breakdown of serotonin may be due to the use of serotonin-specific re-uptake inhibitor (SSRI) drugs or the release of serotonin from the central nervous system, intestinal argentaffin cells or platelets.

**Drugs which may have an adverse affect:**

Acetaminophen, Prozac, Reserpine

**Ultra-Sensitive TSH ( -90.79%)**

TSH, produced by the anterior pituitary gland, causes the release and distribution of stored thyroid hormones. When T4 and T3 are too high, TSH secretion decreases. When T4 and T3 are low, TSH secretion increases. Decreased levels of TSH are seen in hyperthyroidism and secondary and tertiary hypothyroidism.

**Drugs which may have an adverse affect:**

Anabolic Steroids, Corticosteroids

**B.U.N. ( 78.57%)**

Blood Urea Nitrogen is the byproduct of the breakdown of proteins. Increased levels may be indicative of impaired renal function, congestive heart failure, shock, gastrointestinal bleeding, a high-protein diet, or certain drug use (e.g., corticosteroids, tetracycline).

**Drugs which may have an adverse affect:**

Acetazolamide, Acyclovir, Allopurinol, Amantadine, Amphotericin B, Antacids, Arginine, Aspirin, Busulfan, Carbamazepine, Carbenoxolone, Carbutamide, Cephaloridine, Chloral hydrate, Chlorthalidone, Clonidine, Codeine, Colistin, Dextran, Diazepam, Diclofenac, Echinomycin, Ethacrynic Acid, Furosemide, Gentamicin, Griseofulvin, Guanethidine, Hydroxyurea, Ibuprofen, Imipramine, Indomethacin, Kanamycin, Ketoprofen, Levodopa, Lithium Carbonate, Methicillin, Methotrexate, Methylodopa, Morphine, Neomycin, Nifedipine, Nitrofurantoin, Ofloxacin, Paramethadione, Paromomycin, Penicillamine, Phenylbutazone, Piroxicam, Plicamycin, Polythiazide, Probenecid, Propranolol, Rifampin, Salicylates, Sildenafil, Spectinomycin, Streptokinase, Streptomycin, Tadalafil, Tetracycline, Triameterene, Trimethadione, Vancomycin, Vardenafil, Vasopressin

**LDL ( 76.47%)**

LDL is the cholesterol rich remnants of the lipid transport vehicle VLDL (very-low density lipoproteins). There have been many studies showing correlations between high levels of LDL and arterial atherosclerosis. Due to the expense of direct LDL measurement, a calculation known as the Friedewald formula is used (Total Cholesterol - HDL Cholesterol - Triglycerides/5). When Triglyceride levels are greater than 400, this method is not accurate. Increased levels are seen in high cholesterol diets, nephrotic syndromes, multiple myeloma, hepatic obstruction or disease, anorexia nervosa, diabetes, chronic renal failure, and premature coronary heart disease.

**Drugs which may have an adverse affect:**

Clofibrate

**Glutamine ( -72.22%)**

Glutamine is abundant in both blood and cerebrospinal fluid and easily passes the blood-brain barrier. This amino acid also acts as a detoxifier of ammonia from the brain and may be a protector against certain bacteria and alcohol poisoning. A low level may be indicative of poor absorption of proteins, protein malnutrition, incomplete digestion (requiring protease enzymes) or chronic alcoholism.

**Phosphoserine ( -66.67%)**

No information available.

**CA Cycle Return ( -60.29%)**

As the citric acid returns to the beginning through the conversion of Malate to Citrate through Oxalacetate, a low result may indicate an ammonia buildup due to an arginine deficiency.

**Citrate ( -60.28%)**

A low reading of this organic acid may be indicative of an amino acid deficiency or a problem with metabolism. Also, a low level is linked to an increased risk of kidney stones, both the calcium and cysteine related stones. Potassium citrate supplementation may be helpful.

**b-Hydroxyisovalerate ( 59.21%)**

An increased reading of this organic acid may be indicative of a functional biotin deficiency. Overuse of antibiotics, dysbiosis, the use of anticonvulsant drugs, and/or pregnancy may also be a cause of these high results.

**Asparagine/Aspartate ( -55.73%)**

If depressed along with a low glutamine/glutamate ratio, then it is possible that the specimen has decayed or gastrointestinal integrity is compromised.

**Asparagine (-55.00%)**

Asparagine is a non-essential amino acid synthesized from aspartic acid and ATP. A low result may be indicative of a functional magnesium deficiency.

**Glutamine/Glutamate (-51.97%)**

This may indicate specimen decay due to poor handling, heating or improperly preserved or gastrointestinal integrity is compromised.

**2-Methylhippurate (-50.00%)**

Low levels of 2-Methylhippurate are desirable as high levels would be an indication of exposure to toluene and/or xylene although low levels may indicate an inability to excrete this toxic metabolite.

**Adipate (-50.00%)**

No known health issues are related to low levels of adipate.

**a-Hydroxybutyrate (-50.00%)**

This organic acid is the last step of glutathione synthesis from methionine through cysteine. Low levels are desirable but not indicative of any positive or negative health issues.

**a-Keto-b-methylvalerate (-50.00%)**

No known health issues are related to low levels of a-keto-β-methylvalerate.

**a-Ketoisocaproate (-50.00%)**

No known health issues are related to low levels of a-ketoisocaproate.

**a-Ketoisovalerate (-50.00%)**

No known health issues are related to low levels of a-ketoisovalerate.

**Anserine (-50.00%)**

No information available.

**Basophil Count (-50.00%)**

Basophil cells are a type of white blood cell linked to allergic reactions. Low readings are common and are not considered to be clinically significant.

**Basophils (-50.00%)**

Basophil cells are a type of white blood cell linked to allergic reactions. Low readings are common and are not considered to be clinically significant.

**Drugs which may have an adverse affect:**

Procainamide

**b-Hydroxybutyrate (-50.00%)**

No known health issues are related to low levels of β-hydroxybutyrate.

**CA Cycle Entry (-50.00%)**

A low result for the marker representing the entry into the citric acid cycle may indicate carbohydrate metabolism impairment especially if pyruvate and/or lactate are elevated. Possibilities causing this particular blockade include mercury, arsenic or petrochemical exposure.

**CA Cycle Phase 1 (-50.00%)**

This is the first phase of the citric acid cycle moving from Citrate to cis-Aconitate. A low reading may indicate a disruption in the efficiency of energy production.

**Cystine ( 50.00%)**

Cystine is the combination of two cysteine molecules combine. A sulfur amino acid, it is critical in the ability to detoxify the body. A high reading may indicate excessive supplementation with methionine, cystine, or N-acetylcysteine. Decreased renal clearance may also cause a high result. Excessive levels can be neurotoxic and adversely affect mental function.

**DHPP (-50.00%)**

No known health issues are related to low levels of DHPP.

**Fumarate (-50.00%)**

Indicative of poor functioning or overstress on the citric acid cycle, a low reading of this organic acid may be suggestive of low levels of tyrosine and phenylalanine.

**Phenylpropionate (-50.00%)**

No known health issues are related to low levels of phenylpropionate.

**p-Hydroxyphenyllactate (-50.00%)**

No known health issues are related to low levels of p-hydroxyphenyllactate.

**Tricarballylate (-50.00%)**

No known health issues are related to low levels of tricarballylate.

**Additional Tests**

The following additional lab tests may help in diagnosis.

**Consider ordering Anti-TPO**

*Rationale: % Status of Ultra-Sensitive TSH is < -50%*

**Consider ordering beta-2 Microglobulin**

*Rationale: Panel Biochemical Ratios Status Scew is > 0%  
Panel Biochemical Ratios Status Deviation is > 50%*

**Consider ordering creatinine clearance test**

*Rationale: Panel Biochemical Ratios Status Deviation is > 50%*

**Consider ordering PTH profile**

*Rationale: Panel Thyroid Function Status Deviation is > 50%*

**Consider ordering urine organic acid test**

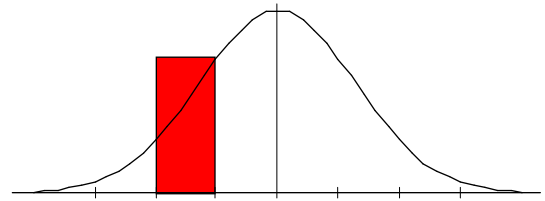
*Rationale: Panel Biochemical Ratios Status Deviation is > 50%*

**Ammonia/Energy**

Arginine, Threonine[L], Glycine, Serine[L], a-Amino adipic Acid, Asparagine[L], Aspartic Acid[H], Citrulline, Glutamic Acid[L], Glutamine[L].

PSD: 26.40  
PSS: -16.72

Ammonia influences a cell's ability to create energy. This panel shows your body's ability to rid excess ammonia buildup and maintain a healthy energy cycle. A profile like this may show you're not eating enough protein, you're unable to digest properly, or you're eating a poor quality of proteins.

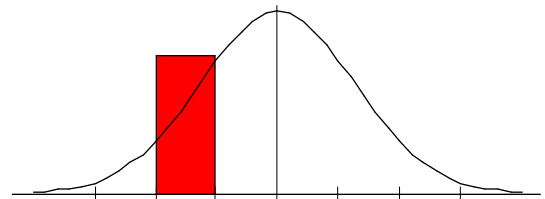


**CNS Metabolism**

Arginine, Tryptophan[L], GABA, Glycine, Serine[L], Taurine, Aspartic Acid[H], Glutamine[L], Ethanolamine, Phosphoethanolamine[L], Phosphoser.

PSD: 30.14  
PSS: -16.35

Amino acids are the basic building blocks of all the cells in our body. Amino acid metabolism is important for proper functioning of the nervous system. This profile may indicate poor central nervous system functioning. Symptoms include: memory loss, fatigue and poor concentration.

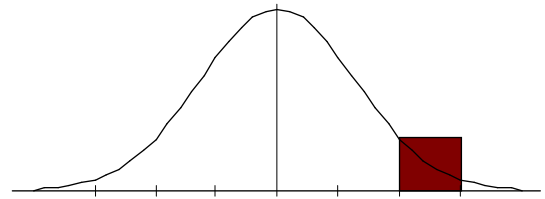


**Connective Tissue**

Leucine, Methionine[H], Valine[H], Cystine[H], Hydroxyproline[H], 3-Methylhistidine[L], Proline.

PSD: 50.49  
PSS: 34.55

This panel shows whether there's an adequate supply and metabolism of amino acids necessary to produce healthy connective tissue and collagen. Necessary for healthy bone, joints, hair, skin, and cartilage. This profile may indicate missing enzymes and co-factors necessary in the production of healthy connective tissue and collagen. Symptoms include: brittle hair, dry skin, increased joint aches and pain. Review protein intake and quality of proteins.

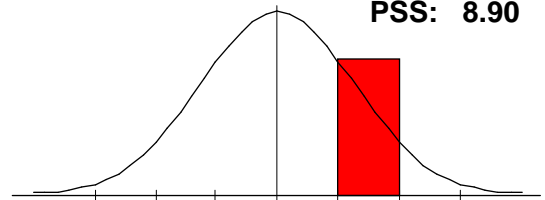


**Detoxification Markers**

Methionine[H], Cystine[H], Taurine, Glutamine[L], Glycine, Aspartic Acid[H].

PSD: 34.56  
PSS: 8.90

This panel reviews amino acids critical for proper detoxification. This includes detoxing medications, environmental toxins, and natural metabolic toxins. This profile may indicate missing enzymes and co-factors necessary for proper detoxification. Review your Supplement List Explanation.

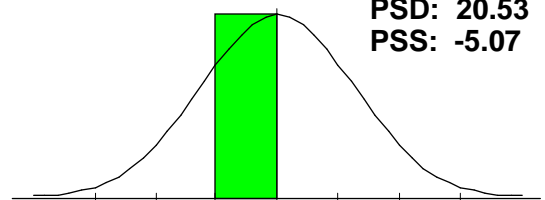


**Essential Amino Acid**

Arginine, Histidine, Isoleucine, Leucine, Lysine, Methionine[H], Phenylalanine, Threonine[L], Tryptophan[L], Valine[H].

PSD: 20.53  
PSS: -5.07

This panel reviews the essential amino acids the body can't produce and must get from the diet. These amino acids are necessary for all body functions. This profile shows a percent imbalance below 25%, so no abnormalities were found.

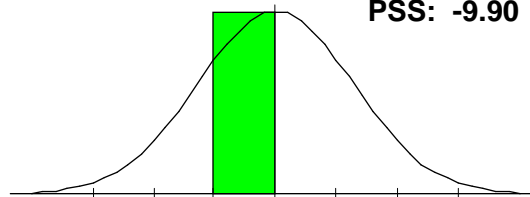


**Fat Metabolism**

Arginine, Isoleucine, Leucine, Valine[H], Taurine, Glutamine[L], Sarcosine.

This panel shows your balance of amino acids critical to proper fat metabolism. Fat metabolism is important in many body functions. Improper metabolism can cause problems like hormonal issues and nerve disorders. This profile shows a percent imbalance below 25%, so no abnormalities were found.

PSD: 21.92  
PSS: -9.90

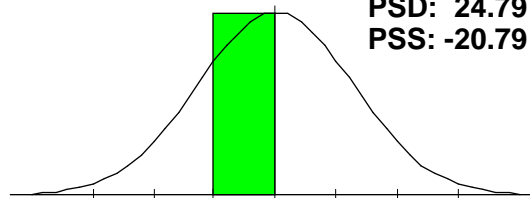


**Gluconeogen**

Threonine[L], Tryptophan[L], Glycine, Serine[L], Alanine.

This panel shows whether you have the proper amino acids in balance to control blood sugar levels. This profile shows a percent imbalance below 25%, so no abnormalities were found.

PSD: 24.79  
PSS: -20.79

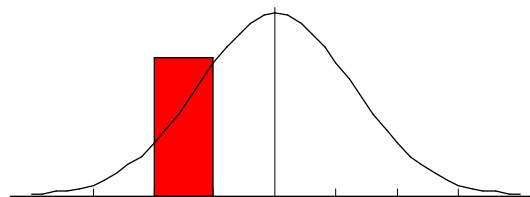


**Hepatic Metabolism**

Methionine[H], Taurine, Glutamine[L], Cystine[H], Cystathionine, Homocystine, Alanine.

This panel shows whether you have adequate stores of the listed amino acids to optimize liver function. This is important because your liver is responsible for cleaning your blood of toxins. This profile may indicate you may not be consuming enough protein. Or that your liver is working so hard, it's using up these amino acids so quickly, it's outstripping your supply.

PSD: 25.83  
PSS: -3.75

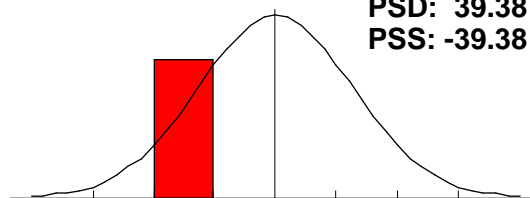


**Immune Metabolites**

Arginine, Threonine[L], Glutamine[L], Ornithine.

This panel shows whether you have adequate amounts of the listed amino acids to properly fight off viral or bacterial infections. This profile may indicate a weak immune function - making it difficult for you to fight off infections. This may be caused by a low dietary protein intake.

PSD: 39.38  
PSS: -39.38

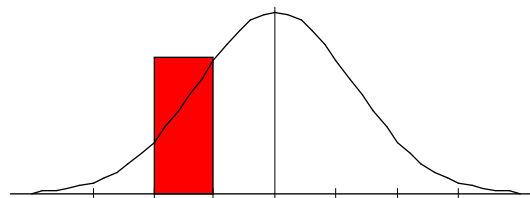


**Magnesium Dependents**

Citrulline, Ethanolamine, Phosphoethanolamine[L], Phosphoserine[L], Serine[L], Methionine sulfoxide.

This panel shows whether you have adequate amounts of magnesium for proper amino acid function. Amino acids are extremely dependent on magnesium to function properly. This profile indicates a possible magnesium deficiency. Highly consider further laboratory testing to assess your magnesium levels.

PSD: 30.68  
PSS: -15.65

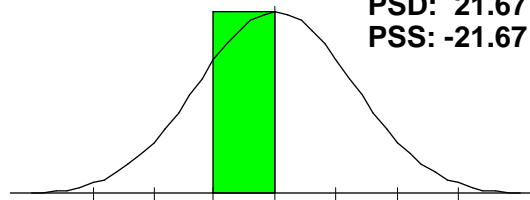


**Muscle Metabolites**

Anserine[L], Carnosine, 1-Methylhistidine, 3-Methylhistidine[L].

Amino acids are the basic building blocks critical in building muscle tissue. This profile shows a percent imbalance below 25%, so no abnormalities were found.

PSD: 21.67  
PSS: -21.67



**Neuroendocrine Metab**

GABA, Glycine, Serine[L], Taurine, Tyrosine[L].

This panel shows whether you have enough of the listed amino acids necessary for the proper functioning of your endocrine system. The endocrine system comprises the control organs of the body such as: thymus, pancreas, and thyroid. This profile shows a percent imbalance below 25%, so no abnormalities were found.

PSD: 14.16  
PSS: -10.16

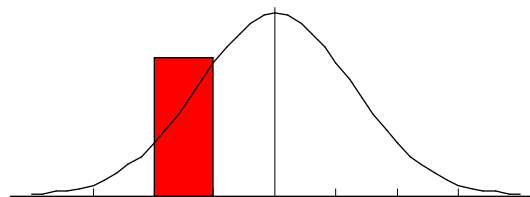


**Urea Cycle Metabolites**

Arginine, Aspartic Acid[H], Citrulline, Ornithine, Glutamine[L], Asparagine[L], Urea.

This panel shows your supply of the amino acids related to the urea cycle. This metabolic process helps you remove excess ammonia from your system. This profile indicates you don't have an adequate supply of the listed amino acids necessary to flush out excess ammonia. Excess ammonia can cause neurological issues. Review your Supplement List Explanation.

PSD: 32.30  
PSS: -15.15

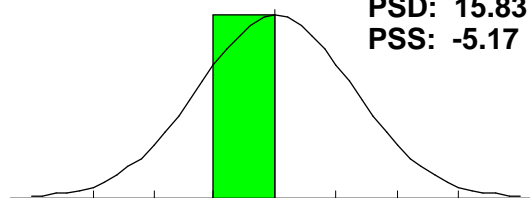


**Adrenal Function**

Cholesterol, Eosinophils, Eosinophil Count, Potassium, Sodium, Chloride.

This panel assesses your production of adrenaline. Adrenaline affects your daily function, such as your ability to handle stress. This profile shows a percent imbalance below 25%, so no abnormalities were found.

PSD: 15.83  
PSS: -5.17

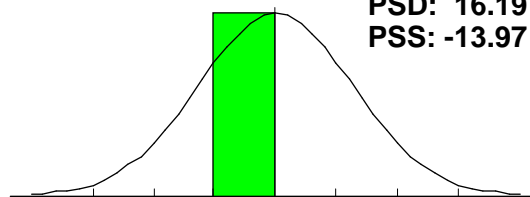


**Allergy**

Eosinophils, Globulin, Lymphocytes[L], Monocytes, W.B.C..

This panel assesses your response to allergens from common sources such as foods, pets or pollens. This profile shows a percent imbalance below 25%, so no abnormalities were found.

PSD: 16.19  
PSS: -13.97



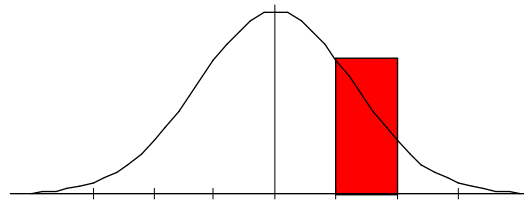


**Athletic Potential**

B.U.N./Creatinine Ratio[H], Cholesterol, Creatinine[L], LDH, Potassium, Protein, Total, Sodium, HDL-Cholesterol.

**PSD: 35.49**  
**PSS: 19.85**

This panel assesses your athletic potential and your ability to recover from injury. Maintaining a normal range helps optimize performance. Athletes require more nutrients because they deplete their supplies faster. This profile shows you may be at high risk for heart attacks, injury and general poor performance. Highly consider a complete physical before starting any exercise routine.

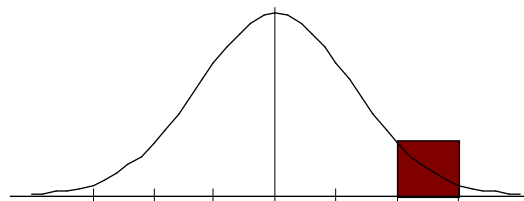


**Biochemical Ratios**

A/G Ratio, B.U.N./Creatinine Ratio[H], Calcium/Phosphorus Ratio[L], Sodium/Potassium Ratio.

**PSD: 62.05**  
**PSS: 39.56**

Ratios indicate your balance of chemistry. It's the ratios between your test results - not just how much you have of something - that indicate balance. This profile may indicate imbalances in your chemistry. This panel provides a good tracking mechanism for showing improvements in your biochemical status. Review your Supplement List Explanation.

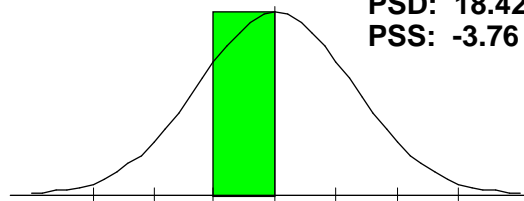


**Bone/Joint**

Albumin, Alkaline Phosphatase, Calcium, Neutrophils[H], Phosphorus, Protein, Total, Uric Acid[L], Vitamin D,25-OH,D3[L].

**PSD: 18.42**  
**PSS: -3.76**

This panel helps assess bone and joint health. These markers show your body's ability to create healthy bones and joints. This profile shows a percent imbalance below 25%, so no abnormalities were found.

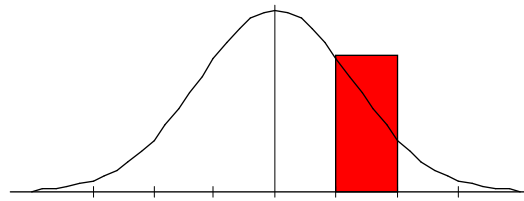


**Carbohydrate Metabolism**

Glucose[H], HDL-Cholesterol, LDL[H], Cholesterol, Triglycerides.

**PSD: 31.13**  
**PSS: 26.33**

This panel is helpful in assessing Type II Diabetic Risk and Hypoglycemic Risk. Maintaining a normal range may reduce your risk of blood sugar metabolism problems. This profile indicates poor carbohydrate metabolism, thus you are at high risk for Type II Diabetes, Insulin Resistance, and Metabolic Syndrome (Syndrome X). An elevated profile indicates the need for reviewing dietary and exercise habits and making the appropriate lifestyle changes. Additionally, a high profile suggests the need to assess liver function as this organ plays a pivotal role in carbohydrate metabolism.

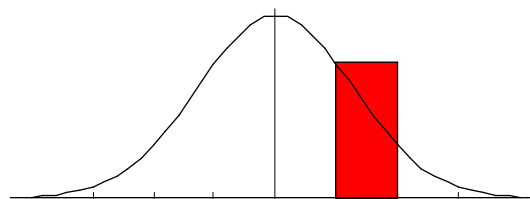


**Cardiac Risk**

Cholesterol, GGT[L], Iron, Total, LDH, sGOT, Triglycerides, Uric Acid[L], HDL-Cholesterol, LDL[H].

**PSD: 25.44**  
**PSS: 3.69**

This panel is helpful in assessing cardiovascular disease risk. Maintaining a normal range may reduce your risk of cardiovascular disease (CVD). The profile may indicate you are at greater risk for CVD than the general population. A review of dietary, environmental and personal habits should be done and appropriate lifestyle changes made. If both triglycerides and cholesterol are elevated, a regime of exercise and dietary changes are more likely to exhibit benefits. Also review Supplement Explanation List.cholesterol are elevated, a regime of exercise and dietary changes are more likely to exhibit benefits.

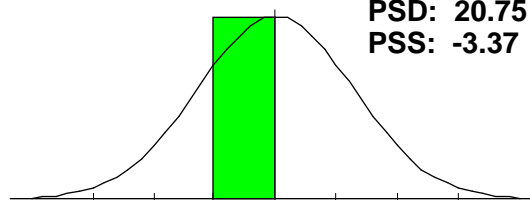


**Cellular Production**

Alkaline Phosphatase, GGT[L], Iron, Total, LDH, Neutrophils[H], W.B.C..

**PSD: 20.75**  
**PSS: -3.37**

This panel may be helpful in determining your body's ability to properly produce healthy cells. This profile shows a percent imbalance below 25%, so no abnormalities were found.

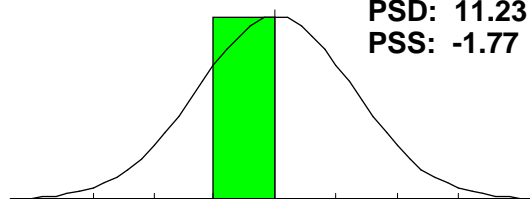


**Electrolyte Balance**

Calcium, Chloride, Phosphorus, Potassium, Sodium.

**PSD: 11.23**  
**PSS: -1.77**

This panel represents the electrolyte balance in blood. Balance is critical in achieving optimal health. This profile shows a percent imbalance below 25%, so no abnormalities were found.

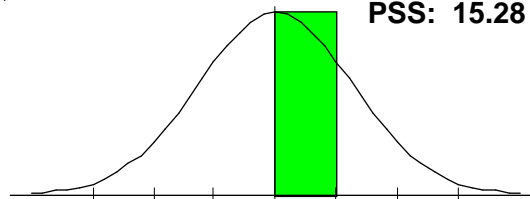


**Gastrointest. Function**

Chloride, Cholesterol, Monocytes, Potassium, Sodium, Triglycerides, LDL[H].

**PSD: 21.17**  
**PSS: 15.28**

This panel helps assess gastrointestinal health. Keeping the elements listed in a normal range may improve digestion and the metabolism of proteins, fats and carbohydrates. This profile shows a percent imbalance below 25%, so no abnormalities were found.

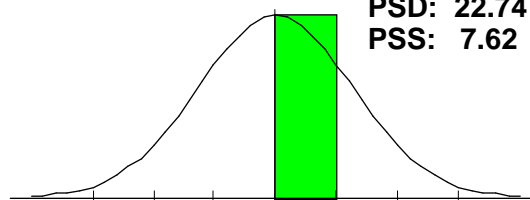


**Hydration**

Albumin, Sodium, Potassium, Chloride, Calcium, Creatinine[L], B.U.N.[H], Phosphorus.

**PSD: 22.74**  
**PSS: 7.62**

Hydration is a key factor in being and staying healthy. Imbalances in this panel can point out whether a person is dehydrated or over hydrated.



## Panel/Subset Report

Anna Salanti  
Female / Age: 62

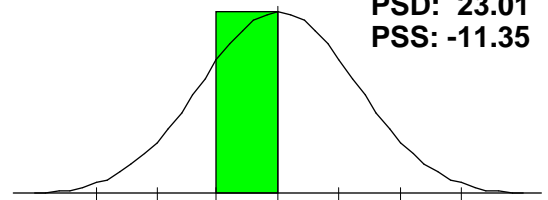
Foundational Wellness Profile Date: 7/16/2014

Anna Salanti (2718)

### Immune Response

Basophils[L], Eosinophils, Lymphocytes[L], Monocytes,  
Neutrophils[H], Globulin.

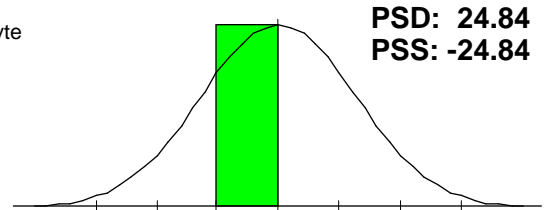
This panel helps assess immune system health. It shows the percentage of specific white blood cells needed for proper immune response. This profile shows a percent imbalance below 25%, so no abnormalities were found.



### Immune Response Count

Basophil Count[L], Eosinophil Count, Lymphocyte Count[L], Monocyte  
Count, Neutrophil Count.

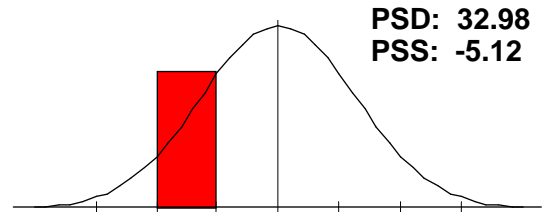
This panel helps assess immune system health. It shows how many specific white blood cells your body has for proper immune response. This profile shows a percent imbalance below 25%, so no abnormalities were found.



### Inflammatory Process

Eosinophils, Uric Acid[L], LDL[H], Monocytes, Lymphocytes[L],  
Neutrophils[H], W.B.C., Basophils[L].

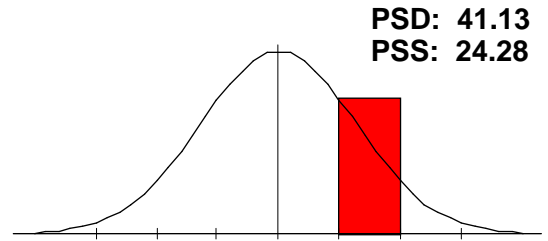
This panel helps assess any inflammatory processes that may be occurring in the body. This profile shows there may be nutrient deficiencies, especially amino acids. Consider changing your diet, especially by increasing quality protein intake.



### Kidney Function

Albumin, B.U.N.[H], B.U.N./Creatinine Ratio[H], Chloride,  
Creatinine[L], Glucose[H], Potassium, Protein, Total, Sodium, Uric  
Acid[L].

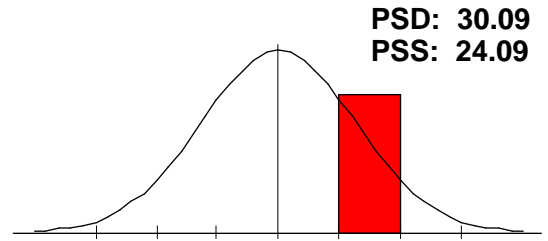
This panel helps assess kidney function. It is important to keep the elements of this subset in balance to help the body eliminate waste material. This profile suggests a careful review of kidney function. This may include a urinalysis to ascertain renal health.



### Lipid

Cholesterol, Triglycerides, HDL-Cholesterol, LDL[H].

Lipid assessment is important in helping achieve optimal wellness as well as reducing cardiovascular disease risk. The profile suggests you may be at higher risk for coronary heart disease than the general population. Review your diet and avoid trans and saturated fats. Plus refer to your Supplement List Explanation.

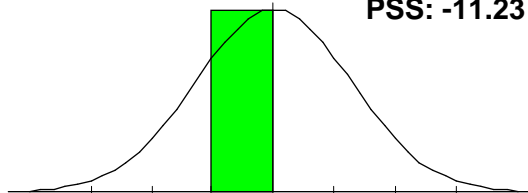


**Liver Function**

Albumin, Alkaline Phosphatase, Bilirubin, Total, GGT[L], Protein, Total, sGOT, sGPT, Uric Acid[L], Vitamin D,25-OH,D3[L], LDH.

Assessing liver function helps determine your body's ability to detoxify environmental toxins, stress hormones, drugs and other chemical toxins. It also shows your ability to process amino acids and other important biological processes. This profile shows a percent imbalance below 25%, so no abnormalities were found.

PSD: 19.62  
PSS: -11.23

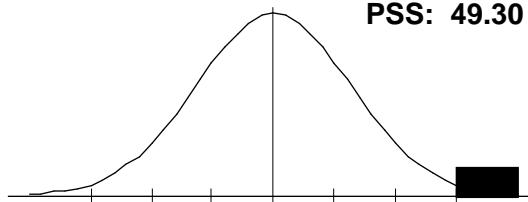


**Nitrogen**

B.U.N.[H], B.U.N./Creatinine Ratio[H], Creatinine[L], Uric Acid[L].

Nitrogen is a major component of protein. This panel assesses if there's adequate protein in the diet and if the body metabolizes (uses) proteins properly. This profile suggests a review of the kidney function. The high reading may be caused by excessive protein intake or high gut bacteria. Consider running a cardiovascular risk assessment.

PSD: 80.14  
PSS: 49.30

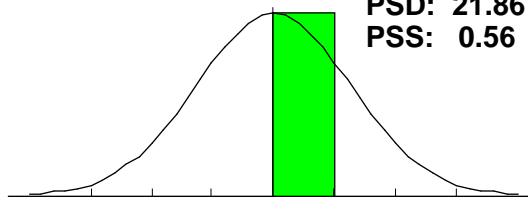


**Oxidative Stress**

Uric Acid[L], Bilirubin, Total, Chloride, Cholesterol, Glucose[H], Iron, Total.

Oxidation is like the rusting of cells. Reducing oxidation is critical for healthy cell function and to slow the aging process. This profile shows a percent imbalance below 25%, so no abnormalities were found.

PSD: 21.86  
PSS: 0.56

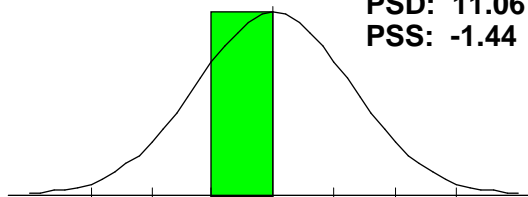


**Protein**

A/G Ratio, Albumin, Globulin, Protein, Total.

Proteins are the basic building blocks of all cells including: hormones, muscle, neurotransmitters, immune systems responses and more. Assessing their competency is crucial in achieving optimal wellness. This profile shows a percent imbalance below 25%, so no abnormalities were found.

PSD: 11.06  
PSS: -1.44

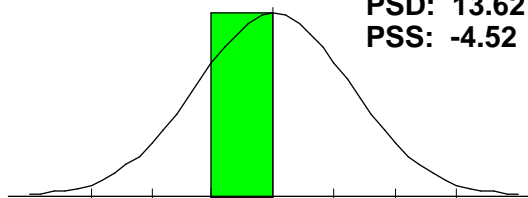


**Pulmonary Function**

Calcium, LDH, Potassium, sGOT, Sodium.

This panel helps assess lung and respiratory function. This profile shows a percent imbalance below 25%, so no abnormalities were found.

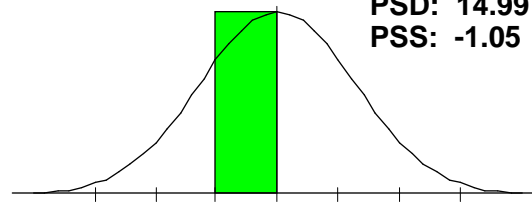
PSD: 13.62  
PSS: -4.52



**Red Blood Cell Health**

Hematocrit, Hemoglobin, MCH, MCHC[L], MCV, R.B.C., W.B.C..

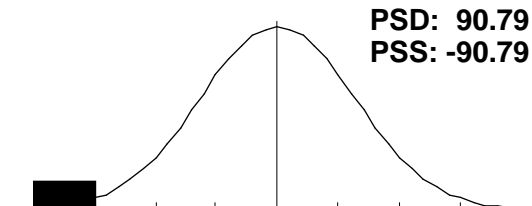
This panel assesses the production of red blood cells and their function. This profile shows a percent imbalance below 25%, so no abnormalities were found.



**Thyroid Function**

Ultra-Sensitive TSH[L].

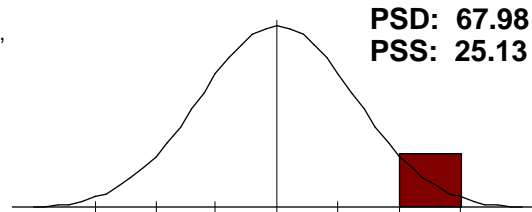
The thyroid is one of your 'master organs.' It controls metabolism, body temperature, mood, temperament, and cholesterol. This profile suggests a careful review of the individual markers in order to determine causative factors.



**B-Complex Markers**

b-Hydroxyisovalerate[H], a-Ketoisovalerate[L], a-Ketoisocaproate[L], a-Keto-b-methylvalerate[L], Methylmalonate[H], Formiminoglutamic Acid[H].

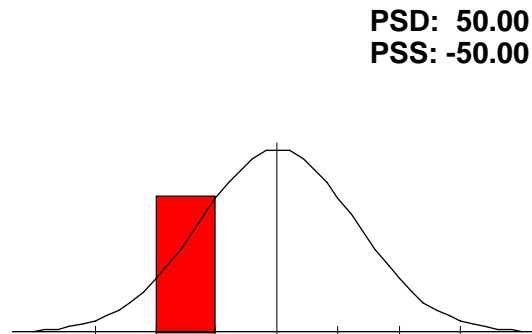
This panel assesses adequate intake of B-complex vitamins. This profile may indicate a need for certain B-complex vitamins. Review your Supplement List Explanation.



**BCAA Catabolism**

a-Ketoisovalerate[L], a-Ketoisocaproate[L], a-Keto-b-methylvalerate[L].

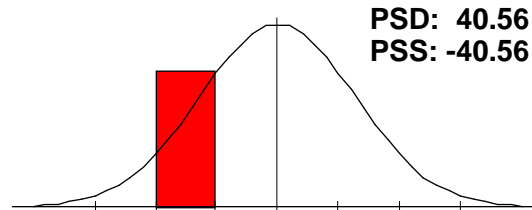
BCAA's are essential in building muscle and you can only get them from your diet or supplements. This panel assess your BCAA levels and how they're being used. This profile may indicate an inadequate supply of BCAAs. Consider supplementation. Note: supplementing with single branch chain amino acids is highly not recommended. All 3 branch chain amino acids (Isoleucine, Leucine and Valine) must be taken together.



**CAC Cycle Ratios**

CA Cycle Entry[L], CA Cycle Phase 1[L], CA Cycle Phase 2, CA Cycle Phase 3[L], CA Cycle Phase 4[L], CA Cycle Return[L].

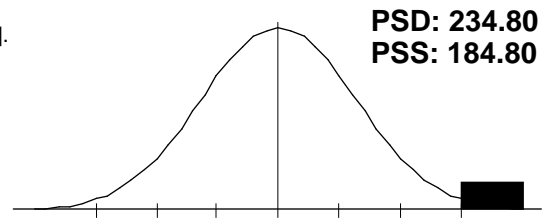
This panel reviews cellular energy producing cycles to maintain health and weight. This profile may indicate poor energy production and/or vitamin, mineral and amino acid deficiencies.



**Carbohydrate Metabolism**

Lactate[H], Pyruvate[H], a-Hydroxybutyrate[L], b-Hydroxybutyrate[L].

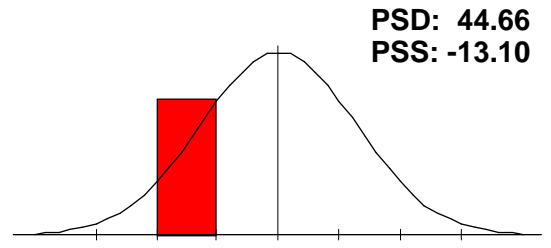
This panel assesses your body's ability to metabolize dietary carbohydrates. This profile suggests impaired carbohydrate metabolism. Symptoms include: brain function disorders, fatigue, weight gain, and chronic diseases. Review your Supplement List Explanation.



**Energy Production**

Citrate[L], cis-Aconitate[L], Isocitrate[L], a-Ketoglutarate[H], Succinate, Fumarate[L], Malate[L], Hydroxymethylglutarate.

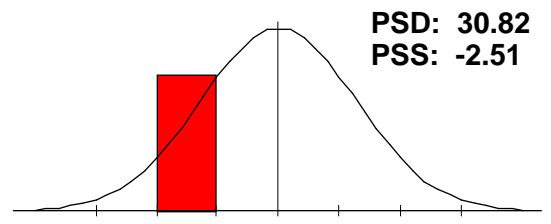
This panel reviews cellular energy producing cycles to maintain health and weight. This profile may indicate an amino acid deficiency. Low readings are typically desirable, but if the CAC Cycle Ratios are abnormal, consider adding a broad spectrum amino acid supplement.



**Fatty Acid Metabolism**

Adipate[L], Suberate, Ethylmalonate[H].

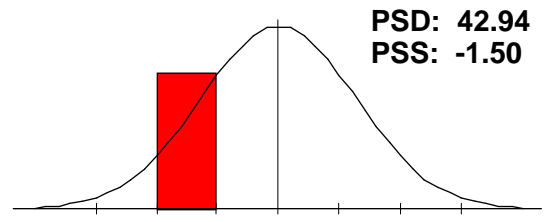
This panel assesses how fats are being broken down and utilized by the body. This profile may indicate you're metabolizing fats efficiently.



**Intestinal Dysbiosis**

p-Hydroxyphenyllactate[L], Phenylacetate[H], Phenylpropionate[L], Tricarballylate[L], DHPP[L], Indican, p-Hydroxybenzoate[H], D-Lactate, D-A.

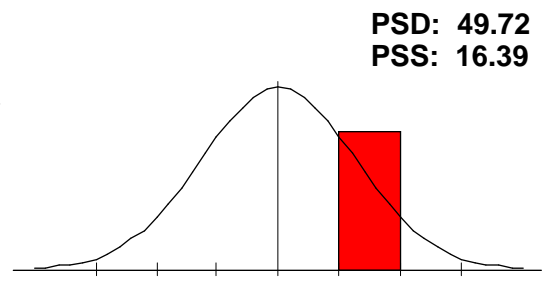
Disbyosis is an overgrowth of bad bacteria in the gut. It is indicative of gut health. This profile suggests you have good gut health



**Liver Detox Indicators**

2-Methylhippurate[L], Glucarate, Orotate, Pyroglutamate[H], Sulfate[H], a-Hydroxybutyrate[L].

This panel assesses how well your liver removes toxins from your system. This profile may indicate: high environmental toxins, improper regulation of cell growth, hereditary deficiencies, and a depressed ability of the liver to detoxify itself. Consider a detoxification protocol. Review your Supplement List Explanation..

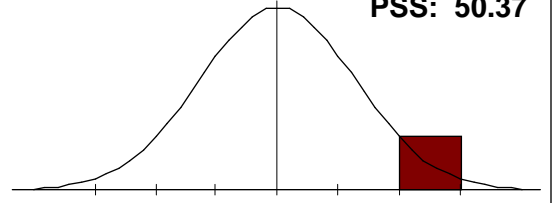


**Neurotransmitters**

Vanilmandelate[L], Homovanillate, 5-Hydroxyindoleacetate[H],  
Kynurenate[H], Quinolinate.

Neurotransmitters are chemicals the brain uses to make the entire neurological system function - including all body functions. This panel assesses neurotransmitter production. This profile may be caused by the use of SSRI's. This may lead to fatigue, depression, or anxiety.

**PSD: 63.41**  
**PSS: 50.37**



## Drug Interactions

Anna Salanti

Foundational Wellness Profile Date: 7/16/2014

Female / Age: 62

Anna Salanti (2718)

Drugs listed below tend to further aggravate elements of blood chemistry that are out of range (H or L). The (#) after each drug denotes the number of times that drug is flagged as being potentially harmful.

ACTH(2)	Acetaminophen(3)	Acetazolamide(2)	Acyclovir
Albuterol	Allopurinol(2)	Amantadine	Amitriptyline
Amphotericin B	Ampicillin	Anabolic Steroids	Antacids
Arginine(2)	Aspirin(5)	Azathioprine	Benziodarone
Busulfan	Caffeine	Carbamazepine	Carbenoxolone
Carbutamide	Cephaloridine	Chloral hydrate	Chlorothiazide
Chlorpromazine(2)	Chlorthalidone(3)	Clindamycin	Clofibrate(3)
Clonidine(3)	Clopramide	Codeine	Colchicine(2)
Colistin	Corticosteroids(3)	Cortisone(3)	Dextran(2)
Diazepam	Diazoxide	Diclofenac	Diphenylhydantoin
Echinomycin	Estrogens	Ethacrynic Acid(3)	Ethionamide
Furosemide(2)	G-CSF	Gemfibrozil	Gentamicin
Griseofulvin(2)	Guanethidine	Haloperidol	Hydralazine
Hydrocortisone(2)	Hydroxyurea	Ibuprofen(4)	Imipramine(3)
Indomethacin(3)	Isoproterenol	Kanamycin	Ketoprofen
Levodopa(2)	Levonorgestrel	Lithium Carbonate(5)	Lovastatin
MAO Inhibitors	Mannitol	Marijuana(2)	Mercaptopurine
Methicillin	Methotrexate(2)	Methyldopa(3)	Morphine(2)
Neomycin	Nifedipine(3)	Nitrofurantoin(2)	Ofloxacin
Paraldehyde	Paramethadione	Paromomycin	Penicillamine(2)
Phenelzine	Phenylbutazone(3)	Phenytoin	Piroxicam
Plicamycin	Polythiazide(2)	Pravastatin	Prednisone(3)
Probenecid(2)	Procainamide	Propranolol	Protriptyline
Prozac	Reserpine(3)	Rifampin	Salicylates
Sildenafil(2)	Spectinomycin	Streptokinase	Streptomycin
Sulfamethoxazole	Tadalafil(2)	Tetracycline	Thiothixene
Triameterene	Trimethadione	Vancomycin	Vardenafil(2)
Vasopressin	Viomycin		



## Nutrition - Detail

**Anna Salanti**  
Female / Age: 62

**Foundational Wellness Profile Date: 7/16/2014**

Anna Salanti (2718)

Nutritional and herbal information contained in this report is based upon research related to imbalances in your chemistry. The recommendations are based upon the information provided, without interpretation. This must be done with the help of your qualified health care professional.

### **1-5-HTP** 3x daily 100 mg

5-Hydroxytryptophan is indicated due to the high level of 5-HIAA in urine which suggests serotonin catabolism and a possible loss of tryptophan reserves.

Decreased

### **Rationale**

Normal

Increased

5-Hydroxyindoleacetate

### **1-B-Complex + Lipoic Acid** See Nutrition Detail

B complex vitamins are involved in a broad spectrum of cell metabolic deficiencies as well as fatty acid utilization.

Decreased

Normal

Increased

#### ALPHA LIPOIC ACID

Lipoic acid helps recycle antioxidants and extends their antioxidant life. Important co-enzyme for energy metabolism.

Adults

1- B-complex twice daily

50 mgs daily

Children

1 - B-complex daily

25 mgs daily

Pyruvate

a-Ketoglutarate

### **1-Carbohydrate Metabolism Profile** See Nutrition Detail

When Lactate and Pyruvate are elevated it indicates a potential for impaired carbohydrate metabolism. This pattern indicates suboptimal operation of carbohydrate metabolism, interfering with efficient cellular energy production. Various pathways being over- or under- utilized can be nutritionally supported with digestive enzymes, B-Complex, Lipoic acid, and CoEnzyme Q10 supplementation. Recommended nutrients include:

Decreased

Normal

Increased

B-Complex (2x daily)

Lipoic Acid (2x daily)

CoEnzyme Q10 (1x daily)

Digestive Enzymes (1-2 with each meal)

Lactate

Pyruvate

Wallace, DC, Mitochondrial genetics: a paradigm for aging and degenerative diseases?, Science, 256:628-632 (1992).

Corral-Debrinski, Shffner JM, Lott MY, Wallace DC, Association of mitochondrial DNA damage with aging and coronary arteriosclerotic heart disease. Mutat Res, 275:169-180 (1992).

### **1-Folic Acid** 2x daily 800 mcg

Adult: 800 mcg 2x daily Children 800 mcg 1x daily

A folic acid deficiency may lead to a buildup of this organic acid which is created through the metabolism of histidine.

Decreased

Normal

Increased

Formiminoglutamic Acid

### **1-Pantothenic Acid (B5)** 2x daily 500 mg

Vital in enzymatic reactions in fatty acid and carbohydrate metabolism, as well as gluconeogenesis, synthesis of sterols, steroid hormones and porphyrins. As CoA, it functions as a carrier of acyl groups. It also plays a central role in cellular proteins, impacting their activity and structure.

Pantothenic acid may be helpful in lowering pyruvate.

Decreased

Normal

Increased

Pyruvate

### **1-Pyridoxal-5-Phosphate** 2x daily 50 mg

B6 function involves many complex interrelated functions around amino acid metabolism. Cell processes involve PLP in immune modulation, fatty acids, steroid hormone, receptors, neurotransmitters, gluconeogenesis, and heme synthesis. of fat and transport of long-chain essential fatty acids as well as being cardiac protective. Kynurenate is a strong marker for Vitamin B6 deficiency.

Decreased

Normal

Increased

Kynurenate

Xanthurenate

## Nutrition - Detail

**Anna Salanti**

**Foundational Wellness Profile Date: 7/16/2014**

Female / Age: 62

Anna Salanti (2718)

Nutritional and herbal information contained in this report is based upon research related to imbalances in your chemistry. The recommendations are based upon the information provided, without interpretation. This must be done with the help of your qualified health care professional.

### 1-Vitamin B12 2x daily 1000 mcg

The only vitamin containing essential mineral elements, B12 is important in metabolism of nerve tissue, protein, fat and carbohydrate metabolism and the actions of a number of amino acids. It also is involved in the production of DNA and RNA. The organic acid Methylmalonate when high, is a good indicator of a B12 deficiency.

<u>Decreased</u>	<u><b>Rationale</b></u> <u>Normal</u>	<u>Increased</u> Methylmalonate
------------------	--	------------------------------------

### 1-Vitamin D3 2x daily 1000 IU

Vitamin D is an important fat-soluble nutrient needed for numerous biological processes including bone formation. It is also a key factor in immune response. As a supplement it is especially necessary in winter months when our bodies do not produce enough due to the lack of sunlight. Dosage should also be increased with larger body masses. A one month loading period of 5-10,000 IUs per day may be needed as well.

<u>Decreased</u> Vitamin D,25-OH,D3	<u>Normal</u>	<u>Increased</u>
--	---------------	------------------

### 1-Whey Protein See Nutrition Detail

High quality whey protein is one of the most effective means of boosting glutathione levels which seem to be deficient in this case. The whey should also contain an array of vitamins (especially vitamin C) and minerals along with immunoglobulins, glycine and N-acetyl cysteine. For adults, at least one serving full serving and for children one-half a serving per day is recommended.

<u>Decreased</u> a-Hydroxybutyrate	<u>Normal</u>	<u>Increased</u> Pyroglutamate
---------------------------------------	---------------	-----------------------------------

### 2-Glycine 2x daily 1000 mg

Glycine is an important amino acid and is necessary in phase II detoxification as it is a component of hippurate through its binding with benzoate.

<u>Decreased</u>	<u>Normal</u> Hippurate	<u>Increased</u> Benzoate
------------------	----------------------------	------------------------------

### 2-Magnesium and Pyridoxine (B6) 2x daily see detail

Magnesium 360 mg, Pyridoxal-5-Phosphate (B6) 50 mg, Second most abundant cation (positively charged mineral) in intracellular fluid. Magnesium helps facilitate Na - K transport and influences Ca levels. It is involved in vasodilation, contraction, as well as cardiac and skeletal muscle cells. Required in over 300 enzymes, temperature control, neuronal homeostasis and has a profound effect on cardiac physiology. B6 function involves many complex interrelated functions around amino acid metabolism. Cell processes involve PLP in immune modulation, fatty acids, steroid hormone, receptors, neurotransmitters, gluconeogenesis, and heme synthesis.

<u>Decreased</u>	<u>Normal</u> Cystathionine Homocystine	<u>Increased</u> Methionine Cystine
------------------	---	---

### 2-Magnesium and Zinc 2x daily see details

Magnesium (Mg) 240 mg, Zinc 25 mg  
Magnesium is the second most abundant cation (positively charged mineral) in intracellular fluid. It helps facilitate Na - K transport and influences Ca levels. It is involved in vasodilation, contraction, as well as cardiac and skeletal muscle cells. Required in over 300 enzymes, temperature control, neuronal homeostasis and has a profound effect on cardiac physiology. Zinc is active in the structure and function of biomembranes. Involved in more than 200 key enzymes including carbohydrate metabolism, connective tissue metabolism, T-cell function and prostaglandin secretion.

<u>Decreased</u>	<u>Normal</u>	<u>Increased</u> Aspartic Acid
------------------	---------------	-----------------------------------

## Nutrition - Detail

Anna Salanti

Foundational Wellness Profile Date: 7/16/2014

Female / Age: 62

Anna Salanti (2718)

Nutritional and herbal information contained in this report is based upon research related to imbalances in your chemistry. The recommendations are based upon the information provided, without interpretation. This must be done with the help of your qualified health care professional.

### 3-5-Hydroxy-Tryptophan (5-HTP) 2x daily 50 mg

A carbon skeleton indispensable amino acid, tryptophan is the precursor to the neurotransmitter serotonin. The only form available presently is 5-HTP.

Decreased  
Tryptophan

**Rationale**  
Normal

Increased

### 3-Magnesium Citrate 2x daily one-quarter tsp After meals

Second most abundant cation (positively charged mineral) in intracellular fluid. It helps facilitate Na - K transport and influences Ca levels. It is involved in vasodilation, contraction, as well as cardiac and skeletal muscle cells. Required in over 300 enzymes, temperature control, neuronal homeostasis and has a profound effect on cardiac physiology.

Decreased  
Asparagine

Normal

Increased  
Aspartic Acid

### 3-Molybdenum as Citrate or Glycinate 1x daily 25 mcg

Vital constituent of xanthine oxidase (uric acid production), aldehyde and sulfate oxidase. Functions in transfer of electrons for redox process and completion of sulfur amino acid catabolism. It is also involved in hemoglobin synthesis. Molybdenum also inhibits absorption Cu and Fe.

Decreased  
Uric Acid  
MCHC

Normal  
MCV

Increased

### H - Bilberry 1 - 3 times daily

Bilberry (*Vaccinium myrtillus*) is an herb often used for the control of insulin levels and may help halt or prevent macular degeneration. It has also been reported to be effective in lowering triglyceride levels. As with any herb, caution should be taken with its use. Bilberry also may interfere with iron absorption.

Decreased

Normal  
Iron, Total  
Triglycerides

Increased  
Glucose

### H - Garlic 1 - 3 times daily

Garlic's use has been reported to be beneficial in lowering blood lipid (fat) levels. May cause unwanted bodily odors. As with any herb, caution should be taken with its use.

Decreased

Normal  
Cholesterol

Increased  
LDL

### H - Ginseng (Panax) 1 - 3 times daily

Also known as Korean Ginseng (*Panax ginseng*), this herb has shown benefits to those suffering from fatigue, stress, compromised immune systems and diabetes. As with any herb, caution should be taken with its use. Women who experience breast tenderness should discontinue its use.

Decreased

Normal

Increased  
Glucose

## Clinical Correlation

**Anna Salanti**

**Foundational Wellness Profile Date: 7/16/2014**

Female / Age: 62

Anna Salanti (2718)

This report "MATCHES" clinical observations with the lab test. Elements shown, normal and abnormal, tend to characterize the observation. Highlighted elements are those reported to "MATCH" the characteristics of the clinical observation. Others are NOT matches but are elements in the observation.

### **Hypervalinemia (270.3)**

**100.00% (1 of 1)**

Decreased

Normal

Increased

33.33 Valine

### **Catecholamine Dysfunction ()**

**66.67% (2 of 3)**

Decreased

Normal

Increased

10.53 Homovanillate

**-32.61 Vanilmandelate**

**-50.00 Fumarate**

## Comparison Progress Report

**Anna Salanti**

Female / Age: 62

**Foundational Wellness Profile Date: 7/16/2014**

Anna Salanti (2718)

A "+" change is toward optimal % Status of zero. A "-" change is away from optimal % Status of zero.

	Status % on:	12/31/2013		7/16/2014		+/- change
Histidine		<b>-78.57</b>	<b>L</b>	8.00		+ 70.57
a-Aminoadipic Acid		<b>50.00</b>	<b>H</b>	3.33		+ 46.67
GABA		<b>46.67</b>	<b>H</b>	0.00		+ 46.67
1-Methylhistidine		<b>45.83</b>	<b>H</b>	-4.67		+ 41.17
a-Amino-N-Butyric Acid		<b>42.86</b>	<b>H</b>	-2.00		+ 40.86
Cystathionine		<b>33.33</b>	<b>H</b>	0.00		+ 33.33
Glycine		<b>-42.92</b>	<b>L</b>	10.00		+ 32.92
Citrulline		<b>41.30</b>	<b>H</b>	11.36		+ 29.94
Homocystine		<b>41.67</b>	<b>H</b>	-15.00		+ 26.67
Hydroxyproline		<b>31.25</b>	<b>H</b>	<b>187.04</b>	<b>H</b>	- <b>155.79</b>
Glutamine		-6.55		<b>-72.22</b>	<b>L</b>	- <b>65.67</b>
Asparagine		-15.63		<b>-55.00</b>	<b>L</b>	- <b>39.38</b>
Valine		7.05		<b>33.33</b>	<b>H</b>	- <b>26.29</b>

## Comparison Report

**Anna Salanti**

Female / Age: 62

**Foundational Wellness Profile Date: 7/16/2014**

Anna Salanti (2718)

The arrow's length is proportional to change. Left to right is increase. Right to left is decrease.  
Green is improvement. Red is decline.

		+/-	Status % on:		12/31/2013	7/16/2014
-4.67		45.83	+	1-Methylhistidine	45.83 H	-4.67
				3-Methylhistidine	39.19 H	-32.00 L
3.33		50.00	+	a-Amino adipic Acid	50.00 H	3.33
-2.00		42.86	+	a-Amino-N-Butyric Acid	42.86 H	-2.00
-11.54		33.27	+	Alanine	33.27 H	-11.54
-50.00		38.89	-	Anserine	38.89 H	-50.00 L
				Arginine	-9.38	-14.71
-55.00		-15.63	-	Asparagine	-15.63	-55.00 L
				Aspartic Acid	-50.00 L	43.10 H
-14.00		-3.57	-	b-Alanine	-3.57	-14.00
-22.92		0.00	+	Carnosine	-22.92	0.00
11.36		41.30	+	Citrulline	41.30 H	11.36
0.00		33.33	+	Cystathionine	33.33 H	0.00
				Cystine	43.88 H	50.00 H
				Ethanolamine	28.49 H	22.73
0.00		46.67	+	GABA	46.67 H	0.00
-30.77		-13.11	-	Glutamic Acid	-13.11	-30.77 L
-72.22		-6.55	-	Glutamine	-6.55	-72.22 L
-42.92		10.00	+	Glycine	-42.92 L	10.00
-78.57		8.00	+	Histidine	-78.57 L	8.00
-15.00		41.67	+	Homocystine	41.67 H	-15.00
31.25		187.04	-	Hydroxyproline	31.25 H	187.04 H
-26.19		8.73	+	Isoleucine	-26.19 L	8.73
				Leucine	-12.34	-7.14
-22.73		14.66	-	Lysine	14.66	-22.73
				Methionine	-20.59	27.27 H
-42.00		-24.17	+	Ornithine	-42.00 L	-24.17
				Phenylalanine	-12.07	-12.00
				Phosphoethanolamine	-41.30 L	-41.30 L
-66.67		46.00	-	Phosphoserine	46.00 H	-66.67 L
				Proline	-20.00	-16.67
-25.21		-12.50	+	Sarcosine	-25.21 L	-12.50
-43.85		-31.00	+	Serine	-43.85 L	-31.00 L
-4.78		15.08	+	Taurine	15.08	-4.78
				Threonine	-41.67 L	-46.43 L
-25.00		36.67	+	Tryptophan	36.67 H	-25.00 L
-25.00		14.29	-	Tyrosine	14.29	-25.00 L
7.05		33.33	-	Valine	7.05	33.33 H
				<b>Total Status Deviation</b>	<b>31.32</b>	<b>29.77</b>
				<b>Total Status Skew</b>	<b>4.92</b>	<b>-4.10</b>

## Comparison Progress Report

**Anna Salanti**

Female / Age: 62

**Foundational Wellness Profile Date: 7/16/2014**

Anna Salanti (2718)

A "+" change is toward optimal % Status of zero. A "-" change is away from optimal % Status of zero.

	Status % on:	1/18/2011		7/16/2014		+/- change
Ultra-Sensitive TSH		<b>-128.21</b>	<b>L</b>	<b>-90.79</b>	<b>L</b>	<b>+ 37.43</b>
Hemoglobin		<b>41.43</b>	<b>H</b>	4.29		+ 37.14
Hematocrit		<b>49.00</b>	<b>H</b>	17.00		+ 32.00
B.U.N./Creatinine Ratio		10.96		<b>180.30</b>	<b>H</b>	<b>- 169.34</b>
B.U.N.		2.38		<b>78.57</b>	<b>H</b>	<b>- 76.19</b>
Basophils		0.00		<b>-50.00</b>	<b>L</b>	<b>- 50.00</b>
Neutrophils		0.00		<b>29.41</b>	<b>H</b>	<b>- 29.41</b>
Basophil Count		-24.00		<b>-50.00</b>	<b>L</b>	<b>- 26.00</b>

## Comparison Report

**Anna Salanti**  
Female / Age: 62

**Foundational Wellness Profile Date: 7/16/2014**

Anna Salanti (2718)

The arrow's length is proportional to change. Left to right is increase. Right to left is decrease.  
Green is improvement. Red is decline.

	+/-		Status	% on:		
				1/18/2011	7/16/2014	
		A/G Ratio		-12.17	-16.33	
		Albumin		19.23	19.23	
-10.71	←	-2.14	-	Alkaline Phosphatase	-2.14	-10.71
2.38	→	78.57	-	B.U.N.	2.38	78.57 H
10.96	→	180.30	-	B.U.N./Creatinine Ratio	10.96	180.30 H
-50.00	←	0.00	-	Basophils	0.00	-50.00 L
-22.73	←	-4.55	-	Bilirubin, Total	-4.55	-22.73
		Calcium		11.90	-11.90	
		Chloride		13.64	13.64	
18.33	←	27.50	+	Cholesterol	27.50 H	18.33
-28.00	←	-9.00	-	Creatinine	-9.00	-28.00 L
		Eosinophils		21.43	-21.43	
-31.82	←	17.74	-	GGT	17.74	-31.82 L
		Globulin		-10.00	-6.67	
		Glucose		32.35 H	35.29 H	
		HDL-Cholesterol		-14.00	-12.00	
17.00	←	49.00	+	Hematocrit	49.00 H	17.00
4.29	←	41.43	+	Hemoglobin	41.43 H	4.29
-7.50	←	16.67	+	Iron, Total	16.67	-7.50
		LDL		83.82 H	76.47 H	
-25.00	←	-12.50	-	Lymphocytes	-12.50	-25.00 L
		MCH		2.70	3.34	
-26.90	←	-12.87	-	MCHC	-12.87	-26.90 L
14.72	→	24.16	-	MCV	14.72	24.16
5.56	←	27.78	+	Monocytes	27.78 H	5.56
0.00	→	29.41	-	Neutrophils	0.00	29.41 H
-20.59	←	-8.82	-	Potassium	-8.82	-20.59
		Protein, Total		-6.00	-2.00	
-6.92	←	26.15	+	R.B.C.	26.15 H	-6.92
-12.86	←	-3.13	-	sGOT	-3.13	-12.86
-10.00	←	33.87	+	sGPT	33.87 H	-10.00
-10.00	→	0.00	+	Sodium	-10.00	0.00
13.57	←	37.86	+	Triglycerides	37.86 H	13.57
-128.21	→	-90.79	+	Ultra-Sensitive TSH	-128.21 L	-90.79 L
-30.43	←	13.82	-	Vitamin D,25-OH,D3	13.82	-30.43 L
-31.54	→	-22.31	+	W.B.C.	-31.54 L	-22.31
<b>Total Status Deviation</b>				<b>20.84</b>	<b>26.70</b>	
<b>Total Status Skew</b>				<b>3.76</b>	<b>-1.71</b>	



## Comparison Progress Report

**Anna Salanti**

Female / Age: 62

**Foundational Wellness Profile Date: 7/16/2014**

Anna Salanti (2718)

A "+" change is toward optimal % Status of zero. A "-" change is away from optimal % Status of zero.

	Status % on: 12/31/2013		7/16/2014		+/- change
CA Cycle Phase 3	<b>176.97</b>	<b>H</b>	<b>-31.97</b>	<b>L</b>	<b>+ 145.00</b>
Orotate	<b>145.65</b>	<b>H</b>	6.52		+ 139.13
Hippurate	<b>120.37</b>	<b>H</b>	13.14		+ 107.23
Phenylacetate	<b>125.00</b>	<b>H</b>	<b>40.91</b>	<b>H</b>	<b>+ 84.09</b>
Succinate	<b>81.90</b>	<b>H</b>	-18.10		+ 63.79
Indican	<b>60.00</b>	<b>H</b>	0.00		+ 60.00
Malate	<b>71.43</b>	<b>H</b>	<b>-35.71</b>	<b>L</b>	<b>+ 35.71</b>
CA Cycle Phase 1	<b>78.81</b>	<b>H</b>	<b>-50.00</b>	<b>L</b>	<b>+ 28.81</b>
Quinolate	<b>50.00</b>	<b>H</b>	22.50		+ 27.50
Benzoate	<b>2466.67</b>	<b>H</b>	<b>4083.33</b>	<b>H</b>	<b>-1616.67</b>
Lactate	<b>34.55</b>	<b>H</b>	<b>696.87</b>	<b>H</b>	<b>- 662.33</b>
Kynurenate	7.89		<b>150.00</b>	<b>H</b>	<b>- 142.11</b>
p-Hydroxybenzoate	20.71		<b>131.82</b>	<b>H</b>	<b>- 111.11</b>
Xanthurenate	-3.19		<b>111.76</b>	<b>H</b>	<b>- 108.57</b>
Sulfate	15.30		<b>118.90</b>	<b>H</b>	<b>- 103.60</b>
Pyruvate	<b>-50.00</b>	<b>L</b>	<b>142.31</b>	<b>H</b>	<b>- 92.31</b>
a-Ketoglutarate	<b>-30.00</b>	<b>L</b>	<b>117.89</b>	<b>H</b>	<b>- 87.89</b>
5-Hydroxyindoleacetate	<b>35.71</b>	<b>H</b>	<b>101.43</b>	<b>H</b>	<b>- 65.71</b>
b-Hydroxyisovalerate	2.63		<b>59.21</b>	<b>H</b>	<b>- 56.58</b>
Formiminoglutamic Acid	<b>66.67</b>	<b>H</b>	<b>116.67</b>	<b>H</b>	<b>- 50.00</b>
Fumarate	0.85		<b>-50.00</b>	<b>L</b>	<b>- 49.15</b>
p-Hydroxyphenyllactate	-4.43		<b>-50.00</b>	<b>L</b>	<b>- 45.57</b>
2-Methylhippurate	7.14		<b>-50.00</b>	<b>L</b>	<b>- 42.86</b>
Isocitrate	0.85		<b>-38.14</b>	<b>L</b>	<b>- 37.29</b>
Methylmalonate	8.82		<b>38.24</b>	<b>H</b>	<b>- 29.41</b>
Adipate	-21.15		<b>-50.00</b>	<b>L</b>	<b>- 28.85</b>
CA Cycle Return	<b>-34.10</b>	<b>L</b>	<b>-60.29</b>	<b>L</b>	<b>- 26.19</b>

## Comparison Report

**Anna Salanti**

**Foundational Wellness Profile Date: 7/16/2014**

Female / Age: 62

Anna Salanti (2718)

The arrow's length is proportional to change. Left to right is increase. Right to left is decrease.  
Green is improvement. Red is decline.

		+/-	Status	% on:	12/31/2013	7/16/2014	
-50.00		7.14	-		7.14	-50.00	L
35.71		101.43	-		35.71	101.43	H
2.83		14.15	+		14.15	2.83	
-50.00		-21.15	-		-21.15	-50.00	L
					-50.00	-50.00	L
					-50.00	-50.00	L
-30.00		117.89	-		-30.00	117.89	H
					-50.00	-50.00	L
					-50.00	-50.00	L
2466.67		4083.33	-		2466.67	4083.33	H
					-50.00	-50.00	L
2.63		59.21	-		2.63	59.21	H
					22.73	-28.79	L
-60.28		38.99	-		38.99	-60.28	L
					8.33	11.11	
					-50.00	-50.00	L
2.63		19.57	+		19.57	2.63	
					25.00	30.56	H
66.67		116.67	-		66.67	116.67	H
-50.00		0.85	-		0.85	-50.00	L
					29.37	24.60	
13.14		120.37	+		120.37	13.14	
					23.81	10.53	
					22.22	8.33	
0.00		60.00	+		60.00	0.00	
-38.14		0.85	-		0.85	-38.14	L
7.89		150.00	-		7.89	150.00	H
34.55		696.87	-		34.55	696.87	H
-35.71		71.43	+		71.43	-35.71	L
					8.82	38.24	H
6.52		145.65	+		145.65	6.52	
40.91		125.00	+		125.00	40.91	H
					-50.00	-50.00	L
20.71		131.82	-		20.71	131.82	H
					-18.42	-13.16	
-50.00		-4.43	-		-4.43	-50.00	L
					44.92	48.31	H
-50.00		142.31	-		-50.00	142.31	H
					50.00	22.50	
					-2.94	11.90	
-18.10		81.90	+		81.90	-18.10	
15.30		118.90	-		15.30	118.90	H
					-50.00	-50.00	L
					-54.76	-32.61	L
-3.19		111.76	-		-3.19	111.76	H
				<b>Total Status Deviation</b>	<b>92.12</b>	<b>136.66</b>	
				<b>Total Status Skew</b>	<b>65.56</b>	<b>93.62</b>	

## Panel/Subset Comparison Report

Anna Salanti  
Female / Age: 62

Foundational Wellness Profile Date: 7/16/2014

Anna Salanti (2718)

Ammonia/Energy	12/31/2013		7/16/2014		+/-	
Arginine	-9.38		-14.71			
Threonine	<b>-41.67</b>	L	<b>-46.43</b>	L		
Glycine	<b>-42.92</b>	L	10.00		+	
Serine	<b>-43.85</b>	L	<b>-31.00</b>	L	+	
a-Aminoadipic Acid	<b>50.00</b>	H	3.33		+	
Asparagine	-15.63		<b>-55.00</b>	L	-	
Aspartic Acid	<b>-50.00</b>	L	<b>43.10</b>	H		
Citrulline	<b>41.30</b>	H	11.36		+	
Glutamic Acid	-13.11		<b>-30.77</b>	L	-	
Glutamine	-6.55		<b>-72.22</b>	L	-	
Ornithine	<b>-42.00</b>	L	-24.17		+	
a-Amino-N-Butyric Acid	<b>42.86</b>	H	-2.00		+	
Alanine	<b>33.27</b>	H	-11.54		+	
b-Alanine	-3.57		-14.00		-	
<b>PSS / PSD</b>	<b>-7.23 / 31.15</b>		<b>-16.72 / 26.40</b>			

CNS Metabolism	12/31/2013		7/16/2014		+/-	
Arginine	-9.38		-14.71			
Tryptophan	<b>36.67</b>	H	<b>-25.00</b>	L	+	
GABA	<b>46.67</b>	H	0.00		+	
Glycine	<b>-42.92</b>	L	10.00		+	
Serine	<b>-43.85</b>	L	<b>-31.00</b>	L	+	
Taurine	15.08		-4.78		+	
Aspartic Acid	<b>-50.00</b>	L	<b>43.10</b>	H		
Glutamine	-6.55		<b>-72.22</b>	L	-	
Ethanolamine	<b>28.49</b>	H	22.73			
Phosphoethanolamine	<b>-41.30</b>	L	<b>-41.30</b>	L		
Phosphoserine	<b>46.00</b>	H	<b>-66.67</b>	L	-	
<b>PSS / PSD</b>	<b>-1.92 / 33.35</b>		<b>-16.35 / 30.14</b>			

Connective Tissue	12/31/2013		7/16/2014		+/-	
Leucine	-12.34		-7.14			
Methionine	-20.59		<b>27.27</b>	H		
Valine	7.05		<b>33.33</b>	H	-	
Cystine	<b>43.88</b>	H	<b>50.00</b>	H		
Hydroxyproline	<b>31.25</b>	H	<b>187.04</b>	H	-	
3-Methylhistidine	<b>39.19</b>	H	<b>-32.00</b>	L		
Proline	-20.00		-16.67			
<b>PSS / PSD</b>	<b>14.39 / 27.62</b>		<b>34.55 / 50.49</b>			

Detoxification Markers	12/31/2013		7/16/2014		+/-	
Methionine	-20.59		<b>27.27</b>	H		
Cystine	<b>43.88</b>	H	<b>50.00</b>	H		
Taurine	15.08		-4.78		+	
Glutamine	-6.55		<b>-72.22</b>	L	-	
Glycine	<b>-42.92</b>	L	10.00		+	
Aspartic Acid	<b>-50.00</b>	L	<b>43.10</b>	H		
<b>PSS / PSD</b>	<b>-10.18 / 29.84</b>		<b>8.90 / 34.56</b>			

## Panel/Subset Comparison Report

Anna Salanti  
Female / Age: 62

Foundational Wellness Profile Date: 7/16/2014

Anna Salanti (2718)

Essential Amino Acid	12/31/2013	7/16/2014	+/-	
Arginine	-9.38	-14.71		
Histidine	<b>-78.57</b> L	8.00	+	<b>-78.57</b> 8.00
Isoleucine	<b>-26.19</b> L	8.73	+	<b>-26.19</b> 8.73
Leucine	-12.34	-7.14		
Lysine	14.66	-22.73	-	14.66 <b>-22.73</b>
Methionine	-20.59	<b>27.27</b> H		
Phenylalanine	-12.07	-12.00		
Threonine	<b>-41.67</b> L	<b>-46.43</b> L		
Tryptophan	<b>36.67</b> H	<b>-25.00</b> L	+	<b>-25.00</b> <b>36.67</b>
Valine	7.05	<b>33.33</b> H	-	7.05 <b>33.33</b>
<b>PSS / PSD</b>	-14.24 / 25.92	-5.07 / 20.53		

Fat Metabolism	12/31/2013	7/16/2014	+/-	
Arginine	-9.38	-14.71		
Isoleucine	<b>-26.19</b> L	8.73	+	<b>-26.19</b> 8.73
Leucine	-12.34	-7.14		
Valine	7.05	<b>33.33</b> H	-	7.05 <b>33.33</b>
Taurine	15.08	-4.78	+	15.08 <b>-4.78</b>
Glutamine	-6.55	<b>-72.22</b> L	-	<b>-72.22</b> -6.55
Sarcosine	<b>-25.21</b> L	-12.50	+	<b>-25.21</b> -12.50
<b>PSS / PSD</b>	-8.22 / 14.54	-9.90 / 21.92		

Gluconeogen	12/31/2013	7/16/2014	+/-	
Threonine	<b>-41.67</b> L	<b>-46.43</b> L		
Tryptophan	<b>36.67</b> H	<b>-25.00</b> L	+	<b>-25.00</b> <b>36.67</b>
Glycine	<b>-42.92</b> L	10.00	+	<b>-42.92</b> 10.00
Serine	<b>-43.85</b> L	<b>-31.00</b> L	+	<b>-43.85</b> <b>-31.00</b>
Alanine	<b>33.27</b> H	-11.54	+	<b>33.27</b> -11.54
<b>PSS / PSD</b>	-11.70 / 39.67	-20.79 / 24.79		

Hepatic Metabolism	12/31/2013	7/16/2014	+/-	
Methionine	-20.59	<b>27.27</b> H		
Taurine	15.08	-4.78	+	15.08 <b>-4.78</b>
Glutamine	-6.55	<b>-72.22</b> L	-	<b>-72.22</b> -6.55
Cystine	<b>43.88</b> H	<b>50.00</b> H		
Cystathionine	<b>33.33</b> H	0.00	+	<b>33.33</b> 0.00
Homocystine	<b>41.67</b> H	-15.00	+	<b>41.67</b> -15.00
Alanine	<b>33.27</b> H	-11.54	+	<b>33.27</b> -11.54
<b>PSS / PSD</b>	20.01 / 27.77	-3.75 / 25.83		

Immune Metabolites	12/31/2013	7/16/2014	+/-	
Arginine	-9.38	-14.71		
Threonine	<b>-41.67</b> L	<b>-46.43</b> L		
Glutamine	-6.55	<b>-72.22</b> L	-	<b>-72.22</b> -6.55
Ornithine	<b>-42.00</b> L	-24.17	+	<b>-42.00</b> -24.17
<b>PSS / PSD</b>	-24.90 / 24.90	-39.38 / 39.38		

## Panel/Subset Comparison Report

**Anna Salanti**  
Female / Age: 62

**Foundational Wellness Profile Date: 7/16/2014**

Anna Salanti (2718)

<b>Magnesium Dependents</b>	<b>12/31/2013</b>		<b>7/16/2014</b>	<b>+/-</b>	
Citrulline	<b>41.30</b> H		11.36	+	11.36 ← <b>41.30</b>
Ethanolamine	<b>28.49</b> H		22.73		
Phosphoethanolamine	<b>-41.30</b> L		<b>-41.30</b> L		
Phosphoserine	<b>46.00</b> H		<b>-66.67</b> L	-	<b>-66.67</b> ← <b>46.00</b>
Serine	<b>-43.85</b> L		<b>-31.00</b> L	+	<b>-43.85</b> → <b>-31.00</b>
<b>PSS / PSD</b>	6.13 / 40.19		-15.65 / 30.68		

<b>Muscle Metabolites</b>	<b>12/31/2013</b>		<b>7/16/2014</b>	<b>+/-</b>	
Anserine	<b>38.89</b> H		<b>-50.00</b> L	-	<b>-50.00</b> ← <b>38.89</b>
Carnosine	-22.92		0.00	+	-22.92 → 0.00
1-Methylhistidine	<b>45.83</b> H		-4.67	+	-4.67 ← <b>45.83</b>
3-Methylhistidine	<b>39.19</b> H		<b>-32.00</b> L		
<b>PSS / PSD</b>	25.25 / 36.71		-21.67 / 21.67		

<b>Neuroendocrine Metab</b>	<b>12/31/2013</b>		<b>7/16/2014</b>	<b>+/-</b>	
GABA	<b>46.67</b> H		0.00	+	0.00 ← <b>46.67</b>
Glycine	<b>-42.92</b> L		10.00	+	<b>-42.92</b> → 10.00
Serine	<b>-43.85</b> L		<b>-31.00</b> L	+	<b>-43.85</b> → <b>-31.00</b>
Taurine	15.08		-4.78	+	-4.78 ← 15.08
Tyrosine	14.29		<b>-25.00</b> L	-	<b>-25.00</b> ← 14.29
<b>PSS / PSD</b>	-2.15 / 32.56		-10.16 / 14.16		

<b>Urea Cycle Metabolites</b>	<b>12/31/2013</b>		<b>7/16/2014</b>	<b>+/-</b>	
Arginine	-9.38		-14.71		
Aspartic Acid	<b>-50.00</b> L		<b>43.10</b> H		
Citrulline	<b>41.30</b> H		11.36	+	11.36 ← <b>41.30</b>
Ornithine	<b>-42.00</b> L		-24.17	+	<b>-42.00</b> → -24.17
Glutamine	-6.55		<b>-72.22</b> L	-	<b>-72.22</b> ← -6.55
Asparagine	-15.63		<b>-55.00</b> L	-	<b>-55.00</b> ← -15.63
<b>PSS / PSD</b>	-13.71 / 27.48		-15.15 / 32.30		

<b>Adrenal Function</b>	<b>1/18/2011</b>		<b>7/16/2014</b>	<b>+/-</b>	
Cholesterol	<b>27.50</b> H		18.33	+	18.33 ← <b>27.50</b>
Eosinophils	21.43		-21.43		
Eosinophil Count	15.00		-21.00		
Potassium	-8.82		-20.59	-	-20.59 ← -8.82
Sodium	-10.00		0.00	+	-10.00 → 0.00
Chloride	13.64		13.64		
<b>PSS / PSD</b>	9.79 / 16.06		-5.17 / 15.83		

<b>Allergy</b>	<b>1/18/2011</b>		<b>7/16/2014</b>	<b>+/-</b>	
Eosinophils	21.43		-21.43		
Globulin	-10.00		-6.67		
Lymphocytes	-12.50		<b>-25.00</b> L	-	<b>-25.00</b> ← -12.50
Monocytes	<b>27.78</b> H		5.56	+	5.56 ← <b>27.78</b>
W.B.C.	<b>-31.54</b> L		-22.31	+	<b>-31.54</b> → -22.31
<b>PSS / PSD</b>	-0.97 / 20.65		-13.97 / 16.19		

## Panel/Subset Comparison Report

**Anna Salanti**  
Female / Age: 62

**Foundational Wellness Profile Date: 7/16/2014**

Anna Salanti (2718)

<b>Athletic Potential</b>	<b>1/18/2011</b>	<b>7/16/2014</b>	<b>+/-</b>	
B.U.N./Creatinine Ratio	10.96	<b>180.30</b> H	-	10.96 <b>180.30</b>
Cholesterol	<b>27.50</b> H	18.33	+	18.33 <b>27.50</b>
Creatinine	-9.00	<b>-28.00</b> L	-	<b>-28.00</b> -9.00
Potassium	-8.82	-20.59	-	-20.59  -8.82
Protein, Total	-6.00	-2.00		
Sodium	-10.00	0.00	+	-10.00  0.00
HDL-Cholesterol	-14.00	-12.00		
<b>PSS / PSD</b>	<b>-3.25 / 12.87</b>	<b>19.85 / 35.49</b>		

<b>Biochemical Ratios</b>	<b>1/18/2011</b>	<b>7/16/2014</b>	<b>+/-</b>	
A/G Ratio	-12.17	-16.33		
B.U.N./Creatinine Ratio	10.96	<b>180.30</b> H	-	10.96 <b>180.30</b>
Sodium/Potassium Ratio	9.13	22.92	-	9.13  22.92
<b>PSS / PSD</b>	<b>2.64 / 10.75</b>	<b>39.56 / 62.05</b>		

<b>Bone/Joint</b>	<b>1/18/2011</b>	<b>7/16/2014</b>	<b>+/-</b>	
Albumin	19.23	19.23		
Alkaline Phosphatase	-2.14	-10.71	-	-10.71  -2.14
Calcium	11.90	-11.90		
Neutrophils	0.00	<b>29.41</b> H	-	0.00 <b>29.41</b>
Protein, Total	-6.00	-2.00		
Vitamin D,25-OH,D3	13.82	<b>-30.43</b> L	-	<b>-30.43</b> 13.82
<b>PSS / PSD</b>	<b>6.14 / 8.85</b>	<b>-3.76 / 18.42</b>		

<b>Carbohydrate Metabolism</b>	<b>1/18/2011</b>	<b>7/16/2014</b>	<b>+/-</b>	
Glucose	<b>32.35</b> H	<b>35.29</b> H		
HDL-Cholesterol	-14.00	-12.00		
LDL	<b>83.82</b> H	<b>76.47</b> H		
Cholesterol	<b>27.50</b> H	18.33	+	18.33 <b>27.50</b>
Triglycerides	<b>37.86</b> H	13.57	+	13.57 <b>37.86</b>
<b>PSS / PSD</b>	<b>33.51 / 39.11</b>	<b>26.33 / 31.13</b>		

<b>Cardiac Risk</b>	<b>1/18/2011</b>	<b>7/16/2014</b>	<b>+/-</b>	
Cholesterol	<b>27.50</b> H	18.33	+	18.33 <b>27.50</b>
GGT	17.74	<b>-31.82</b> L	-	<b>-31.82</b> 17.74
Iron, Total	16.67	-7.50	+	-7.50  16.67
sGOT	-3.13	-12.86	-	-12.86  -3.13
Triglycerides	<b>37.86</b> H	13.57	+	13.57 <b>37.86</b>
HDL-Cholesterol	-14.00	-12.00		
LDL	<b>83.82</b> H	<b>76.47</b> H		
<b>PSS / PSD</b>	<b>23.78 / 28.67</b>	<b>3.69 / 25.44</b>		

## Panel/Subset Comparison Report

Anna Salanti  
Female / Age: 62

Foundational Wellness Profile Date: 7/16/2014

Anna Salanti (2718)

Cellular Production	1/18/2011	7/16/2014	+/-	
Alkaline Phosphatase	-2.14	-10.71	-	-10.71 ← -2.14
GGT	17.74	<b>-31.82</b> L	-	<b>-31.82</b> ← 17.74
Iron, Total	16.67	-7.50	+	-7.50 → 16.67
Neutrophils	0.00	<b>29.41</b> H	-	0.00 → <b>29.41</b>
W.B.C.	<b>-31.54</b> L	-22.31	+	<b>-31.54</b> → -22.31
<b>PSS / PSD</b>	3.79 / 15.01	-3.37 / 20.75		

Electrolyte Balance	1/18/2011	7/16/2014	+/-	
Calcium	11.90	-11.90		
Chloride	13.64	13.64		
Potassium	-8.82	-20.59	-	-20.59 ← -8.82
Sodium	-10.00	0.00	+	-10.00 → 0.00
<b>PSS / PSD</b>	-1.99 / 12.21	-1.77 / 11.23		

Gastrointest. Function	1/18/2011	7/16/2014	+/-	
Chloride	13.64	13.64		
Cholesterol	<b>27.50</b> H	18.33	+	18.33 → <b>27.50</b>
Monocytes	<b>27.78</b> H	5.56	+	5.56 → <b>27.78</b>
Potassium	-8.82	-20.59	-	-20.59 ← -8.82
Sodium	-10.00	0.00	+	-10.00 → 0.00
Triglycerides	<b>37.86</b> H	13.57	+	13.57 → <b>37.86</b>
LDL	<b>83.82</b> H	<b>76.47</b> H		
<b>PSS / PSD</b>	19.68 / 27.57	15.28 / 21.17		

Hydration	1/18/2011	7/16/2014	+/-	
Albumin	19.23	19.23		
Sodium	-10.00	0.00	+	-10.00 → 0.00
Potassium	-8.82	-20.59	-	-20.59 ← -8.82
Chloride	13.64	13.64		
Calcium	11.90	-11.90		
Creatinine	-9.00	<b>-28.00</b> L	-	<b>-28.00</b> ← -9.00
B.U.N.	2.38	<b>78.57</b> H	-	2.38 → <b>78.57</b>
<b>PSS / PSD</b>	0.33 / 11.46	7.62 / 22.74		

Immune Response	1/18/2011	7/16/2014	+/-	
Basophils	0.00	<b>-50.00</b> L	-	<b>-50.00</b> ← 0.00
Eosinophils	21.43	-21.43		
Lymphocytes	-12.50	<b>-25.00</b> L	-	<b>-25.00</b> ← -12.50
Monocytes	<b>27.78</b> H	5.56	+	5.56 → <b>27.78</b>
Neutrophils	0.00	<b>29.41</b> H	-	0.00 → <b>29.41</b>
Globulin	-10.00	-6.67		
<b>PSS / PSD</b>	4.45 / 11.95	-11.35 / 23.01		

Immune Response Count	1/18/2011	7/16/2014	+/-	
Basophil Count	-24.00	<b>-50.00</b> L	-	<b>-50.00</b> ← -24.00
Eosinophil Count	15.00	-21.00		
Lymphocyte Count	<b>-32.84</b> L	<b>-34.84</b> L		
Monocyte Count	2.44	-3.11		
Neutrophil Count	<b>-30.60</b> L	-15.23	+	<b>-30.60</b> → -15.23
<b>PSS / PSD</b>	-14.00 / 20.98	-24.84 / 24.84		

## Panel/Subset Comparison Report

Anna Salanti  
Female / Age: 62

Foundational Wellness Profile Date: 7/16/2014

Anna Salanti (2718)

Inflammatory Process	1/18/2011	7/16/2014	+/-	
Eosinophils	21.43	-21.43		
LDL	<b>83.82</b> H	<b>76.47</b> H		
Monocytes	<b>27.78</b> H	5.56	+	5.56 ← <b>27.78</b>
Lymphocytes	-12.50	<b>-25.00</b> L	-	<b>-25.00</b> ← -12.50
Neutrophils	0.00	<b>29.41</b> H	-	0.00 → <b>29.41</b>
W.B.C.	<b>-31.54</b> L	-22.31	+	<b>-31.54</b> → -22.31
Basophils	0.00	<b>-50.00</b> L	-	<b>-50.00</b> ← 0.00
<b>PSS / PSD</b>	12.71 / 25.30	-5.12 / 32.98		

Kidney Function	1/18/2011	7/16/2014	+/-	
Albumin	19.23	19.23		
B.U.N.	2.38	<b>78.57</b> H	-	2.38 → <b>78.57</b>
B.U.N./Creatinine Ratio	10.96	<b>180.30</b> H	-	10.96 → <b>180.30</b>
Chloride	13.64	13.64		
Creatinine	-9.00	<b>-28.00</b> L	-	<b>-28.00</b> ← -9.00
Glucose	<b>32.35</b> H	<b>35.29</b> H		
Potassium	-8.82	-20.59	-	-20.59 ← -8.82
Protein, Total	-6.00	-2.00		
Sodium	-10.00	0.00	+	-10.00 → 0.00
<b>PSS / PSD</b>	2.81 / 12.91	24.28 / 41.13		

Lipid	1/18/2011	7/16/2014	+/-	
Cholesterol	<b>27.50</b> H	18.33	+	18.33 ← <b>27.50</b>
Triglycerides	<b>37.86</b> H	13.57	+	13.57 ← <b>37.86</b>
HDL-Cholesterol	-14.00	-12.00		
LDL	<b>83.82</b> H	<b>76.47</b> H		
<b>PSS / PSD</b>	33.80 / 40.80	24.09 / 30.09		

Liver Function	1/18/2011	7/16/2014	+/-	
Albumin	19.23	19.23		
Alkaline Phosphatase	-2.14	-10.71	-	-10.71 ← -2.14
Bilirubin, Total	-4.55	-22.73	-	-22.73 ← -4.55
GGT	17.74	<b>-31.82</b> L	-	<b>-31.82</b> ← 17.74
Protein, Total	-6.00	-2.00		
sGOT	-3.13	-12.86	-	-12.86 ← -3.13
sGPT	<b>33.87</b> H	-10.00	+	-10.00 ← <b>33.87</b>
Vitamin D,25-OH,D3	13.82	<b>-30.43</b> L	-	<b>-30.43</b> ← 13.82
<b>PSS / PSD</b>	8.61 / 12.56	-11.23 / 19.62		

Nitrogen	1/18/2011	7/16/2014	+/-	
B.U.N.	2.38	<b>78.57</b> H	-	2.38 → <b>78.57</b>
B.U.N./Creatinine Ratio	10.96	<b>180.30</b> H	-	10.96 → <b>180.30</b>
Creatinine	-9.00	<b>-28.00</b> L	-	<b>-28.00</b> ← -9.00
<b>PSS / PSD</b>	1.45 / 7.45	49.30 / 80.14		



## Panel/Subset Comparison Report

**Anna Salanti**  
Female / Age: 62

**Foundational Wellness Profile Date: 7/16/2014**

Anna Salanti (2718)

<b>Oxidative Stress</b>	<b>1/18/2011</b>	<b>7/16/2014</b>	<b>+/-</b>		
Bilirubin, Total	-4.55	-22.73	-	-22.73	← -4.55
Chloride	13.64	13.64			
Cholesterol	<b>27.50 H</b>	18.33	+	18.33	← <b>27.50</b>
Glucose	<b>32.35 H</b>	<b>35.29 H</b>			
Iron, Total	16.67	-7.50	+	-7.50	← 16.67
<b>PSS / PSD</b>	17.94 / 19.45	0.56 / 21.86			

<b>Protein</b>	<b>1/18/2011</b>	<b>7/16/2014</b>	<b>+/-</b>		
A/G Ratio	-12.17	-16.33			
Albumin	19.23	19.23			
Globulin	-10.00	-6.67			
Protein, Total	-6.00	-2.00			
<b>PSS / PSD</b>	-2.23 / 11.85	-1.44 / 11.06			

<b>Pulmonary Function</b>	<b>1/18/2011</b>	<b>7/16/2014</b>	<b>+/-</b>		
Calcium	11.90	-11.90			
Potassium	-8.82	-20.59	-	-20.59	← -8.82
sGOT	-3.13	-12.86	-	-12.86	← -3.13
Sodium	-10.00	0.00	+	-10.00	→ 0.00
<b>PSS / PSD</b>	-0.79 / 12.09	-4.52 / 13.62			

<b>Red Blood Cell Health</b>	<b>1/18/2011</b>	<b>7/16/2014</b>	<b>+/-</b>		
Hematocrit	<b>49.00 H</b>	17.00	+	17.00	← <b>49.00</b>
Hemoglobin	<b>41.43 H</b>	4.29	+	4.29	← <b>41.43</b>
MCH	2.70	3.34			
MCHC	-12.87	<b>-26.90 L</b>	-	-26.90	← -12.87
MCV	14.72	24.16	-	14.72	→ 24.16
R.B.C.	<b>26.15 H</b>	-6.92	+	-6.92	← <b>26.15</b>
W.B.C.	<b>-31.54 L</b>	-22.31	+	-31.54	→ -22.31
<b>PSS / PSD</b>	12.80 / 25.49	-1.05 / 14.99			

<b>Thyroid Function</b>	<b>1/18/2011</b>	<b>7/16/2014</b>	<b>+/-</b>		
Ultra-Sensitive TSH	<b>-128.21 L</b>	<b>-90.79 L</b>	+	-128.21	→ -90.79
<b>PSS / PSD</b>	-71.77 / 71.77	-90.79 / 90.79			

<b>B-Complex Markers</b>	<b>12/31/2013</b>	<b>7/16/2014</b>	<b>+/-</b>		
b-Hydroxyisovalerate	2.63	<b>59.21 H</b>	-	2.63	→ <b>59.21</b>
a-Ketoisovalerate	<b>-50.00 L</b>	<b>-50.00 L</b>			
a-Ketoisocaproate	<b>-50.00 L</b>	<b>-50.00 L</b>			
a-Keto-b-methylvalerate	<b>-50.00 L</b>	<b>-50.00 L</b>			
Methylmalonate	8.82	<b>38.24 H</b>	-	8.82	→ <b>38.24</b>
Formiminoglutamic Acid	<b>66.67 H</b>	<b>116.67 H</b>	-	<b>66.67</b>	→ <b>116.67</b>
Xanthurenate	-3.19	<b>111.76 H</b>	-	-3.19	→ <b>111.76</b>
<b>PSS / PSD</b>	-10.72 / 33.04	25.13 / 67.98			

<b>BCAA Catabolism</b>	<b>12/31/2013</b>	<b>7/16/2014</b>	<b>+/-</b>		
a-Ketoisovalerate	<b>-50.00 L</b>	<b>-50.00 L</b>			
a-Ketoisocaproate	<b>-50.00 L</b>	<b>-50.00 L</b>			
a-Keto-b-methylvalerate	<b>-50.00 L</b>	<b>-50.00 L</b>			
<b>PSS / PSD</b>	-50.00 / 50.00	-50.00 / 50.00			

## Panel/Subset Comparison Report

Anna Salanti  
Female / Age: 62

Foundational Wellness Profile Date: 7/16/2014

Anna Salanti (2718)

CA Cycle Ratios	12/31/2013		7/16/2014	+/-	
CA Cycle Phase 1	78.81	H	-50.00	L +	-50.00 ← 78.81
CA Cycle Phase 2	-8.93		-4.00		
CA Cycle Phase 3	176.97	H	-31.97	L +	-31.97 ← 176.97
CA Cycle Phase 4	50.66	H	-47.10	L	
CA Cycle Return	-34.10	L	-60.29	L -	-60.29 ← -34.10
<b>PSS / PSD</b>	91.88 / 104.18		-40.56 / 40.56		

Carbohydrate Metabolism	12/31/2013		7/16/2014	+/-	
Lactate	34.55	H	696.87	H -	34.55 → 696.87
Pyruvate	-50.00	L	142.31	H -	-50.00 → 142.31
a-Hydroxybutyrate	-50.00	L	-50.00	L	
b-Hydroxybutyrate	-50.00	L	-50.00	L	
<b>PSS / PSD</b>	-28.86 / 46.14		184.80 / 234.80		

Energy Production	12/31/2013		7/16/2014	+/-	
Citrate	38.99	H	-60.28	L -	-60.28 ← 38.99
cis-Aconitate	22.73		-28.79	L	
Isocitrate	0.85		-38.14	L -	-38.14 ← 0.85
a-Ketoglutarate	-30.00	L	117.89	H -	-30.00 → 117.89
Succinate	81.90	H	-18.10	+	-18.10 ← 81.90
Fumarate	0.85		-50.00	L -	-50.00 ← 0.85
Malate	71.43	H	-35.71	L +	-35.71 ← 71.43
Hydroxymethylglutarate	22.22		8.33	+	8.33 ← 22.22
<b>PSS / PSD</b>	26.12 / 33.62		-13.10 / 44.66		

Fatty Acid Metabolism	12/31/2013		7/16/2014	+/-	
Adipate	-21.15		-50.00	L -	-50.00 ← -21.15
Suberate	-2.94		11.90	-	-2.94 → 11.90
Ethylmalonate	25.00	H	30.56	H	
<b>PSS / PSD</b>	0.30 / 16.37		-2.51 / 30.82		

Intestinal Dysbiosis	12/31/2013		7/16/2014	+/-	
p-Hydroxyphenyllactate	-4.43		-50.00	L -	-50.00 ← -4.43
Phenylacetate	125.00	H	40.91	H +	40.91 ← 125.00
Phenylpropionate	-50.00	L	-50.00	L	
Tricarballoylate	-50.00	L	-50.00	L	
DHPP	-50.00	L	-50.00	L	
Indican	60.00	H	0.00	+	0.00 ← 60.00
p-Hydroxybenzoate	20.71		131.82	H -	20.71 → 131.82
D-Lactate	19.57		2.63	+	2.63 ← 19.57
D-Arabinitol	8.33		11.11		
<b>PSS / PSD</b>	8.80 / 43.12		-1.50 / 42.94		

## Panel/Subset Comparison Report

**Anna Salanti**  
Female / Age: 62

**Foundational Wellness Profile Date: 7/16/2014**

Anna Salanti (2718)

Liver Detox Indicators	12/31/2013		7/16/2014	+/-		
2-Methylhippurate	7.14		-50.00	L -	-50.00	← 7.14
Glucarate	<b>29.37</b>	H	24.60			
Orotate	<b>145.65</b>	H	6.52	+	6.52	← <b>145.65</b>
Pyroglutamate	<b>44.92</b>	H	<b>48.31</b>	H		
Sulfate	15.30		<b>118.90</b>	H -	15.30	→ <b>118.90</b>
a-Hydroxybutyrate	<b>-50.00</b>	L	<b>-50.00</b>	L		
<b>PSS / PSD</b>	32.06 / 48.73		16.39 / 49.72			

Neurotransmitters	12/31/2013		7/16/2014	+/-		
Vanilmandelate	<b>-54.76</b>	L	<b>-32.61</b>	L +	-54.76	→ -32.61
Homovanillate	23.81		10.53	+	10.53	← 23.81
5-Hydroxyindoleacetate	<b>35.71</b>	H	<b>101.43</b>	H -	35.71	→ <b>101.43</b>
Kynurenate	7.89		<b>150.00</b>	H -	7.89	→ <b>150.00</b>
Quinolate	<b>50.00</b>	H	22.50	+	22.50	← <b>50.00</b>
<b>PSS / PSD</b>	12.53 / 34.44		50.37 / 63.41			

# Village Pharmacy

898 Tanager Street  
Incline Village, NV 89451  
Tel: (775) 831-1133  
Fax: (775) 831-2228

Ordering Practitioner  
**Anna Salanti**  
503-977-2660

## Custom Amino Acid Profile

Biochemically Individualized for your patient

Client  
**Anna Salanti**

Visit date  
**7/16/2014**

### Order Payment and Delivery Information

To order, complete and FAX to (775) 831-2228.

**Ship to:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**City, State, Zip:** \_\_\_\_\_

**Phone:** \_\_\_\_\_

**Credit Card Number:** \_\_\_\_\_

**Expires:** \_\_\_\_\_

**Authorizing Signature:** \_\_\_\_\_

### Amino Acid Customization Details

	Container Base Grams	Test Result	% Status	Grams Added
L-Arginine	19.50	7.5	-14.71	0
L-Histidine	13.50	7.900000	8.00	0
L-Isoleucine	13.50	7.400000	8.73	0
L-Leucine	12.00	12	-7.14	0
L-Lysine	12.00	18	-22.73	0
L-Methionine	15.00	2.5	27.27	0
L-Phenylalanine	15.00	5.900000	-12.00	0
L-Taurine	8.10	9.699999	-4.78	0
L-Threonine	13.50	8.5	-46.43	0
L-Tryptophan (as 5-HTP)	0.90	4	-25.00	0
L-Valine	15.00	28	33.33	0
<b>Total Base Grams:</b>	<b>138.00</b>			<b>Total Grams Added: 0</b>

#### Other Ingredients \*

Grams per Container	Grams per Container
Alanine . . . . . 26.88	Tyrosine . . . . . 0.36
Alpha-Ketoglutarate . . . . . 12.00	Magnesium . . . . . 2.01
Aspartic Acid . . . . . 11.04	P5P (B6) . . . . . 1.005
Glycine . . . . . 67.92	Folic Acid . . . . . 0.67
Glutamic Acid . . . . . 16.98	Zinc . . . . . 0.67
Glutamine . . . . . 7.50	
Proline . . . . . 30.96	
Serine . . . . . 8.76	

\* Flavored product may include additional ingredients not shown.

Customization exclusively from Lab Interpretation's LabAssist™ interpretive report, and KTS Products Synerplex Amino Acids.