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Anna

Date: 2/21/2008
(accession: A0802220199)

Next Test Due: 8/21/2008

LabAssist™ Foundational Wellness Profile Report

Practitioner

Printed on Tuesday, March 4, 2008 for:

If there is a problem with this report, please contact us as soon as possible at: (775) 851-3337 or Fax (775) 851-3363

Basic Status High/Low - Plasma Amino Acid on 2/21/2008

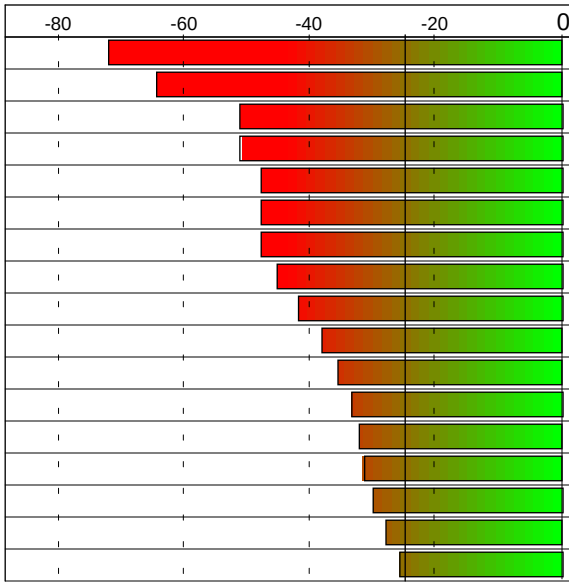
Anna **Foundational Wellness Profile Date: 2/21/2008**

Female / Age: 56

Client ID:555986644 (8322)

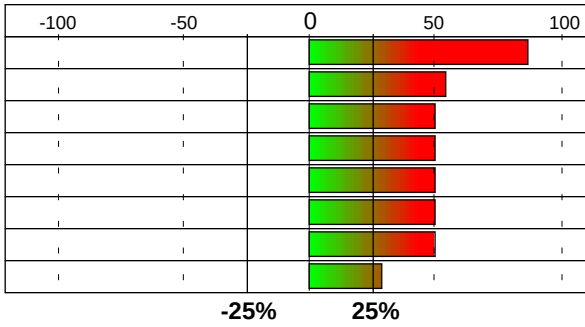
The % Status is the weighted deviation of the laboratory result.

Low Results



	% Status		Result	*Low*	*High*
Asparagine	-71.93	**L**	**26.36**	45.00	130.00
Glutamine	-64.39	**L**	**535.24**	600.00	1050.00
Serine	-50.99	**L**	**88.81**	90.00	210.00
Glycine	-50.85	**L**	**223.08**	225.00	450.00
Phenylalanine	-47.80	**L**	**47.09**	45.00	140.00
Leucine	-47.75	**L**	**92.47**	90.00	200.00
Valine	-47.64	**L**	**175.90**	170.00	420.00
Isoleucine	-45.18	**L**	**55.31**	50.00	160.00
Histidine	-41.65	**L**	**75.85**	70.00	140.00
Threonine	-38.07	**L**	**117.89**	100.00	250.00
Methionine	-35.53	**L**	**28.62**	25.00	50.00
Proline	-33.10	**L**	**175.63**	130.00	400.00
1-Methylhistidine	-32.20	**L**	**3.56**	0.00	20.00
Ornithine	-31.38	**L**	**77.93**	50.00	200.00
Lysine	-29.98	**L**	**180.04**	150.00	300.00
Taurine	-27.75	**L**	**94.51**	50.00	250.00
Aspartic Acid	-25.79	**L**	**11.81**	6.00	30.00

High Results



	% Status		Result	*Low*	*High*
Hydroxyproline	86.17	**H**	**40.85**	0.00	30.00
GABA	53.80	**H**	**5.19**	0.00	5.00
Anserine	50.00	**H**	**1.00**	0.00	1.00
Carnosine	50.00	**H**	**1.00**	0.00	1.00
Homocystine	50.00	**H**	**1.00**	0.00	1.00
Hydroxylysine	50.00	**H**	**1.00**	0.00	1.00
3-Methylhistidine	49.40	**H**	**4.97**	0.00	5.00
Ethanolamine	28.00	**H**	**6.24**	0.00	8.00

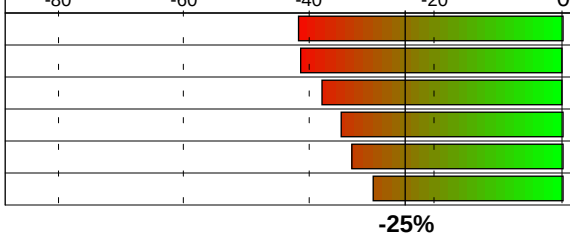
Basic Status High/Low - Blood Test on 2/21/2008

Anna **Foundational Wellness Profile Date: 2/21/2008**

Female / Age: 56

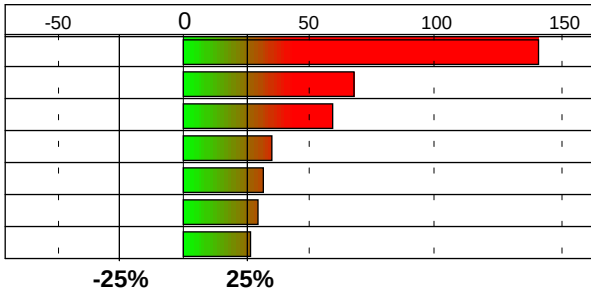
The % Status is the weighted deviation of the laboratory result.

Low Results



	% Status		Result	*Low*	*High*
Lymphocyte Count	-41.55	**L**	**1107.80**	850.00	3900.00
Basophil Count	-41.30	**L**	**17.40**	0.00	200.00
Lymphocytes	-37.94	**L**	**19.10**	15.00	49.00
Basophils	-35.00	**L**	**0.30**	0.00	2.00
CO2	-33.33	**L**	**23.00**	21.00	33.00
Free T-4	-30.00	**L**	**1.00**	0.80	1.80

High Results



	% Status		Result	*Low*	*High*
LDL	141.18	**H**	**192.00**	62.00	130.00
Cholesterol	68.33	**H**	**282.00**	140.00	260.00
Ultra-Sensitive TSH	59.29	**H**	**2.63**	1.10	2.50
Glucose	35.29	**H**	**94.00**	65.00	99.00
Triglycerides	32.26	**H**	**112.00**	10.00	134.00
MCH	29.59	**H**	**31.78**	27.00	33.00
T-3 Uptake	26.92	**H**	**32.00**	22.00	35.00

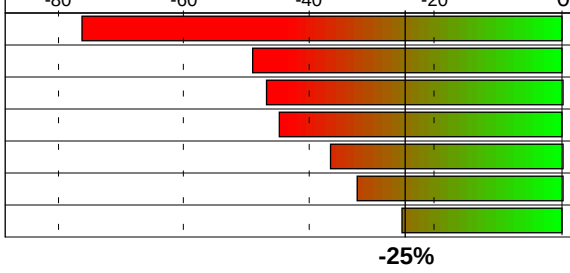
Basic Status High/Low - Urine Organic Acid on 2/21/2008

Anna **Foundational Wellness Profile Date: 2/21/2008**

Female / Age: 56

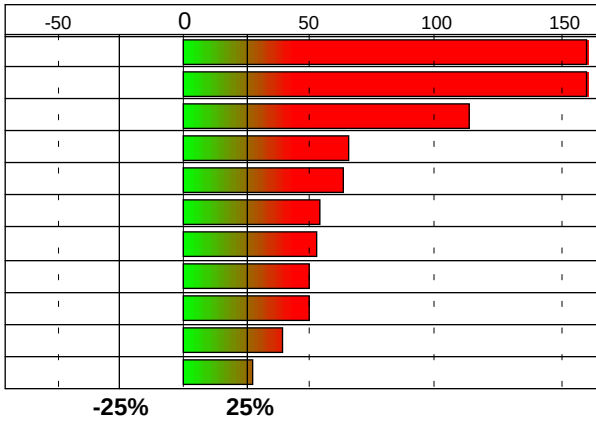
The % Status is the weighted deviation of the laboratory result.

Low Results



	% Status		Result	*Low*	*High*
Vanilmandelate	-76.02	**L**	**0.40**	1.10	3.80
Indican	-48.75	**L**	**1.00**	0.00	80.00
P-Hydroxyphenylacetate	-47.00	**L**	**0.60**	0.00	20.00
b-Hydroxybutyrate	-44.77	**L**	**0.15**	0.00	2.80
Pyruvate	-36.76	**L**	**0.54**	0.00	4.10
Methylmalonate	-32.42	**L**	**0.40**	0.00	2.30
Sulfate	-25.38	**L**	**221.15**	166.00	390.00

High Results



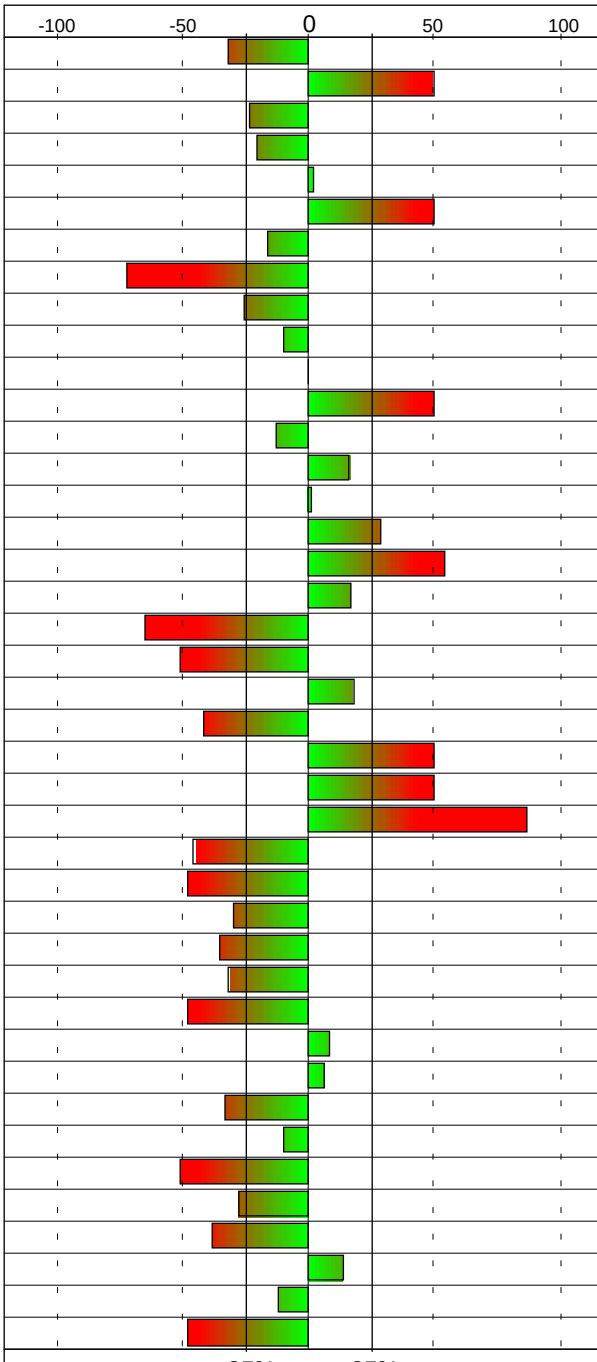
	% Status		Result	*Low*	*High*
CA Cycle Entry	1125.02	**H**	**1410.02**	0.00	120.00
Homovanillate	574.59	**H**	**40.22**	1.50	7.70
p-Hydroxyphenyllactate	113.44	**H**	**1.14**	0.00	0.70
Lactate	65.24	**H**	**22.14**	1.40	19.40
D-Lactate	63.26	**H**	**6.23**	0.00	5.50
a-Ketoisocaproate	53.86	**H**	**0.41**	0.00	0.39
Suberate	53.19	**H**	**1.86**	0.00	1.80
Phenylacetate	50.00	**H**	**0.06**	0.00	0.06
Phenylpropionate	50.00	**H**	**0.50**	0.00	0.50
Tricarballylate	39.78	**H**	**1.44**	0.00	1.60
8-Hydroxy-2-deoxyguan	27.54	**H**	**4.11**	0.00	5.30

Basic Status Alphabetic - Plasma Amino Acid on 2/21/2008

Anna **Foundational Wellness Profile Date: 2/21/2008**

Female / Age: 56

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



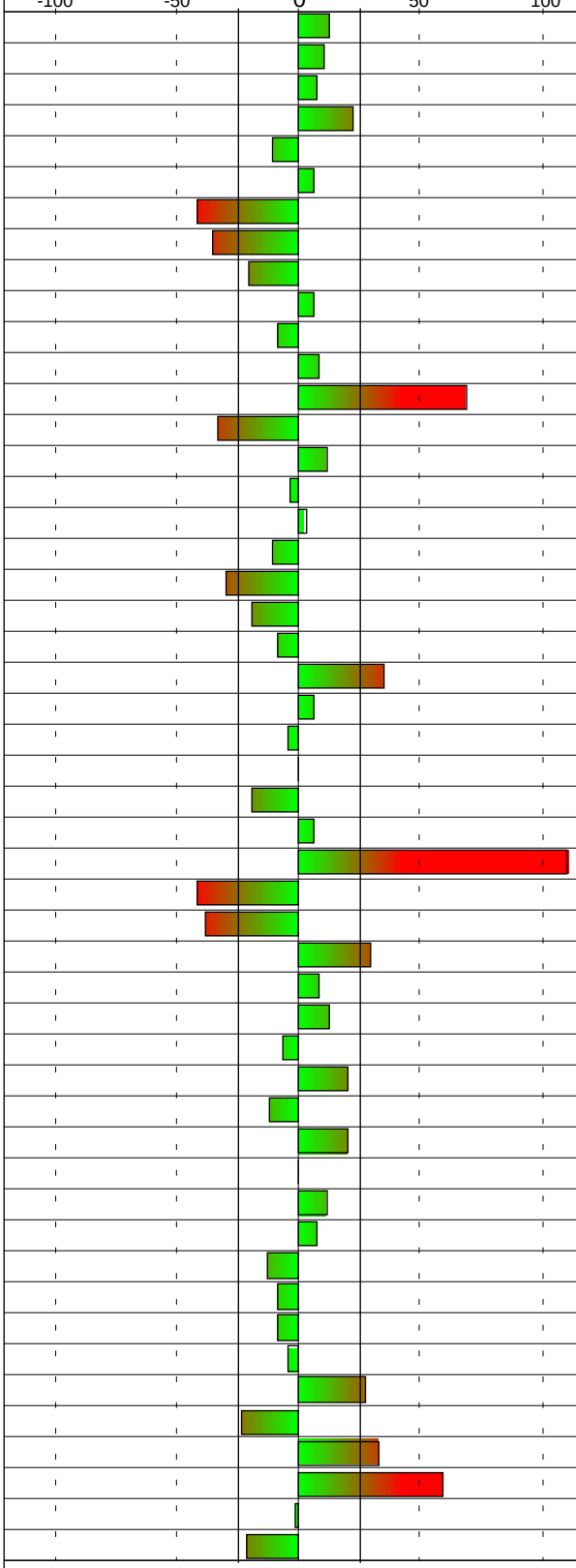
	% Status		Result	Low	High
1-Methylhistidine	**-32.20**	**L**	**3.56**	0.00	20.00
3-Methylhistidine	**49.40**	**H**	**4.97**	0.00	5.00
a-Aminoadipic Acid	-23.25		1.07	0.00	4.00
a-Amino-N-Butyric Acid	-20.40		18.88	10.00	40.00
Alanine	1.58		430.53	250.00	600.00
Anserine	**50.00**	**H**	**1.00**	0.00	1.00
Arginine	-16.05		87.34	50.00	160.00
Asparagine	**-71.93**	**L**	**26.36**	45.00	130.00
Aspartic Acid	**-25.79**	**L**	**11.81**	6.00	30.00
b-Alanine	-10.00		2.00	0.00	5.00
b-Aminoisobutyric Acid	0.00		1.00	0.00	2.00
Carnosine	**50.00**	**H**	**1.00**	0.00	1.00
Citrulline	-12.71		35.51	15.00	70.00
Cystathionine	16.25		2.65	0.00	4.00
Cystine	0.50		50.40	10.00	90.00
Ethanolamine	**28.00**	**H**	**6.24**	0.00	8.00
GABA	**53.80**	**H**	**5.19**	0.00	5.00
Glutamic Acid	16.69		115.02	45.00	150.00
Glutamine	**-64.39**	**L**	**535.24**	600.00	1050.00
Glycine	**-50.85**	**L**	**223.08**	225.00	450.00
Glycine/Serine Ratio	17.46		2.51	1.50	3.00
Histidine	**-41.65**	**L**	**75.85**	70.00	140.00
Homocystine	**50.00**	**H**	**1.00**	0.00	1.00
Hydroxylysine	**50.00**	**H**	**1.00**	0.00	1.00
Hydroxyproline	**86.17**	**H**	**40.85**	0.00	30.00
Isoleucine	**-45.18**	**L**	**55.31**	50.00	160.00
Leucine	**-47.75**	**L**	**92.47**	90.00	200.00
Lysine	**-29.98**	**L**	**180.04**	150.00	300.00
Methionine	**-35.53**	**L**	**28.62**	25.00	50.00
Ornithine	**-31.38**	**L**	**77.93**	50.00	200.00
Phenylalanine	**-47.80**	**L**	**47.09**	45.00	140.00
Phosphoethanolamine	8.37		17.51	0.00	30.00
Phosphoserine	5.83		6.70	0.00	12.00
Proline	**-33.10**	**L**	**175.63**	130.00	400.00
Sarcosine	-10.00		2.00	0.00	5.00
Serine	**-50.99**	**L**	**88.81**	90.00	210.00
Taurine	**-27.75**	**L**	**94.51**	50.00	250.00
Threonine	**-38.07**	**L**	**117.89**	100.00	250.00
Tryptophan	13.75		54.13	35.00	65.00
Tyrosine	-11.91		76.66	50.00	120.00
Valine	**-47.64**	**L**	**175.90**	170.00	420.00
Total Status Deviation	**32.30**				
Total Status Skew	**-8.01**				

Basic Status Alphabetic - Blood Test on 2/21/2008

Anna **Foundational Wellness Profile Date: 2/21/2008**

Female / Age: 56

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



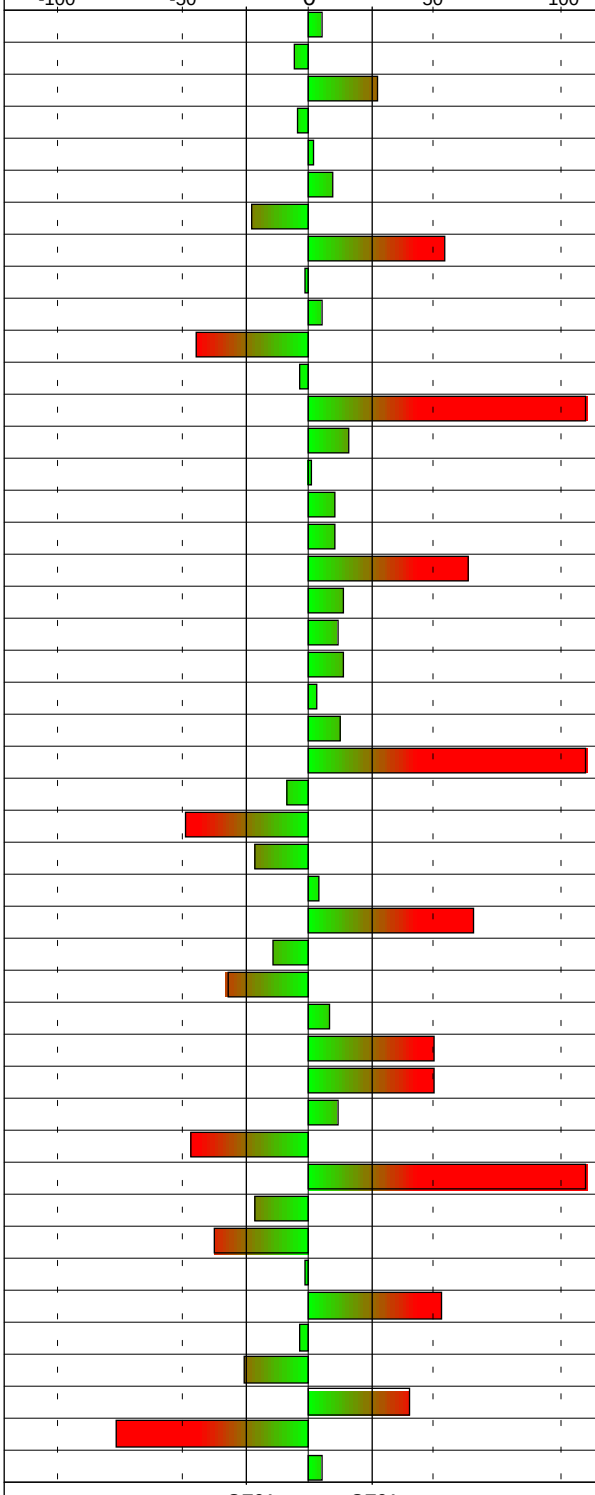
	% Status		Result	Low	High
A/G Ratio	12.64		1.55	0.80	2.00
Albumin	10.00		4.50	3.60	5.10
Alkaline Phosphatase	7.73		89.00	33.00	130.00
Anion Gap	21.67		16.60	8.00	20.00
B.U.N.	-11.11		14.00	7.00	25.00
B.U.N./Creatinine Ratio	6.59		15.05	6.00	22.00
Basophil Count	**-41.30**	**L**	**17.40**	0.00	200.00
Basophils	**-35.00**	**L**	**0.30**	0.00	2.00
Bilirubin, Total	-20.00		0.50	0.20	1.20
Calcium	6.25		9.50	8.60	10.20
Calcium/Phosphorus Ratio	-8.57		2.71	2.30	3.30
Chloride	8.33		105.00	98.00	110.00
Cholesterol	**68.33**	**H**	**282.00**	140.00	260.00
CO2	**-33.33**	**L**	**23.00**	21.00	33.00
Creatinine	11.43		0.93	0.50	1.20
Eosinophil Count	-2.87		243.60	15.00	500.00
Eosinophils	2.50		4.20	0.00	8.00
Free T-3	-11.05		304.00	230.00	420.00
Free T-4	**-30.00**	**L**	**1.00**	0.80	1.80
GGT	-19.23		26.00	2.00	80.00
Globulin	-8.82		2.90	2.20	3.90
Glucose	**35.29**	**H**	**94.00**	65.00	99.00
HDL-Cholesterol	6.36		68.00	37.00	92.00
Hematocrit	-4.00		39.60	35.00	45.00
Hemoglobin	0.00		13.60	11.70	15.50
Iron, Total	-18.80		74.00	35.00	160.00
LDH	6.15		193.00	120.00	250.00
LDL	**141.18**	**H**	**192.00**	62.00	130.00
Lymphocyte Count	**-41.55**	**L**	**1107.80**	850.00	3900.00
Lymphocytes	**-37.94**	**L**	**19.10**	15.00	49.00
MCH	**29.59**	**H**	**31.78**	27.00	33.00
MCHC	8.59		34.34	32.00	36.00
MCV	12.62		92.52	80.00	100.00
Monocyte Count	-6.29		527.80	200.00	950.00
Monocytes	20.00		9.10	0.00	13.00
Neutrophil Count	-11.85		3903.40	1500.00	7800.00
Neutrophils	19.76		67.30	38.00	80.00
Phosphorus	0.00		3.50	2.50	4.50
Potassium	11.11		4.60	3.50	5.30
Protein, Total	7.14		7.40	6.20	8.30
R.B.C.	-13.08		4.28	3.80	5.10
sGOT	-8.33		22.00	2.00	50.00
sGPT	-8.62		26.00	2.00	60.00
Sodium	-4.55		140.00	135.00	146.00
T-3 Uptake	**26.92**	**H**	**32.00**	22.00	35.00
Thyroxine (T4)	-23.75		6.60	4.50	12.50
Triglycerides	**32.26**	**H**	**112.00**	10.00	134.00
Ultra-Sensitive TSH	**59.29**	**H**	**2.63**	1.10	2.50
Uric Acid	-1.11		4.70	2.50	7.00
W.B.C.	-21.43		5.80	3.80	10.80
Total Status Deviation	**19.75**				
Total Status Skew	**2.67**				

Basic Status Alphabetic - Urine Organic Acid on 2/21/2008

Anna **Foundational Wellness Profile Date: 2/21/2008**

Female / Age: 56

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



	% Status		Result	Low	High
2-Methylhippurate	4.79		0.03	0.00	0.05
5-Hydroxyindoleacetate	-5.78		3.31	1.50	5.60
8-Hydroxy-2-deoxyguan	**27.54**	**H**	**4.11**	0.00	5.30
Adipate	-4.11		2.62	0.00	5.70
a-Hydroxybutyrate	1.62		0.62	0.00	1.20
a-Keto-b-methylvalerate	9.57		0.95	0.00	1.60
a-Ketoglutarate	-22.04		12.69	2.60	38.70
a-Ketoisocaproate	**53.86**	**H**	**0.41**	0.00	0.39
a-Ketoisovalerate	-1.41		0.29	0.00	0.60
Benzoate	4.80		1.37	0.00	2.50
b-Hydroxybutyrate	**-44.77**	**L**	**0.15**	0.00	2.80
b-Hydroxyisovalerate	-3.12		4.22	0.00	9.00
CA Cycle Entry	**1125.02**	**H**	**1410.02**	0.00	120.00
CA Cycle Return	15.67		922.83	125.00	1340.00
cis-Aconitate	0.72		59.93	30.00	89.00
Citrate	10.14		765.61	175.00	1157.00
D-Arabinitol	10.32		19.30	0.00	32.00
D-Lactate	**63.26**	**H**	**6.23**	0.00	5.50
Ethylmalonate	13.29		3.48	0.00	5.50
Formiminoglutamic Acid	11.86		0.90	0.00	1.45
Fumarate	13.60		0.45	0.00	0.71
Glucarate	3.07		3.72	0.00	7.00
Hippurate	12.85		340.66	0.00	542.00
Homovanillate	**574.59**	**H**	**40.22**	1.50	7.70
Hydroxymethylglutarate	-8.25		2.84	0.00	6.80
Indican	**-48.75**	**L**	**1.00**	0.00	80.00
Isocitrate	-21.44		51.99	36.00	92.00
Kynurenate	4.12		0.97	0.00	1.80
Lactate	**65.24**	**H**	**22.14**	1.40	19.40
Malate	-13.93		0.83	0.00	2.30
Methylmalonate	**-32.42**	**L**	**0.40**	0.00	2.30
Orotate	8.33		0.58	0.00	1.00
Phenylacetate	**50.00**	**H**	**0.06**	0.00	0.06
Phenylpropionate	**50.00**	**H**	**0.50**	0.00	0.50
p-Hydroxybenzoate	11.67		0.74	0.00	1.20
P-Hydroxyphenylacetate	**-47.00**	**L**	**0.60**	0.00	20.00
p-Hydroxyphenyllactate	**113.44**	**H**	**1.14**	0.00	0.70
Pyroglutamate	-21.33		17.20	0.00	60.00
Pyruvate	**-36.76**	**L**	**0.54**	0.00	4.10
Quinolinate	-0.98		5.00	0.00	10.20
Suberate	**53.19**	**H**	**1.86**	0.00	1.80
Succinate	-3.32		9.13	1.10	18.30
Sulfate	**-25.38**	**L**	**221.15**	166.00	390.00
Tricarballylate	**39.78**	**H**	**1.44**	0.00	1.60
Vanilmandelate	**-76.02**	**L**	**0.40**	1.10	3.80
Xanthurenate	5.52		0.39	0.00	0.70
Total Status Deviation	**62.10**				
Total Status Skew	**36.56**				

Nutritional Support

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

- ☐ **1-Antioxidant Complex**
  See Nutrition Detail
- ☐ **1-CAC Entry Protocol**
  See Nutrition Detail
- ☐ **1-Digestive Enzymes**
  With meals
- ☐ **1-PS w/Omega 3 FA**
  2x daily
- ☐ **1-Tyrosine**
  2x daily 500 mg
- ☐ **1-Tyrosine**
  2x daily 500 mg
- ☐ **1-Yeast Reduction Protocol2**
  See Nutrition Detail
- ☐ **2-Zinc Citrate**
  2x daily 50 mg
- ☐ **H - Billberry**
  1 - 3 times daily
- ☐ **H - Black Cohosh**
  1 - 3 times daily (Females only)
- ☐ **H - Garlic**
  1 - 3 times daily
- ☐ **H - Ginseng (Panax)**
  1 - 3 times daily

Food Recommendations

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

Apricots, Dried	Artichoke	Banana	Beef
Black Pepper	Blackberries	Blackeyed Peas	Blueberries
Bok Choy Cabbage	Boysenberries	Broccoli	Brussel Sprouts
Buckwheat	Butter Beans	Cantaloupe	Carrot
Cauliflower	Cherries	Chicken	Clams
Cornish Game Hens	Duck	Eggplant	Escarole
Fava Beans	Flounder	Goose	Grapefruit
Green Beans	Gruyere Cheese	Guava	Haddock
Halibut	Kale	Kidney Beans	Lentils
Loganberries	Macadamia Nuts	Mango	Millet
Mozarella Cheese	Mushrooms	Mussels	Mustard Greens
Navy Beans	Onions	Orange	Oysters
Papaya	Peanuts	Pecans	Plaintains
Potatoes	Prunes	Pumpkin	Rabbit
Red Peppers	Salmon	Shad	Snapper
Sole	Soy	Spinach	Strawberries
Sturgeon	Sweet Potato	Swiss Chard	Veal
Walnuts	Watermelon	Wild Rice	Yams

Foods to AVOID

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

Bacon	Cholesterol Rich Foods	Chuck Roast	Coconut Cream
Coconut Milk	Dairy Cream	Egg Yolk	Hydrogenated Fats
Liver Pate	Margarine	Sweetbreads	

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
CAC Cycle Ratios	170.25%	152.78%
Neurotransmitters	132.30%	99.18%
Lipid	62.03%	62.03%
Intestinal Dysbiosis	48.40%	36.21%
Muscle Metabolites	45.40%	29.30%
Connective Tissue	43.76%	2.76%
Neuroendocrine Metab	39.06%	-17.54%
Gastrointest. Function	37.86%	29.44%
Immune Metabolites	37.47%	-37.47%
Carbohydrate Metabolism	37.10%	-3.67%
Urea Cycle Metabolites	37.04%	-37.04%
Fat Metabolism	36.97%	-36.97%
Essential Amino Acid	36.34%	-33.59%
Thyroid	34.99%	8.11%
Detoxification Markers	34.14%	-33.97%
Cardiac Marker	33.53%	22.98%
CNS Metabolism	31.42%	-11.46%
Gluconeogen	31.05%	-24.92%
Ammonia/Energy	31.01%	-28.40%
Anti Oxidant Status	28.74%	15.80%
Hepatic Metabolism	28.00%	-8.48%

Lab Reported out-of-range Values

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

CA Cycle Entry (1125.02%)

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

Homovanillate (574.59%)

Elevated levels of homovanillate may be due to amino acid deficiencies, the use of L-Dopa as a treatment for Parkinson's disease, copper deficiency, cocaine or amphetamine use or chronic depletion of tyrosine. In a recently published article in EHP, heavy metals such as cadmium, lead, mercury and arsenic may also cause elevations of homovanillate.

Drugs which may have an adverse affect:
Aspirin

Oxidative Damage (300.25%)

A high reading of this ratio is indicative of excessive oxidative damage and the use of anti-oxidants is highly recommended.

Bacteria2 (150.00%)

A high reading is consistant with bacteria in the gut acting upon the amino acid phenylalanine but may also reflect a systemic infection. Probiotics and/or careful administration of antibiotics may be helpful in bringing down this ratio.

LDL (141.18%)

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 artherosclerosis. 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

Foods which may have an adverse affect:
Coconut Milk

p-Hydroxyphenyllactate (113.44%)

High levels of this organic acid are indicative of an ongoing pro-oxidative response. Increased tissue growth, oxidative challenges due to toxicity, inborn errors of metabolism and low levels of vitamin C may be reasons for high results.

Hydroxyproline (86.17%)

May be indicative of bone resorption problems.

CA Cycle Phase 1 (77.76%)

This is the first phase of the citric acid cycle moving from Citrate to cis-Aconitate. A high reading may indicate a disruption in the efficiency of energy production. It can also be due to a problem clearing ammonia due to an arginase enzyme deficiency.

Vanilmandelate (-76.02%)

Low levels of this organic acid may be related to low CNS levels of epinephrine and norepinephrine. Clinical signs include depression, sleep disturbances, and the inability to handle stress and fatigue.

Drugs which may have an adverse affect:
Clonidine, Imipramine, MAO Inhibitors, Methyldopa, Reserpine

CA Cycle Phase 6 (72.49%)

The last phase of the citric acid cycle, this stage marks the conversion of Fumarate into Malate. When the ratio is low, this may signify that the body is not refilling its losses along the entire cycle. Supplementing with a broad spectrum amino acid along with niacin may help restore balance.

Asparagine (-71.93%)

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

Cholesterol (68.33%)

Cholesterol is a fat, found in the blood which has been reported to be linked, when elevated, to an increased risk of cardiovascular disease. It is not a good independent risk factor but can be helpful in conjunction with HDL (good cholesterol), LDL (bad cholesterol) and the Cholesterol/HDL Ratio in assessing risk for heart disease. High levels may be caused by familial (hereditary) hypercholesterolemia, biliary obstruction, nephrotic syndrome, hypothyroidism, and pregnancy.

Drugs which may have an adverse affect:
Aspirin, Carbamazepine, Chlorpromazine, Clofibrate, Clonidine, Corticosteroids, Cortisone, Epinephrine, Furosemide, Ibuprofen, Imipramine, Lithium Carbonate, Methimazole, Miconazole, Paramethadione, Penicillamine, Phenobarbital, Phenylbutazone, Phenytoin, Prednisone, Propranolol, Tamoxifen, Trimethadione, Viomycin

Foods which may have an adverse affect:
Bacon, Cholesterol Rich Foods, Chuck Roast, Coconut Cream, Coconut Milk, Dairy Cream, Egg Yolk, Hydrogenated Fats, Liver Pate, Margarine, Sweetbreads

Lactate (65.24%)

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.

Glutamine (-64.39%)

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.

D-Lactate (63.26%)

A high reading of D-lactate may indicate that there may be an overgrowth of Lactobacillus acidophilus, plantarum or salivarius. High dietary carbohydrate intake or antibiotic use are other possibilities.

Ultra-Sensitive TSH (59.29%)

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. Increased TSH levels are seen in primary hypothyroidism, thyrotropin producing tumors, and thyrotoxicosis.

Drugs which may have an adverse affect:
Lithium Carbonate, Rifampin, Valproic Acid

a-Ketoisocaproate (53.86%)

This organic acid may be elevated due to poor amino acid metabolism. Supplementation with a B complex may be necessary as well as additional intake of thiamine (B1)

GABA (53.80%)

GABA is known as a neuroinhibitory amino acid that is derived from glutamic acid and seems to regulate nerve cell function. A high reading may be due to missing co-factors within the Krebs or citric acid cycle.

Drugs which may have an adverse affect:
Valproic Acid

Suberate (53.19%)

Elevated levels have been correlated to deficiencies of carnitine due to the inability to properly bring long chain fatty acids into the mitochondria. A deficiency of B2 (riboflavin) may also be found with elevations of the urinary organic acid.

Serine (-50.99%)

Serine is a key amino acid can be converted to glycine and vice versus. It is crucial in the production of many neurotransmitters. It is also important in DNA synthesis, gluconeogenesis and in the creation of many hormones and enzymes. A low result may be indicative of a deficit in acetylcholine synthesis, or methionine metabolism.

Glycine (-50.85%)

Glycine plays an important role in the body's ability to detoxify itself as well as in wound healing. It is also important in the creation of nucleic acids and bile acids. This amino acid is non-essential as it can be synthesized from serine and threonine. A low result may be indicative of poor nitrogen retention or a low intake of quality proteins.

Anserine (50.00%)

May be due to high dietary intake of poultry or zinc deficiency.

Bacteria Markers (-50.00%)

A low reading is consistant with healthy gut flora.

Carnosine (50.00%)

May be indicative of zinc deficiency. Genetic deficiency may lead to neurological development problems and sensory polyneuropathy.

Homocystine (50.00%)

This may be indicative of a higher risk of coronary heart disease (atherosclerosis), neurological, ocular, or musclo-skeletal disorders.

Drugs which may have an adverse affect:
Methotrexate

Hydroxylysine (50.00%)

A high plasma level of hydroxylysine may be indicative of connective and bone tissue breakdown or the use of a blood thinner such as Coumadin. A high level may also be found in a number of degenerative diseases.

Phenylacetate (50.00%)

A high reading of this organic acid may be indicative of an overgrowth of intestinal microbiota or protozoa. The presence of this acid may be due to the action of bacteria on phenylalanine and should not appear in anything more than background amounts.

Phenylpropionate (50.00%)

A high reading of this organic acid may be indicative of an overgrowth of intestinal microbiota, protozoa or malabsorption of phenylalanine from the diet due to HCL deficiency. The presence of this acid may be due to the action of bacteria on phenylalanine and should not appear in anything more than background amounts.

Additional Tests

The following additional lab tests may help in diagnosis.

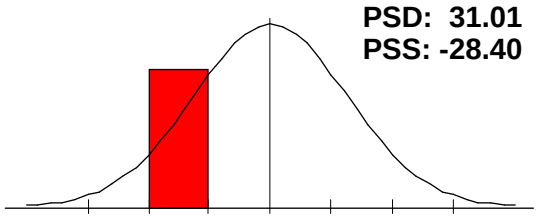
Consider ordering TRH stimulation test if clinically indicated

Rationale: % Status of Ultra-Sensitive TSH is > 50%

Ammonia/Energy

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

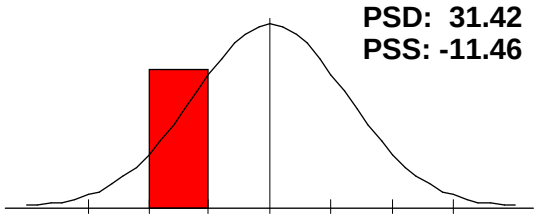
A panel profile such as this may be indicative of inadequate protein intake, poor absorption or poor quality protein intake.



CNS Metabolism

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

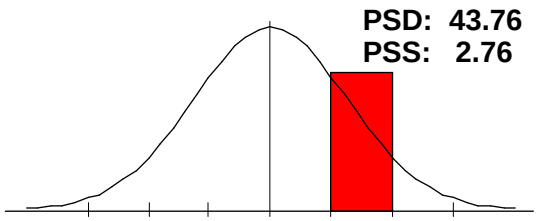
The panel profile seen here may be indicative of poor central nervous system functioning including memory loss, fatigue, poor concentration.



Connective Tissue

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

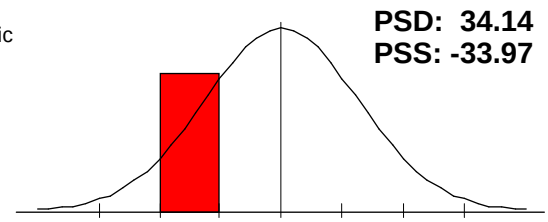
The panel profile seen here may be indicative of an missing enzymes and co-factors in the production of connective tissue. Review dietary intake of proteins with a special eye on quality of intake.



Detoxification Markers

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

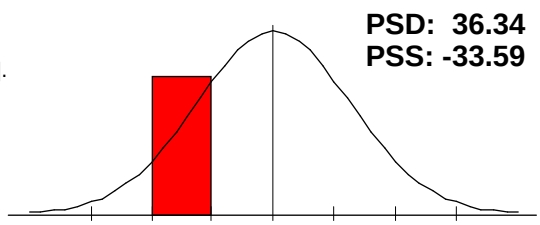
This panel contains amino acids critical for proper detoxification. A low reading may be indiciative of an inability to properly detoxify. Personalized supplementation is suggested.



Essential Amino Acid

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

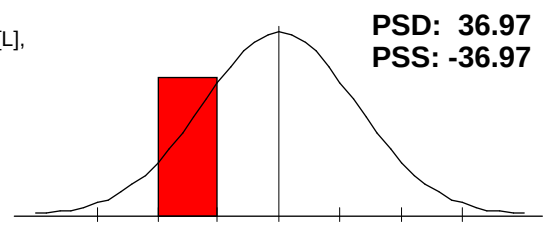
The panel profile seen here indicates a low density of essential amino acids. Since they cannot be synthesized in the human body, these building blocks must be taken in via diet or supplements.



Fat Metabolism

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

A panel profile such as this may indicate an inability of the body to properly metabolize dietary fats. Check for dysbiosis, or try supplementation with lipase digestive enzymes as well as broad spectrum amino acids.

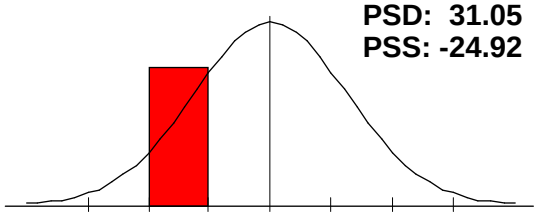


Gluconeogen

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

This panel profile may be indicative of hypoglycemia or poor dietary protein intake.

PSD: 31.05
PSS: -24.92

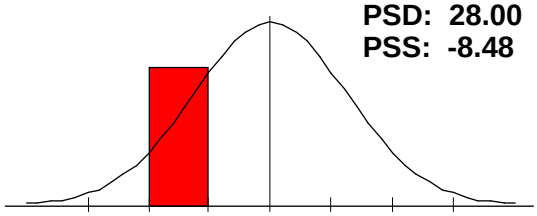


Hepatic Metabolism

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

A panel profile such as this may be indicative of an underfunctioning liver or poor dietary protein intake.

PSD: 28.00
PSS: -8.48

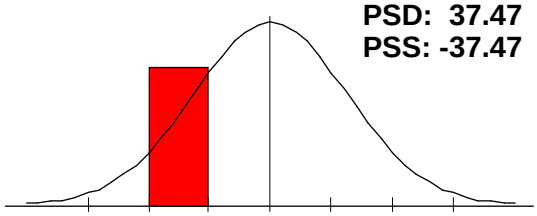


Immune Metabolites

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

A panel profile such as this may be indicative of a poor functioning immune system or low dietary intake of protein.

PSD: 37.47
PSS: -37.47

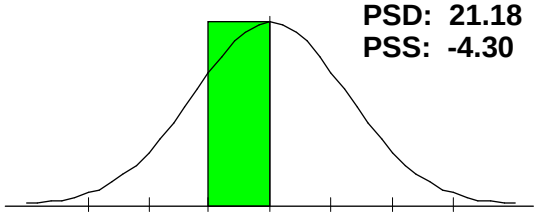


Magnesium Dependents

Citrulline, Ethanolamine[H], Phosphoethanolamine, Phosphoserine, Serine[L].

The amino acids in this panel are dependent on magnesium for their metabolism.

PSD: 21.18
PSS: -4.30

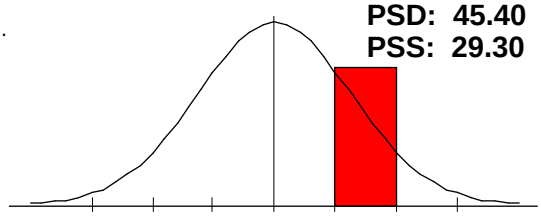


Muscle Metabolites

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

This panel profile may be indicative of abnormal protein metabolism especially if 1-methylhistidine is elevated.

PSD: 45.40
PSS: 29.30

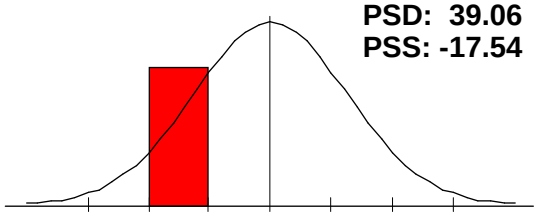


Neuroendocrine Metab

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

This panel profile may be indicative of an underfunctioning endocrine system or poor dietary intake of protein.

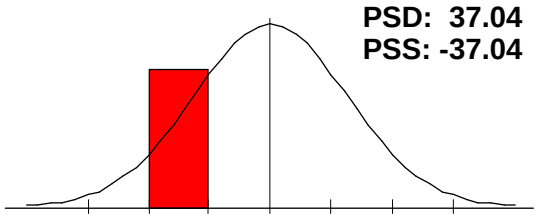
PSD: 39.06
PSS: -17.54



Urea Cycle Metabolites

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

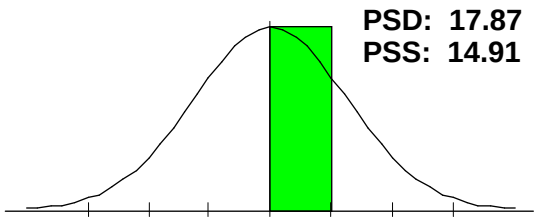
This panel contains amino acids that are related to the urea cycle which is an important metabolic process to remove excess ammonia from the system. Targeted and personalized supplementation is suggested.



Adrenal Function

Cholesterol[H], Eosinophils, Eosinophil Count, Potassium, Sodium.

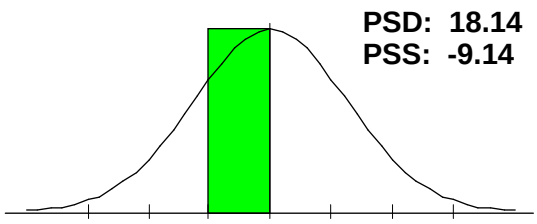
This panel is meant to assess adrenal function. A deficiency in this panel may indicate adrenal stress. The deviation was below 25% so no abnormalities were found.



Allergy

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

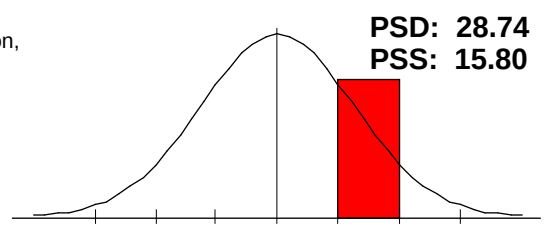
This panel is used to assess the individual's response to potential allergens. Abnormalities in this panel may indicate the need for additional allergy testing. The deviation was below 25% so no abnormalities were found.



Anti Oxidant Status

Anion Gap, Bilirubin, Total, Chloride, Cholesterol[H], Glucose[H], Iron, Total.

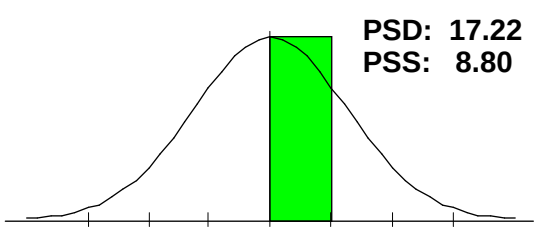
This panel profile may indicate that the patient needs to increase their intake of antioxidants and make appropriate lifestyle changes (smoking, alcohol, reduce stress, etc.). A varied, broad spectrum of antioxidants is preferable to one or two alone.



Athletic Potential

B.U.N./Creatinine Ratio, Cholesterol[H], CO2[L], Creatinine, LDH, Potassium, Protein, Total, Sodium, HDL-Cholesterol.

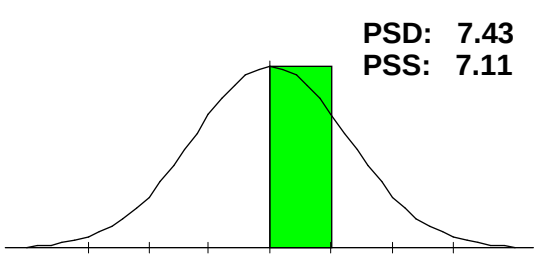
This panel is used to help assess athletic potential. Keeping this panel in a normal range may be helpful in improving athletic performance and reducing the risk of injury. The deviation was below 25% so no abnormalities were found.



Bone/Joint

Albumin, Alkaline Phosphatase, Calcium, Neutrophils, Phosphorus, Protein, Total, Uric Acid.

This panel may be helpful in assessing bone and joint health. Keeping the elements of this panel in a normal range may be helpful in reducing the risk of osteoporosis and other bone and joint disorders. The deviation was below 25% so no abnormalities were found.



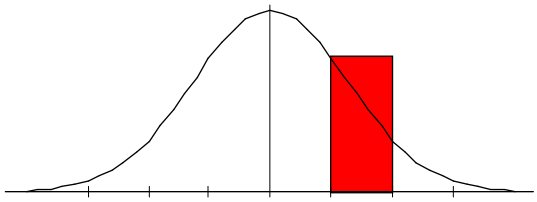
Anna **Foundational Wellness Profile Date: 2/21/2008**

Female / Age: 56

Cardiac Marker

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

PSD: 33.53
PSS: 22.98

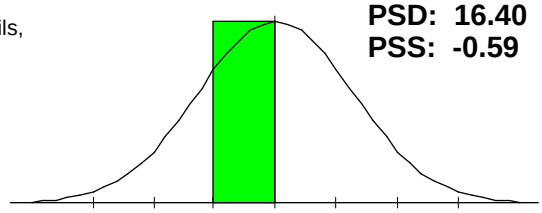


The profile shown here indicates that this individual may be at a greater risk for coronary heart disease than the general population. A review of dietary, environmental and personal habits should be done and appropriate lifestyle changes made. If both triglycerides and cholesterol are elevated, a regime of exercise and dietary changes are more likely to exhibit benefits.

Cellular Distortions

Alkaline Phosphatase, Anion Gap, GGT, Iron, Total, LDH, Neutrophils, W.B.C..

PSD: 16.40
PSS: -0.59

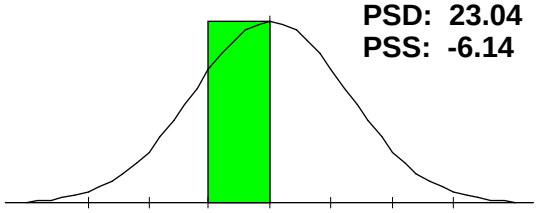


This panel may be helpful in determining the ability of the body to properly produce healthy cells. The deviation was below 25% so no abnormalities were found.

Differential

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

PSD: 23.04
PSS: -6.14

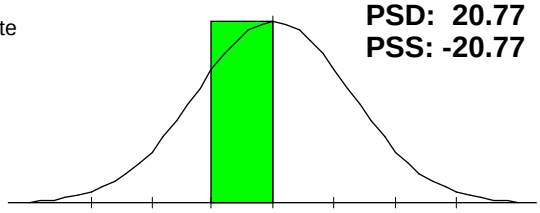


This panel may be helpful in assessing immune system health. Excesses or deficiencies in this panel may indicate a compromised immune system. The deviation was below 25% so no abnormalities were found.

Differential Count

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

PSD: 20.77
PSS: -20.77

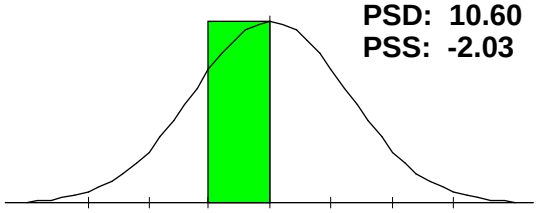


This panel may be helpful in assessing immune system health. Excesses or deficiencies in this panel may indicate a compromised immune system. The deviation was below 25% so no abnormalities were found.

Electrolyte

Calcium, Chloride, CO2[L], Phosphorus, Potassium, Sodium.

PSD: 10.60
PSS: -2.03

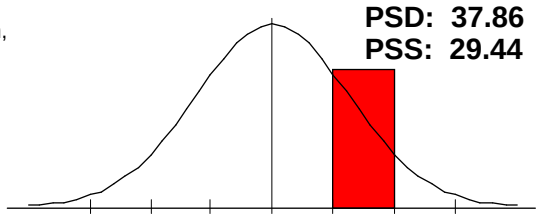


This panel is a representation of electrolyte balance in blood. Balance is critical in maintaining and achieving optimal health. The deviation was below 25% so no abnormalities were found.

Gastrointest. Function

Anion Gap, Chloride, Cholesterol[H], CO2[L], Monocytes, Potassium, Sodium, Triglycerides[H], LDL[H].

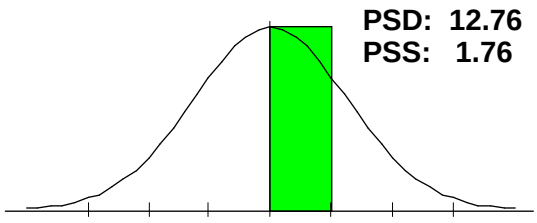
This panel profile indicates the need for further evaluation of gastrointestinal integrity, digestion and absorption. Check for dysbiosis, food allergies or "leaky gut" syndrome.



Hematology

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

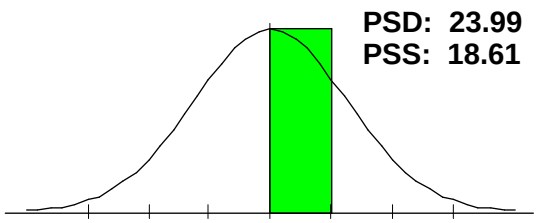
The hematology panel assesses the production of red blood cells and their function. The deviation was below 25% so no abnormalities were found.



Inflammatory Process

Eosinophils, Globulin, LDH, Neutrophils, Potassium, sGOT, sGPT, Triglycerides[H], Uric Acid, LDL[H].

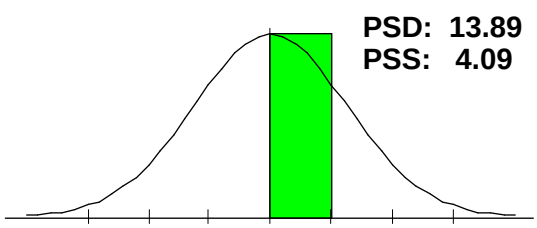
This panel may be helpful in assessing any inflammatory processes that may be occuring in the body. The deviation was below 25% so no abnormalities were found.



Kidney Function

Albumin, B.U.N., B.U.N./Creatinine Ratio, Chloride, CO2[L], Creatinine, Glucose[H], Potassium, Protein, Total, Sodium.

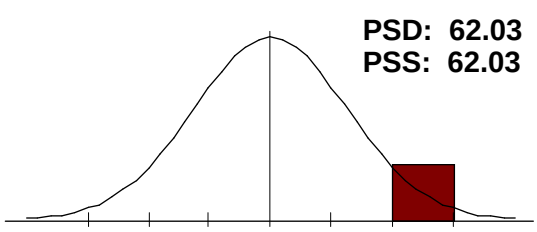
This panel may be helpful in assessing kidney function. It is important to keep the elements of this subset in balance to help the body eliminate waste material. The deviation was below 25% so no abnormalities were found.



Lipid

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

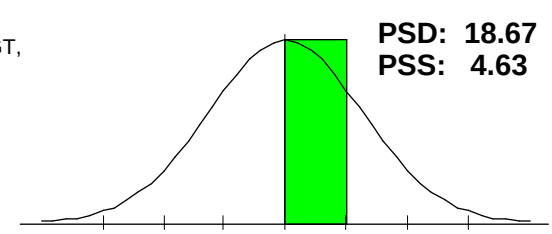
The panel profile seen here suggests that the patient may be at a greater risk for coronary heart disease than the general population. A dietary evaluation should be undertaken as well to educate the patient about saturated and trans fats.



Liver Function

Albumin, Alkaline Phosphatase, Bilirubin, Total, Cholesterol[H], GGT, Protein, Total, sGOT, sGPT.

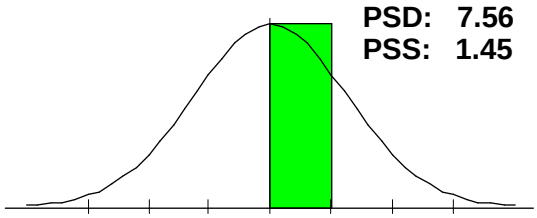
Assessing liver function is important in determining the individual's ability to detoxify itself as well as processing amino acids and other important biological processes. The deviation was below 25% so no abnormalities were found.



Nitrogen

B.U.N., B.U.N./Creatinine Ratio, Creatinine, Uric Acid.

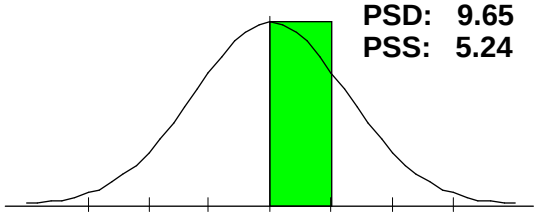
Nitrogen is an important element in achieving optimal wellness. The elements in this panel are important in determining nitrogen competency. The deviation was below 25% so no abnormalities were found.



Protein

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

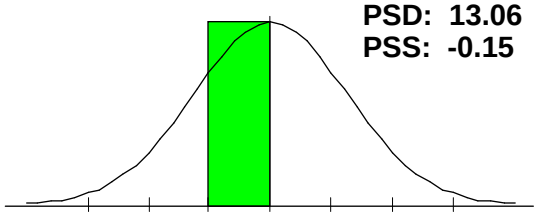
Proteins are the basic building blocks of hormones, muscle, neurotransmitters, immune systems responses and more. Assessing their competency is crucial in achieving optimal wellness. The deviation was below 25% so no abnormalities were found.



Pulmonary Function

Anion Gap, Calcium, CO2[L], LDH, Potassium, sGOT, Sodium.

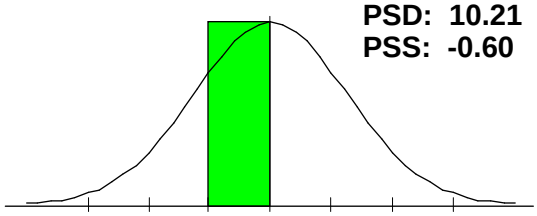
This panel may be helpful in assessing lung and respiratory function. The deviation was below 25% so no abnormalities were found.



Ratios

A/G Ratio, B.U.N./Creatinine Ratio, Calcium/Phosphorus Ratio, Sodium/Potassium Ratio.

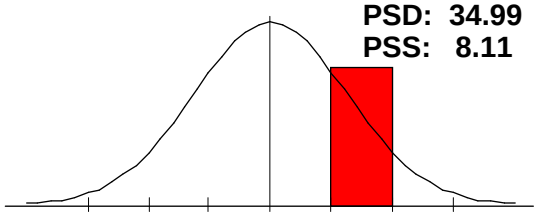
This panel may be helpful in determining the general balance of the overall chemistry of the individual. The deviation was below 25% so no abnormalities were found.



Thyroid

Thyroxine (T4), T-3 Uptake[H], Ultra-Sensitive TSH[H], Free T-4[L].

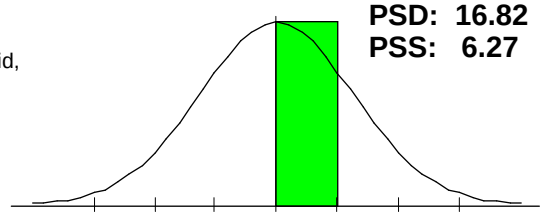
This panel may indicate the need for a careful review of the individual markers in order to determine causative factors.



B-Complex Markers

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

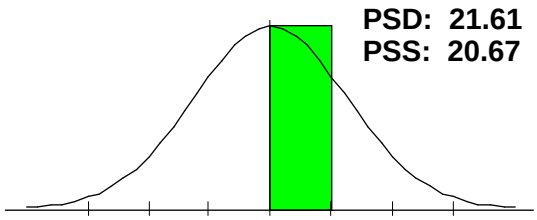
A normal panel profile such as this is an indicator of adequate intake of B-complex vitamins.



BCAA Catabolism

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

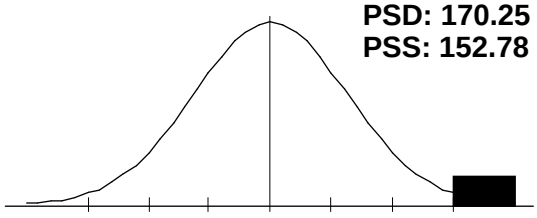
A normal reading in this panel suggest proper amino acid stores.



CAC Cycle Ratios

CA Cycle Entry[H], CA Cycle Phase 1[H], CA Cycle Phase 2[L], CA Cycle Phase 3, CA Cycle Phase 4[L], CA Cycle Phase 5, CA Cycle Phase 6[H], C.

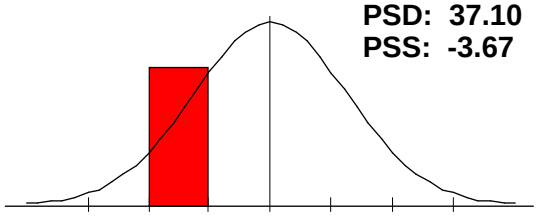
This panel reflects steps of the citric acid cycle. A high reading may be indicative of poor energy production and/or vitamin, mineral and amino acid deficiencies.



Carbohydrate Metabolism

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

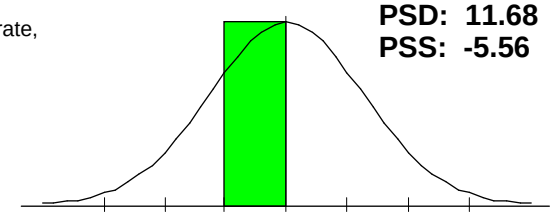
This profile may be due to poor carbohydrate metabolism or intake. It may also be due to low levels of physical activity or in well conditioned athletes.



Energy Production

Citrate, cis-Aconitate, Isocitrate, a-Ketoglutarate, Succinate, Fumarate, Malate, Hydroxymethylglutarate.

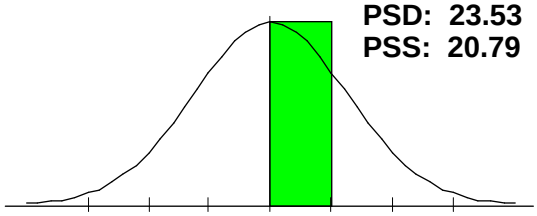
A normal reading such as this is consistant with a properly functioning citric acid cycle.



Fatty Acid Metabolism

Adipate, Suberate[H], Ethylmalonate.

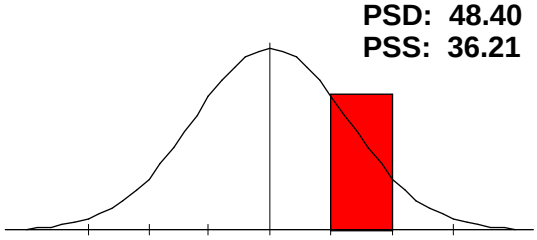
These urinary markers give us a picture into the metabolism of fatty acids.



Intestinal Dysbiosis

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

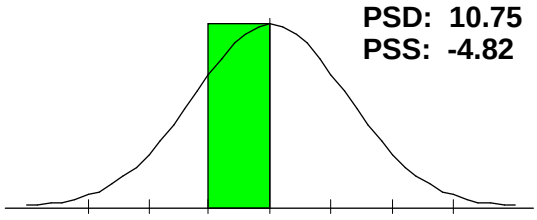
This panel profile may be indicative of intestinal dysbiosis. Poor absorption and metabolism of proteins, fats and carbohydrates may occur. A review of potential bacteria, protozoa, Clostridial spp., yeast or fungus may be necessary.



Liver Detox Indicators

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

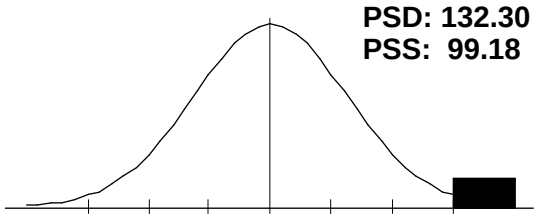
A normal liver detox panel is consistant with good liver detoxification processes.



Neurotransmitters

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

The panel profile seen here may be due to the use of serotonin re-uptake inhibitors such as Prozac or poor catecholamine catabolism.



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	Acetaminophen(2)	Acetazolamide(2)	Albuterol
Amitriptyline	Ammonium Chloride	Anabolic Steroids	Aspirin(5)
Carbamazepine	Chlorpromazine(2)	Clofibrate(2)	Clonidine(3)
Corticosteroids(2)	Cortisol	Cortisone(2)	Dextrothyroxine
Epinephrine(2)	Estrogens	Furosemide(2)	Gemfibrozil
Haloperidol	Hydralazine	Hydrocortisone	Ibuprofen(2)
Imipramine(3)	Indomethacin	Itraconazole	Levodopa
Levothyroxine	Lithium Carbonate(4)	Lovastatin	MAO Inhibitors
Mercaptopurine	Methimazole	Methotrexate	Methyldopa(3)
Miconazole(2)	Morphine	Nifedipine	Nitrofurantoin
Paramethadione	Penicillamine	Phenelzine	Phenobarbital
Phenylbutazone(2)	Phenytoin(2)	Polythiazide(2)	Pravastatin
Prednisone(4)	Procainamide	Propranolol(2)	Protriptyline
Reserpine(2)	Rifampin	Salicylates	Steroids
Tamoxifen(2)	Tetracycline	Triameterene	Trimethadione(2)
Valproic Acid(2)	Viomycin		

Anna **Foundational Wellness Profile Date: 2/21/2008**

Female / Age: 56

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 a qualified health care professional.

1-Antioxidant Complex See Nutrition Detail

Rationale

Decreased	Normal	Increased
		Oxidative Damage

ANTIOXIDANT PROTOCOL

When certain oxidative test markers appear, the following protocol can be followed: a Broad Spectrum Antioxidant which should include CoEnzyme Q10 (2 times daily, Vitamins A and E as well as Selenium (2 times daily) and Vitamin C (1000 mg 2 times daily).

Vitamin E should only be consumed with the advice of a physician if currently taking Coumadin or other blood thinning medications.

COENZYME Q10

An important antioxidant and esssential component of mitochondria, CoQ10 can be depleted if on cholesterol lowering drugs.

VITAMIN A/MIXED-CAROTENES

Vitamin A is involved in the growth and repair of tissue and helps maintain healthy skin. It is essential in the maintenance of eyesight, building of bones, teeth and blood. It also enhances production of RNA.

VITAMIN E

Vitamin E is a major antioxidant, enhances lymphocyte production, maintains cellular integrity, and aids in the biosynthesis of heme proteins

SELENIUM (Se)

Cofactor in glutathione peroxidase, in detoxification of peroxides, free radicals and thyroid hormone deionases.

VITAMIN C

Water-soluble vitamin essential for the synthesis and maintenance of collagen as well as body tissue cells, cartilage, bones, teeth, skin and tendons. Helps protect the immune system. Also improves iron and calcium absorption as well as trace mineral utilization.

1-CAC Entry Protocol See Nutrition Detail

Decreased	Normal	Increased
		CA Cycle Entry

CAC ENTRY PROTOCOL

When the entry point to the citric acid cycle is blocked, the ability to utilize carbohydrates to produce energy is impaired. The following protocol may be helpful in bringing down this ratio.

B-Complex - 2x daily
Amino Acid Complex - 5 grams 2x daily
CoEnzyme Q10 - 50 mg 2x daily
Alpha Lipoic Acid - 200 mg 2x daily
Vitamin C - 1000 mg 2x daily

For children between 6-18
B-Complex - 1x daily
CoEnzyme Q10 - 25 mg daily
Vitamin C - 500 mg daily
Amino Acid Complex - 5 grams daily

For children under the age of 6:
Amino Acid Complex with co-factors - 1/8 tsp 2x daily
Vitamin C - 125 mg 2x daily
CoEnzyme Q10 - 12.5 mg daily

For children between the ages of 6 and 18 use 1/2 the adult dose.

1-Digestive Enzymes With meals

Decreased	Normal	Increased
		Glucose Triglycerides

DIGESTIVE ENZYMES

Digestive enzymes are helpful in situations where there are signs of allergy, nutrient depletion, improper fat, protein or carbohydrate metabolism.

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 a qualified health care professional.

1-PS w/Omega 3 FA 2x daily

PHOSPHATIDYLSERINE W/OMEGA 3 FA

Phosphatidylserine in combination with omega 3 fatty acids is an ideal way to support brain function, improve memory, control cortisol, improve mood, and enhance energy production in the brain.

Adults

PS - 100 mg twice daily

Omega 3 fatty acids - 1100 mgs twice daily

Children

PS - 100 mg daily

Omega 3 fatty acids - 1100 mgs daily

Rationale

Decreased	Normal	Increased
Serine		

1-Tyrosine 2x daily 500 mg

TYROSINE

An amino acid which is essential to the synthesis of protein, catecholamines, melanin, and thyroid hormones. Vitamin C and folic acid are essential to its metabolism. The formation of thyroid hormone is dependent upon the absorption and sequestering of iodine which then attaches to tyrosine to form thyroxine.

Decreased	Normal	Increased
		Ultra-Sensitive TSH

1-Tyrosine 2x daily 500 mg

TYROSINE

An amino acid which is essential to the synthesis of protein, catecholamines, melanin, and thyroid hormones. Vitamin C and folic acid are essential to its metabolism. The formation of thyroid hormone is dependent upon the absorption and sequestering of iodine which then attaches to tyrosine to form thyroxine.

Decreased	Normal	Increased
Vanilmandelate		Homovanillate

1-Yeast Reduction Protocol2 See Nutrition Detail

YEAST REDUCTION PROTOCOL2

Because of the relative increase in the markers for yeast and fungi (Benzoate, Hippurate, Phenylacetate and Phenylpropionate) it may be helpful to begin a yeast reduction protocol. Avoiding refined carbohydrates such as sugar, alcohol and other yeast-containing products is recommended. The introduction of probiotics as well as glycine and pantothenic acid may be helpful balancing this ratio.

Probiotics - 2-3 times daily if D-Lactate is normal or low

Pantothenic acid - 100 mg 3 times daily

Glycine - 500 mg 3 times daily

For children between the ages of 6 and 18 take 1/2 the adult dose.

Decreased	Normal	Increased
		Bacteria2

2-Zinc Citrate 2x daily 50 mg

ZINC (Zn)

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.

Decreased	Normal	Increased
1-Methylhistidine	b-Alanine	Anserine

H - Billberry 1 - 3 times daily

BILBERRY

Billberry (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	Increased
	Iron, Total	Glucose Triglycerides

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 a qualified health care professional.

H - Black Cohosh 1 - 3 times daily Females only

BLACK COHOSH

The herb black cohosh (Cimicifuga racemosa) has been used primarily in the treatment of menstrual cramps and menopause. It must be absolutely avoided during pregnancy. As with any herb, caution should be taken with its use. Do not use if you are allergic to aspirin.

Rationale

Decreased	Normal	Increased
		Cholesterol
		LDL

H - Garlic 1 - 3 times daily

GARLIC

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	Increased
		LDL
		Cholesterol

H - Ginseng (Panax) 1 - 3 times daily

GINSENG

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

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.

Collagen Production Imbalance (270.1) 100.00% (3 of 3)

Decreased	Normal	Increased
-33.10 Proline		**86.17 Hydroxyproline**
		50.00 Hydroxylysine

Review Cardiovascular Risk Factors () 83.33% (5 of 6)

Decreased	Normal	Increased
	6.36 HDL-Cholesterol	**68.33 Cholesterol**
		35.29 Glucose
		32.26 Triglycerides
		-1.11 Uric Acid
		141.18 LDL

Review family history or personal history of cardiovascular risk factors such as smoking, excessive alcohol intake, high fat diet, and/or sedentary lifestyle.

Muscle/Collagen Catabolism () 80.00% (4 of 5)

Decreased	Normal	Increased
-47.75 Leucine		**49.40 3-Methylhistidine**
-47.64 Valine		
50.00 Hydroxylysine		
-33.10 Proline		

This profile may be indicative of an individual who is either catabolising their muscle tissue or is unable to build proper muscle tissue due to amino acid deficiencies. Further investigation into amino acid competency may be helpful.

Syndrome X () 75.00% (3 of 4)

Decreased	Normal	Increased
6.36 HDL-Cholesterol		**35.29 Glucose**
		32.26 Triglycerides
		141.18 LDL

Euthyroid Sick Syndrome () 66.67% (2 of 3)

Decreased	Normal	Increased
n/a Triiodothyronine	**-23.75 Thyroxine (T4)**	**59.29 Ultra-Sensitive TSH**

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

Status % on:	4/12/2006		2/21/2008		+/- change
Citrulline	**-38.58**	**L**	-12.71		+ 25.87
Hydroxyproline	**-30.00**	**L**	**86.17**	**H**	**- 56.17**
GABA	10.00		**53.80**	**H**	**- 43.80**
Glutamine	**-28.46**	**L**	**-64.39**	**L**	**- 35.93**
Asparagine	**-46.47**	**L**	**-71.93**	**L**	**- 25.46**

Comparison Report

Anna **Foundational Wellness Profile Date: 2/21/2008**

Female / Age: 56

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:	4/12/2006		2/21/2008	
-40.00 → **-32.20**	+	1-Methylhistidine	**-40.00**	**L**	**-32.20**	**L**
		3-Methylhistidine	**50.00**	**H**	**49.40**	**H**
-23.25 ← 0.00	-	a-Aminoadipic Acid	0.00		-23.25	
-20.40 ← -10.00	-	a-Amino-N-Butyric Acid	-10.00		-20.40	
-15.71 → 1.58	+	Alanine	-15.71		1.58	
		Anserine	**50.00**	**H**	**50.00**	**H**
-39.09 → -16.05	+	Arginine	**-39.09**	**L**	-16.05	
-71.93 ← **-46.47**	-	Asparagine	**-46.47**	**L**	**-71.93**	**L**
-41.67 → **-25.79**	+	Aspartic Acid	**-41.67**	**L**	**-25.79**	**L**
		b-Alanine	-10.00		-10.00	
		b-Aminoisobutyric Acid	0.00		0.00	
		Carnosine	**50.00**	**H**	**50.00**	**H**
-38.58 → -12.71	+	Citrulline	**-38.58**	**L**	-12.71	
0.00 → 16.25	-	Cystathionine	0.00		16.25	
-12.50 → 0.50	+	Cystine	-12.50		0.50	
		Ethanolamine	**-25.00**	**L**	**28.00**	**H**
10.00 → **53.80**	-	GABA	10.00		**53.80**	**H**
-38.57 → 16.69	+	Glutamic Acid	**-38.57**	**L**	16.69	
-64.39 ← **-28.46**	-	Glutamine	**-28.46**	**L**	**-64.39**	**L**
		Glycine	**-44.76**	**L**	**-50.85**	**L**
		Glycine/Serine Ratio	21.13		17.46	
-56.76 → **-41.65**	+	Histidine	**-56.76**	**L**	**-41.65**	**L**
		Homocystine	**50.00**	**H**	**50.00**	**H**
		Hydroxylysine	**50.00**	**H**	**50.00**	**H**
-30.00 → **86.17**	-	Hydroxyproline	**-30.00**	**L**	**86.17**	**H**
		Isoleucine	**-47.85**	**L**	**-45.18**	**L**
-47.75 ← **-35.68**	-	Leucine	**-35.68**	**L**	**-47.75**	**L**
-29.98 ← -18.13	-	Lysine	-18.13		**-29.98**	**L**
-45.00 → **-35.53**	+	Methionine	**-45.00**	**L**	**-35.53**	**L**
-31.38 ← -21.37	-	Ornithine	-21.37		**-31.38**	**L**
-47.80 ← **-34.44**	-	Phenylalanine	**-34.44**	**L**	**-47.80**	**L**
		Phosphoethanolamine	-10.00		8.37	
5.83 ← **25.00**	+	Phosphoserine	**25.00**	**H**	5.83	
-41.33 → **-33.10**	+	Proline	**-41.33**	**L**	**-33.10**	**L**
		Sarcosine	-10.00		-10.00	
		Serine	**-48.13**	**L**	**-50.99**	**L**
-45.03 → **-27.75**	+	Taurine	**-45.03**	**L**	**-27.75**	**L**
		Threonine	**-37.75**	**L**	**-38.07**	**L**
-22.37 → 13.75	+	Tryptophan	-22.37		13.75	
-11.91 ← 24.37	+	Tyrosine	24.37		-11.91	
		Valine	**-46.40**	**L**	**-47.64**	**L**
		Total Status Deviation	**31.01**		**32.30**	
		Total Status Skew	**-14.89**		**-8.01**	

Comparison Progress Report

Anna **Foundational Wellness Profile Date: 2/21/2008**

Female / Age: 56

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

Status % on:	4/12/2006	2/21/2008	+/- change
MCHC	**38.75 H**	8.59	+ 30.16
A/G Ratio	**-37.66 L**	12.64	+ 25.02
CO2	-8.33	**-33.33 L**	**- 25.00**

Comparison Report

Anna **Foundational Wellness Profile Date: 2/21/2008**

Female / Age: 56

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:	4/12/2006		2/21/2008	
-37.66 12.64	+	A/G Ratio	**-37.66**	**L**	12.64	
		Albumin	-15.00		10.00	
7.73 **31.60**	+	Alkaline Phosphatase	**31.60**	**H**	7.73	
2.50 21.67	-	Anion Gap	2.50		21.67	
-11.11 2.38	-	B.U.N.	2.38		-11.11	
6.59 23.68	+	B.U.N./Creatinine Ratio	23.68		6.59	
-50.00 **-41.30**	+	Basophil Count	**-50.00**	**L**	**-41.30**	**L**
-50.00 **-35.00**	+	Basophils	**-50.00**	**L**	**-35.00**	**L**
		Bilirubin, Total	-13.64		-20.00	
		Calcium	-7.14		6.25	
-32.63 -8.57	+	Calcium/Phosphorus Ratio	**-32.63**	**L**	-8.57	
		Chloride	11.54		8.33	
		Cholesterol	**72.00**	**H**	**68.33**	**H**
-33.33 -8.33	-	CO2	-8.33		**-33.33**	**L**
-20.00 11.43	+	Creatinine	-20.00		11.43	
-16.00 -2.87	+	Eosinophil Count	-16.00		-2.87	
		Eosinophils	7.14		2.50	
-19.23 -10.00	-	GGT	-10.00		-19.23	
		Globulin	10.00		-8.82	
		Glucose	**32.35**	**H**	**35.29**	**H**
		HDL-Cholesterol	-6.36		6.36	
		Hematocrit	1.00		-4.00	
0.00 18.57	+	Hemoglobin	18.57		0.00	
-18.80 7.50	-	Iron, Total	7.50		-18.80	
6.15 24.67	+	LDH	24.67		6.15	
117.65 **141.18**	-	LDL	**117.65**	**H**	**141.18**	**H**
		Lymphocyte Count	**-42.50**	**L**	**-41.55**	**L**
		Lymphocytes	**-43.33**	**L**	**-37.94**	**L**
21.82 **29.59**	-	MCH	21.82		**29.59**	**H**
8.59 **38.75**	+	MCHC	**38.75**	**H**	8.59	
		MCV	6.07		12.62	
-17.22 -6.29	+	Monocyte Count	-17.22		-6.29	
5.56 20.00	-	Monocytes	5.56		20.00	
-19.60 -11.85	+	Neutrophil Count	-19.60		-11.85	
		Neutrophils	**26.00**	**H**	19.76	
0.00 15.00	+	Phosphorus	15.00		0.00	
		Potassium	-10.00		11.11	
		Protein, Total	10.00		7.14	
		R.B.C.	-8.46		-13.08	
-8.33 **25.00**	+	sGOT	**25.00**	**H**	-8.33	
-8.62 **32.50**	+	sGPT	**32.50**	**H**	-8.62	
-19.23 -4.55	+	Sodium	-19.23		-4.55	
3.33 **26.92**	-	T-3 Uptake	3.33		**26.92**	**H**
		Thyroxine (T4)	**-26.00**	**L**	-23.75	
		Triglycerides	**33.22**	**H**	**32.26**	**H**
59.29 **71.86**	+	Ultra-Sensitive TSH	**71.86**	**H**	**59.29**	**H**
		Uric Acid	1.72		-1.11	
		W.B.C.	**-26.92**	**L**	-21.43	
		Total Status Deviation	**23.48**		**19.75**	
		Total Status Skew	**2.25**		**2.67**	

Comparison Progress Report

Anna **Foundational Wellness Profile Date: 2/21/2008**

Female / Age: 56

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

Status % on:	4/12/2006		2/21/2008		+/- change
CA Cycle Phase 6	**1209.15**	**H**	**72.49**	**H**	**+1136.66**
CA Cycle Phase 5	**202.80**	**H**	-9.57		+ 193.23
Pyroglutamate	**110.77**	**H**	-21.33		+ 89.44
Lactate	**148.12**	**H**	**65.24**	**H**	**+ 82.87**
Phenylacetate	**124.96**	**H**	**50.00**	**H**	**+ 74.96**
Tricarballylate	**105.21**	**H**	**39.78**	**H**	**+ 65.43**
Ethylmalonate	**65.64**	**H**	13.29		+ 52.36
a-Ketoisocaproate	**103.87**	**H**	**53.86**	**H**	**+ 50.01**
Succinate	**53.04**	**H**	-3.32		+ 49.71
Quinolinate	**49.63**	**H**	-0.98		+ 48.64
Glucarate	**51.56**	**H**	3.07		+ 48.48
a-Ketoglutarate	**63.15**	**H**	-22.04		+ 41.11
b-Hydroxyisovalerate	**42.36**	**H**	-3.12		+ 39.24
a-Ketoisovalerate	**-39.36**	**L**	-1.41		+ 37.95
a-Hydroxybutyrate	**-34.62**	**L**	1.62		+ 33.00
CA Cycle Return	**-47.90**	**L**	15.67		+ 32.24
Hippurate	**40.60**	**H**	12.85		+ 27.74
Citrate	**-35.88**	**L**	10.14		+ 25.73
5-Hydroxyindoleacetate	**-31.32**	**L**	-5.78		+ 25.54
CA Cycle Phase 3	**-26.34**	**L**	1.20		+ 25.14
CA Cycle Entry	6.94		**1125.02**	**H**	**-1118.08**
Homovanillate	**-33.85**	**L**	**574.59**	**H**	**- 540.74**
Oxidative Damage	**147.35**	**H**	**300.25**	**H**	**- 152.90**
Bacteria2	**54.45**	**H**	**150.00**	**H**	**- 95.55**
p-Hydroxyphenyllactate	**-41.60**	**L**	**113.44**	**H**	**- 71.83**
CA Cycle Phase 1	15.26		**77.76**	**H**	**- 62.49**
P-Hydroxyphenylacetate	0.68		**-47.00**	**L**	**- 46.32**
Indican	-6.53		**-48.75**	**L**	**- 42.22**
Suberate	-12.57		**53.19**	**H**	**- 40.62**
b-Hydroxybutyrate	10.49		**-44.77**	**L**	**- 34.28**
D-Lactate	**33.18**	**H**	**63.26**	**H**	**- 30.08**
Methylmalonate	6.54		**-32.42**	**L**	**- 25.88**

Comparison Report

Anna **Foundational Wellness Profile Date: 2/21/2008**

Female / Age: 56

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:	4/12/2006		2/21/2008	
4.79 **27.68**	+	2-Methylhippurate	**27.68**	H	4.79	
-31.32 -5.78	+	5-Hydroxyindoleacetate	**-31.32**	L	-5.78	
-6.37 **27.54**	-	8-Hydroxy-2-deoxyguan	-6.37		**27.54**	H
		Adipate	-7.31		-4.11	
-34.62 1.62	+	a-Hydroxybutyrate	**-34.62**	L	1.62	
-33.57 9.57	+	a-Keto-b-methylvalerate	**-33.57**	L	9.57	
-22.04 **63.15**	+	a-Ketoglutarate	**63.15**	H	-22.04	
53.86 **103.87**	+	a-Ketoisocaproate	**103.87**	H	**53.86**	H
-39.36 -1.41	+	a-Ketoisovalerate	**-39.36**	L	-1.41	
		Benzoate	-10.00		4.80	
-44.77 10.49	-	b-Hydroxybutyrate	10.49		**-44.77**	L
-3.12 **42.36**	+	b-Hydroxyisovalerate	**42.36**	H	-3.12	
6.94 **1125.02**	-	CA Cycle Entry	6.94		**1125.02**	H
-47.90 15.67	+	CA Cycle Return	**-47.90**	L	15.67	
-20.56 0.72	+	cis-Aconitate	-20.56		0.72	
-35.88 10.14	+	Citrate	**-35.88**	L	10.14	
		D-Arabinitol	14.38		10.32	
33.18 **63.26**	-	D-Lactate	**33.18**	H	**63.26**	H
13.29 **65.64**	+	Ethylmalonate	**65.64**	H	13.29	
		Formiminoglutamic Acid	13.41		11.86	
-35.92 13.60	+	Fumarate	**-35.92**	L	13.60	
3.07 **51.56**	+	Glucarate	**51.56**	H	3.07	
12.85 **40.60**	+	Hippurate	**40.60**	H	12.85	
-33.85 **574.59**	-	Homovanillate	**-33.85**	L	**574.59**	H
		Hydroxymethylglutarate	-1.25		-8.25	
-48.75 -6.53	-	Indican	-6.53		**-48.75**	L
-21.44 -9.10	-	Isocitrate	-9.10		-21.44	
4.12 16.38	+	Kynurenate	16.38		4.12	
65.24 **148.12**	+	Lactate	**148.12**	H	**65.24**	H
-13.93 **32.12**	+	Malate	**32.12**	H	-13.93	
-32.42 6.54	-	Methylmalonate	6.54		**-32.42**	L
8.33 23.89	+	Orotate	23.89		8.33	
50.00 **124.96**	+	Phenylacetate	**124.96**	H	**50.00**	H
		Phenylpropionate	**-45.24**	L	**50.00**	H
		p-Hydroxybenzoate	-16.88		11.67	
-47.00 0.68	-	P-Hydroxyphenylacetate	0.68		**-47.00**	L
-41.60 **113.44**	-	p-Hydroxyphenyllactate	**-41.60**	L	**113.44**	H
-21.33 **110.77**	+	Pyroglutamate	**110.77**	H	-21.33	
-36.76 **51.44**	+	Pyruvate	**51.44**	H	**-36.76**	L
-0.98 **49.63**	+	Quinolinate	**49.63**	H	-0.98	
-12.57 **53.19**	-	Suberate	-12.57		**53.19**	H
-3.32 **53.04**	+	Succinate	**53.04**	H	-3.32	
-25.38 -11.09	-	Sulfate	-11.09		**-25.38**	L
39.78 **105.21**	+	Tricarballylate	**105.21**	H	**39.78**	H
-76.02 **-53.90**	-	Vanilmandelate	**-53.90**	L	**-76.02**	L
5.52 14.10	+	Xanthurenate	14.10		5.52	
		Total Status Deviation	**62.32**		**62.10**	
		Total Status Skew	**33.72**		**36.56**	

Ammonia/Energy	4/12/2006		2/21/2008		+/-
Arginine	**-39.09**	**L**	-16.05		+
Threonine	**-37.75**	**L**	**-38.07**	**L**	
Glycine	**-44.76**	**L**	**-50.85**	**L**	
Serine	**-48.13**	**L**	**-50.99**	**L**	
a-Aminoadipic Acid	0.00		-23.25		-
Asparagine	**-46.47**	**L**	**-71.93**	**L**	-
Aspartic Acid	**-41.67**	**L**	**-25.79**	**L**	+
Citrulline	**-38.58**	**L**	-12.71		+
Glutamic Acid	**-38.57**	**L**	16.69		+
Glutamine	**-28.46**	**L**	**-64.39**	**L**	-
Ornithine	-21.37		**-31.38**	**L**	-
a-Amino-N-Butyric Acid	-10.00		-20.40		-
Alanine	-15.71		1.58		+
b-Alanine	-10.00		-10.00		
PSS / PSD	-30.04 / 30.04		-28.40 / 31.01		

CNS Metabolism	4/12/2006		2/21/2008		+/-
Arginine	**-39.09**	**L**	-16.05		+
Tryptophan	-22.37		13.75		+
GABA	10.00		**53.80**	**H**	-
Glycine	**-44.76**	**L**	**-50.85**	**L**	
Serine	**-48.13**	**L**	**-50.99**	**L**	
Taurine	**-45.03**	**L**	**-27.75**	**L**	+
Aspartic Acid	**-41.67**	**L**	**-25.79**	**L**	+
Glutamine	**-28.46**	**L**	**-64.39**	**L**	-
Ethanolamine	**-25.00**	**L**	**28.00**	**H**	
Phosphoethanolamine	-10.00		8.37		
Phosphoserine	**25.00**	**H**	5.83		+
PSS / PSD	-24.50 / 30.86		-11.46 / 31.42		

Connective Tissue	4/12/2006		2/21/2008		+/-
Leucine	**-35.68**	**L**	**-47.75**	**L**	-
Methionine	**-45.00**	**L**	**-35.53**	**L**	+
Valine	**-46.40**	**L**	**-47.64**	**L**	
Cystine	-12.50		0.50		+
Hydroxylysine	**50.00**	**H**	**50.00**	**H**	
Hydroxyproline	**-30.00**	**L**	**86.17**	**H**	-
3-Methylhistidine	**50.00**	**H**	**49.40**	**H**	
Proline	**-41.33**	**L**	**-33.10**	**L**	+
PSS / PSD	-13.86 / 38.86		2.76 / 43.76		

Detoxification Markers	4/12/2006		2/21/2008		+/-
Methionine	**-45.00**	**L**	**-35.53**	**L**	+
Cystine	-12.50		0.50		+
Taurine	**-45.03**	**L**	**-27.75**	**L**	+
Glutamine	**-28.46**	**L**	**-64.39**	**L**	-
Glycine	**-44.76**	**L**	**-50.85**	**L**	
Aspartic Acid	**-41.67**	**L**	**-25.79**	**L**	+
PSS / PSD	-36.24 / 36.24		-33.97 / 34.14		

Essential Amino Acid	4/12/2006		2/21/2008		+/-
Arginine	**-39.09**	**L**	-16.05		+
Histidine	**-56.76**	**L**	**-41.65**	**L**	+
Isoleucine	**-47.85**	**L**	**-45.18**	**L**	
Leucine	**-35.68**	**L**	**-47.75**	**L**	-
Lysine	-18.13		**-29.98**	**L**	-
Methionine	**-45.00**	**L**	**-35.53**	**L**	+
Phenylalanine	**-34.44**	**L**	**-47.80**	**L**	-
Threonine	**-37.75**	**L**	**-38.07**	**L**	
Tryptophan	-22.37		13.75		+
Valine	**-46.40**	**L**	**-47.64**	**L**	
PSS / PSD	-38.35 / 38.35		-33.59 / 36.34		

Fat Metabolism	4/12/2006		2/21/2008		+/-
Arginine	**-39.09**	**L**	-16.05		+
Isoleucine	**-47.85**	**L**	**-45.18**	**L**	
Leucine	**-35.68**	**L**	**-47.75**	**L**	-
Valine	**-46.40**	**L**	**-47.64**	**L**	
Taurine	**-45.03**	**L**	**-27.75**	**L**	+
Glutamine	**-28.46**	**L**	**-64.39**	**L**	-
Sarcosine	-10.00		-10.00		
PSS / PSD	-36.07 / 36.07		-36.97 / 36.97		

Gluconeogen	4/12/2006		2/21/2008		+/-
Threonine	**-37.75**	**L**	**-38.07**	**L**	
Tryptophan	-22.37		13.75		+
Glycine	**-44.76**	**L**	**-50.85**	**L**	
Serine	**-48.13**	**L**	**-50.99**	**L**	
Alanine	-15.71		1.58		+
PSS / PSD	-33.74 / 33.74		-24.92 / 31.05		

Hepatic Metabolism	4/12/2006		2/21/2008		+/-
Methionine	**-45.00**	**L**	**-35.53**	**L**	+
Taurine	**-45.03**	**L**	**-27.75**	**L**	+
Glutamine	**-28.46**	**L**	**-64.39**	**L**	-
Cystine	-12.50		0.50		+
Cystathionine	0.00		16.25		-
Homocystine	**50.00**	**H**	**50.00**	**H**	
Alanine	-15.71		1.58		+
PSS / PSD	-13.82 / 28.10		-8.48 / 28.00		

Immune Metabolites	4/12/2006		2/21/2008		+/-
Arginine	**-39.09**	**L**	-16.05		+
Threonine	**-37.75**	**L**	**-38.07**	**L**	
Glutamine	**-28.46**	**L**	**-64.39**	**L**	-
Ornithine	-21.37		**-31.38**	**L**	-
PSS / PSD	-31.67 / 31.67		-37.47 / 37.47		

Magnesium Dependents	4/12/2006		2/21/2008		+/-
Citrulline	**-38.58**	**L**	-12.71		**+**
Ethanolamine	**-25.00**	**L**	**28.00**	**H**	
Phosphoethanolamine	-10.00		8.37		
Phosphoserine	**25.00**	**H**	5.83		**+**
Serine	**-48.13**	**L**	**-50.99**	**L**	
PSS / PSD	-19.34 / 29.34		-4.30 / 21.18		

Muscle Metabolites	4/12/2006		2/21/2008		+/-
Anserine	**50.00**	**H**	**50.00**	**H**	
Carnosine	**50.00**	**H**	**50.00**	**H**	
1-Methylhistidine	**-40.00**	**L**	**-32.20**	**L**	**+**
3-Methylhistidine	**50.00**	**H**	**49.40**	**H**	
PSS / PSD	27.50 / 47.50		29.30 / 45.40		

Neuroendocrine Metab	4/12/2006		2/21/2008		+/-
GABA	10.00		**53.80**	**H**	**-**
Glycine	**-44.76**	**L**	**-50.85**	**L**	
Serine	**-48.13**	**L**	**-50.99**	**L**	
Taurine	**-45.03**	**L**	**-27.75**	**L**	**+**
Tyrosine	24.37		-11.91		**+**
PSS / PSD	-20.71 / 34.46		-17.54 / 39.06		

Urea Cycle Metabolites	4/12/2006		2/21/2008		+/-
Arginine	**-39.09**	**L**	-16.05		**+**
Aspartic Acid	**-41.67**	**L**	**-25.79**	**L**	**+**
Citrulline	**-38.58**	**L**	-12.71		**+**
Ornithine	-21.37		**-31.38**	**L**	**-**
Glutamine	**-28.46**	**L**	**-64.39**	**L**	**-**
Asparagine	**-46.47**	**L**	**-71.93**	**L**	**-**
PSS / PSD	-35.94 / 35.94		-37.04 / 37.04		

Adrenal Function	4/12/2006		2/21/2008		+/-
Cholesterol	**72.00**	**H**	**68.33**	**H**	
Eosinophils	7.14		2.50		
Eosinophil Count	-16.00		-2.87		**+**
Potassium	-10.00		11.11		
Sodium	-19.23		-4.55		**+**
PSS / PSD	6.78 / 24.87		14.91 / 17.87		

Allergy	4/12/2006		2/21/2008		+/-
Eosinophils	7.14		2.50		
Globulin	10.00		-8.82		
Lymphocytes	**-43.33**	**L**	**-37.94**	**L**	
Monocytes	5.56		20.00		**-**
W.B.C.	**-26.92**	**L**	-21.43		
PSS / PSD	-9.51 / 18.59		-9.14 / 18.14		

Panel/Subset Comparison Report

Anna — **Foundational Wellness Profile Date: 2/21/2008**

Female / Age: 56

Anti Oxidant Status	4/12/2006		2/21/2008		+/-	
Anion Gap	2.50		21.67		-	2.50 → 21.67
Bilirubin, Total	-13.64		-20.00			
Chloride	11.54		8.33			
Cholesterol	**72.00**	**H**	**68.33**	**H**		
Glucose	**32.35**	**H**	**35.29**	**H**		
Iron, Total	7.50		-18.80		-	-18.80 ← 7.50
PSS / PSD	18.71 / 23.25		15.80 / 28.74			

Athletic Potential	4/12/2006		2/21/2008		+/-	
B.U.N./Creatinine Ratio	23.68		6.59		+	6.59 ← 23.68
Cholesterol	**72.00**	**H**	**68.33**	**H**		
CO2	-8.33		**-33.33**	**L**	-	**-33.33** ← -8.33
Creatinine	-20.00		11.43		+	-20.00 → 11.43
LDH	24.67		6.15		+	6.15 ← 24.67
Potassium	-10.00		11.11			
Protein, Total	10.00		7.14			
Sodium	-19.23		-4.55		+	-19.23 → -4.55
HDL-Cholesterol	-6.36		6.36			
PSS / PSD	7.38 / 21.59		8.80 / 17.22			

Bone/Joint	4/12/2006		2/21/2008		+/-	
Albumin	-15.00		10.00			
Alkaline Phosphatase	**31.60**	**H**	7.73		+	7.73 ← **31.60**
Calcium	-7.14		6.25			
Neutrophils	**26.00**	**H**	19.76			
Phosphorus	15.00		0.00		+	0.00 ← 15.00
Protein, Total	10.00		7.14			
Uric Acid	1.72		-1.11			
PSS / PSD	8.88 / 15.21		7.11 / 7.43			

Cardiac Marker	4/12/2006		2/21/2008		+/-	
Cholesterol	**72.00**	**H**	**68.33**	**H**		
GGT	-10.00		-19.23		-	-19.23 ← -10.00
Iron, Total	7.50		-18.80		-	-18.80 ← 7.50
LDH	24.67		6.15		+	6.15 ← 24.67
sGOT	**25.00**	**H**	-8.33		+	-8.33 ← **25.00**
Triglycerides	**33.22**	**H**	**32.26**	**H**		
Uric Acid	1.72		-1.11			
HDL-Cholesterol	-6.36		6.36			
LDL	**117.65**	**H**	**141.18**	**H**	-	**117.65** → **141.18**
PSS / PSD	29.49 / 33.12		22.98 / 33.53			

Panel/Subset Comparison Report

Anna — **Foundational Wellness Profile Date: 2/21/2008**

Female / Age: 56

Cellular Distortions	4/12/2006		2/21/2008		+/-	
Alkaline Phosphatase	**31.60**	**H**	7.73		+	7.73 ← **31.60**
Anion Gap	2.50		21.67		-	2.50 → 21.67
GGT	-10.00		-19.23		-	-19.23 ← -10.00
Iron, Total	7.50		-18.80		-	-18.80 ← 7.50
LDH	24.67		6.15		+	6.15 ← 24.67
Neutrophils	**26.00**	**H**	19.76			
W.B.C.	**-26.92**	**L**	-21.43			
PSS / PSD	7.91 / 18.46		-0.59 / 16.40			

Differential	4/12/2006		2/21/2008		+/-	
Basophils	**-50.00**	**L**	**-35.00**	**L**	+	**-50.00** → **-35.00**
Eosinophils	7.14		2.50			
Lymphocytes	**-43.33**	**L**	**-37.94**	**L**		
Monocytes	5.56		20.00		-	5.56 → 20.00
Neutrophils	**26.00**	**H**	19.76			
PSS / PSD	-10.93 / 26.41		-6.14 / 23.04			

Differential Count	4/12/2006		2/21/2008		+/-	
Basophil Count	**-50.00**	**L**	**-41.30**	**L**	+	**-50.00** → **-41.30**
Eosinophil Count	-16.00		-2.87		+	-16.00 → -2.87
Lymphocyte Count	**-42.50**	**L**	**-41.55**	**L**		
Monocyte Count	-17.22		-6.29		+	-17.22 → -6.29
Neutrophil Count	-19.60		-11.85		+	-19.60 → -11.85
PSS / PSD	-29.06 / 29.06		-20.77 / 20.77			

Electrolyte	4/12/2006		2/21/2008		+/-	
Calcium	-7.14		6.25			
Chloride	11.54		8.33			
CO2	-8.33		**-33.33**	**L**	-	**-33.33** ← -8.33
Phosphorus	15.00		0.00		+	0.00 ← 15.00
Potassium	-10.00		11.11			
Sodium	-19.23		-4.55		+	-19.23 → -4.55
PSS / PSD	-3.03 / 11.87		-2.03 / 10.60			

Gastrointest. Function	4/12/2006		2/21/2008		+/-	
Anion Gap	2.50		21.67		-	2.50 → 21.67
Chloride	11.54		8.33			
Cholesterol	**72.00**	**H**	**68.33**	**H**		
CO2	-8.33		**-33.33**	**L**	-	**-33.33** ← -8.33
Monocytes	5.56		20.00		-	5.56 → 20.00
Potassium	-10.00		11.11			
Sodium	-19.23		-4.55		+	-19.23 → -4.55
Triglycerides	**33.22**	**H**	**32.26**	**H**		
LDL	**117.65**	**H**	**141.18**	**H**	-	**117.65** → **141.18**
PSS / PSD	22.77 / 31.11		29.44 / 37.86			

Panel/Subset Comparison Report

Anna — **Foundational Wellness Profile Date: 2/21/2008**

Female / Age: 56

Hematology	4/12/2006		2/21/2008		+/-	
Hematocrit	1.00		-4.00			
Hemoglobin	18.57		0.00		+	0.00 ← 18.57
MCH	21.82		**29.59**	H	-	21.82 → **29.59**
MCHC	**38.75**	H	8.59		+	8.59 ← **38.75**
MCV	6.07		12.62			
R.B.C.	-8.46		-13.08			
W.B.C.	**-26.92**	L	-21.43			
PSS / PSD	7.26 / 17.37		1.76 / 12.76			

Inflammatory Process	4/12/2006		2/21/2008		+/-	
Eosinophils	7.14		2.50			
Globulin	10.00		-8.82			
LDH	24.67		6.15		+	6.15 ← 24.67
Neutrophils	**26.00**	H	19.76			
Potassium	-10.00		11.11			
sGOT	**25.00**	H	-8.33		+	-8.33 ← **25.00**
sGPT	**32.50**	H	-8.62		+	-8.62 ← **32.50**
Triglycerides	**33.22**	H	**32.26**	H		
Uric Acid	1.72		-1.11			
LDL	**117.65**	H	**141.18**	H	-	**117.65** → **141.18**
PSS / PSD	26.79 / 28.79		18.61 / 23.99			

Kidney Function	4/12/2006		2/21/2008		+/-	
Albumin	-15.00		10.00			
B.U.N.	2.38		-11.11		-	-11.11 ← 2.38
B.U.N./Creatinine Ratio	23.68		6.59		+	6.59 ← 23.68
Chloride	11.54		8.33			
CO2	-8.33		**-33.33**	L	-	**-33.33** ← -8.33
Creatinine	-20.00		11.43		+	-20.00 → 11.43
Glucose	**32.35**	H	**35.29**	H		
Potassium	-10.00		11.11			
Protein, Total	10.00		7.14			
Sodium	-19.23		-4.55		+	-19.23 → -4.55
PSS / PSD	0.74 / 15.25		4.09 / 13.89			

Lipid	4/12/2006		2/21/2008		+/-	
Cholesterol	**72.00**	H	**68.33**	H		
Triglycerides	**33.22**	H	**32.26**	H		
HDL-Cholesterol	-6.36		6.36			
LDL	**117.65**	H	**141.18**	H	-	**117.65** → **141.18**
PSS / PSD	54.13 / 57.31		62.03 / 62.03			

Panel/Subset Comparison Report

Anna — **Foundational Wellness Profile Date: 2/21/2008**

Female / Age: 56

Liver Function	4/12/2006		2/21/2008		+/-	
Albumin	-15.00		10.00			
Alkaline Phosphatase	**31.60**	H	7.73		+	7.73 ← **31.60**
Bilirubin, Total	-13.64		-20.00			
Cholesterol	**72.00**	H	**68.33**	H		
GGT	-10.00		-19.23		-	-19.23 ← -10.00
Protein, Total	10.00		7.14			
sGOT	**25.00**	H	-8.33		+	-8.33 ← **25.00**
sGPT	**32.50**	H	-8.62		+	-8.62 ← **32.50**
PSS / PSD	16.56 / 26.22		4.63 / 18.67			

Nitrogen	4/12/2006	2/21/2008	+/-	
B.U.N.	2.38	-11.11	-	-11.11 ← 2.38
B.U.N./Creatinine Ratio	23.68	6.59	+	6.59 ← 23.68
Creatinine	-20.00	11.43	+	-20.00 → 11.43
Uric Acid	1.72	-1.11		
PSS / PSD	1.95 / 11.95	1.45 / 7.56		

Protein	4/12/2006		2/21/2008		+/-	
A/G Ratio	**-37.66**	L	12.64		+	**-37.66** → 12.64
Albumin	-15.00		10.00			
Globulin	10.00		-8.82			
Protein, Total	10.00		7.14			
PSS / PSD	-13.08 / 21.08		5.24 / 9.65			

Pulmonary Function	4/12/2006		2/21/2008		+/-	
Anion Gap	2.50		21.67		-	2.50 → 21.67
Calcium	-7.14		6.25			
CO2	-8.33		**-33.33**	L	-	**-33.33** ← -8.33
LDH	24.67		6.15		+	6.15 ← 24.67
Potassium	-10.00		11.11			
sGOT	**25.00**	H	-8.33		+	-8.33 ← **25.00**
Sodium	-19.23		-4.55		+	-19.23 → -4.55
PSS / PSD	1.07 / 13.84		-0.15 / 13.06			

Ratios	4/12/2006		2/21/2008		+/-	
A/G Ratio	**-37.66**	L	12.64		+	**-37.66** → 12.64
B.U.N./Creatinine Ratio	23.68		6.59		+	6.59 ← 23.68
Calcium/Phosphorus Ratio	**-32.63**	L	-8.57		+	**-32.63** → -8.57
Sodium/Potassium Ratio	2.71		-13.04		-	-13.04 → 2.71
PSS / PSD	-15.32 / 25.88		-0.60 / 10.21			

Thyroid	4/12/2006		2/21/2008		+/-	
Thyroxine (T4)	**-26.00**	L	-23.75			
T-3 Uptake	3.33		**26.92**	H	-	3.33 → **26.92**
Ultra-Sensitive TSH	**71.86**	H	**59.29**	H	+	**59.29** ← **71.86**
PSS / PSD	5.20 / 32.39		8.11 / 34.99			

Panel/Subset Comparison Report

Anna — **Foundational Wellness Profile Date: 2/21/2008**

Female / Age: 56

B-Complex Markers	4/12/2006		2/21/2008		+/-
b-Hydroxyisovalerate	**42.36**	**H**	-3.12		+
a-Ketoisovalerate	**-39.36**	**L**	-1.41		+
a-Ketoisocaproate	**103.87**	**H**	**53.86**	**H**	+
a-Keto-b-methylvalerate	**-33.57**	**L**	9.57		+
Methylmalonate	6.54		**-32.42**	**L**	-
Formiminoglutamic Acid	13.41		11.86		
Xanthurenate	14.10		5.52		+
PSS / PSD	15.34 / 36.17		6.27 / 16.82		

BCAA Catabolism	4/12/2006		2/21/2008		+/-
a-Ketoisovalerate	**-39.36**	**L**	-1.41		+
a-Ketoisocaproate	**103.87**	**H**	**53.86**	**H**	+
a-Keto-b-methylvalerate	**-33.57**	**L**	9.57		+
PSS / PSD	10.31 / 58.93		20.67 / 21.61		

CAC Cycle Ratios	4/12/2006		2/21/2008		+/-
CA Cycle Entry	6.94		**1125.02**	**H**	-
CA Cycle Phase 1	15.26		**77.76**	**H**	-
CA Cycle Phase 2	-16.18		**-28.31**	**L**	-
CA Cycle Phase 3	**-26.34**	**L**	1.20		+
CA Cycle Phase 4	**-39.84**	**L**	**-32.02**	**L**	+
CA Cycle Phase 5	**202.80**	**H**	-9.57		+
CA Cycle Phase 6	**1209.15**	**H**	**72.49**	**H**	+
CA Cycle Return	**-47.90**	**L**	15.67		+
PSS / PSD	162.99 / 195.55		152.78 / 170.25		

Carbohydrate Metabolism	4/12/2006		2/21/2008		+/-
Lactate	**148.12**	**H**	**65.24**	**H**	+
Pyruvate	**51.44**	**H**	**-36.76**	**L**	+
a-Hydroxybutyrate	**-34.62**	**L**	1.62		+
b-Hydroxybutyrate	10.49		**-44.77**	**L**	-
PSS / PSD	43.86 / 61.17		-3.67 / 37.10		

Energy Production	4/12/2006		2/21/2008		+/-
Citrate	**-35.88**	**L**	10.14		+
cis-Aconitate	-20.56		0.72		+
Isocitrate	-9.10		-21.44		-
a-Ketoglutarate	**63.15**	**H**	-22.04		+
Succinate	**53.04**	**H**	-3.32		+
Fumarate	**-35.92**	**L**	13.60		+
Malate	**32.12**	**H**	-13.93		+
Hydroxymethylglutarate	-1.25		-8.25		
PSS / PSD	5.70 / 31.38		-5.56 / 11.68		

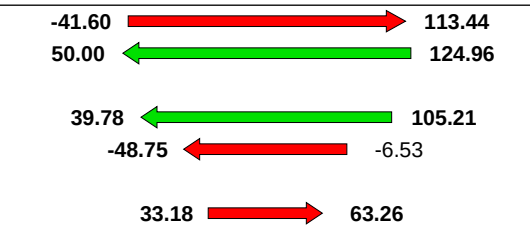
Fatty Acid Metabolism	4/12/2006		2/21/2008		+/-
Adipate	-7.31		-4.11		
Suberate	-12.57		**53.19**	**H**	-
Ethylmalonate	**65.64**	**H**	13.29		+
PSS / PSD	15.26 / 28.51		20.79 / 23.53		

Panel/Subset Comparison Report

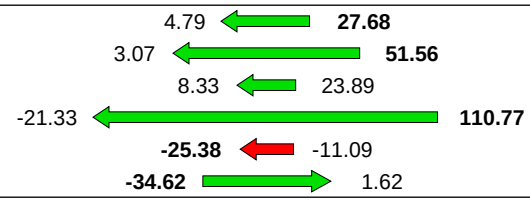
Anna
Female / Age: 56

Foundational Wellness Profile Date: 2/21/2008

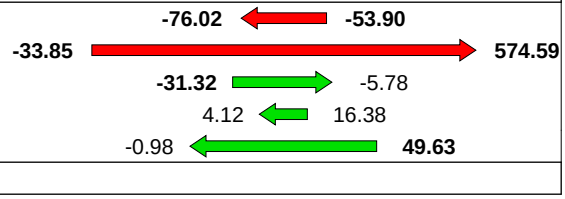
Intestinal Dysbiosis	4/12/2006		2/21/2008		+/-
p-Hydroxyphenyllactate	**-41.60**	**L**	**113.44**	**H**	**-**
Phenylacetate	**124.96**	**H**	**50.00**	**H**	**+**
Phenylpropionate	**-45.24**	**L**	**50.00**	**H**	
Tricarballylate	**105.21**	**H**	**39.78**	**H**	**+**
Indican	-6.53		**-48.75**	**L**	**-**
p-Hydroxybenzoate	-16.88		11.67		
D-Lactate	**33.18**	**H**	**63.26**	**H**	**-**
D-Arabinitol	14.38		10.32		
PSS / PSD	28.59 / 53.09		36.21 / 48.40		



Liver Detox Indicators	4/12/2006		2/21/2008		+/-
2-Methylhippurate	**27.68**	**H**	4.79		**+**
Glucarate	**51.56**	**H**	3.07		**+**
Orotate	23.89		8.33		**+**
Pyroglutamate	**110.77**	**H**	-21.33		**+**
Sulfate	-11.09		**-25.38**	**L**	**-**
a-Hydroxybutyrate	**-34.62**	**L**	1.62		**+**
PSS / PSD	28.03 / 43.27		-4.82 / 10.75		



Neurotransmitters	4/12/2006		2/21/2008		+/-
Vanilmandelate	**-53.90**	**L**	**-76.02**	**L**	**-**
Homovanillate	**-33.85**	**L**	**574.59**	**H**	**-**
5-Hydroxyindoleacetate	**-31.32**	**L**	-5.78		**+**
Kynurenate	16.38		4.12		**+**
Quinolinate	**49.63**	**H**	-0.98		**+**
PSS / PSD	-10.61 / 37.01		99.18 / 132.30		



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

Custom Amino Acid Profile

Biochemically Individualized for your patient

Client
Anna

Visit date
2/21/2008

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	87.33999	-16.05	0
L-Histidine	13.50	75.84559	-41.65	0
L-Isoleucine	13.50	55.30659	-45.18	0
L-Leucine	12.00	92.47000	-47.75	0
L-Lysine	12.00	180.0352	-29.98	0
L-Methionine	15.00	28.61759	-35.53	0
L-Phenylalanine	15.00	47.09000	-47.80	0
L-Taurine	8.10	94.50980	-27.75	0
L-Threonine	13.50	117.8899	-38.07	0
L-Tryptophan (as 5-HTP)	0.90	54.12599	13.75	0
L-Valine	15.00	175.9022	-47.64	0
Total Base Grams:	**138.00**		Total Grams Added:	**0**

Other Ingredients *

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

* Flavored product may include additional ingredients not shown.

Customization based exclusively on Crayhon Research Inc's LabAssist™ interpretive report, and amino acids.