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Anna

Test date: 10/2/2003
(accession: A0318333)

Next Test Due: 4/2/2004

CellMate™ Foundational Wellness Profile Report

Practitioner

Printed on Monday, November 10, 2003 for:

Basic Status High/Low - Plasma Amino Acid on 10/2/2003

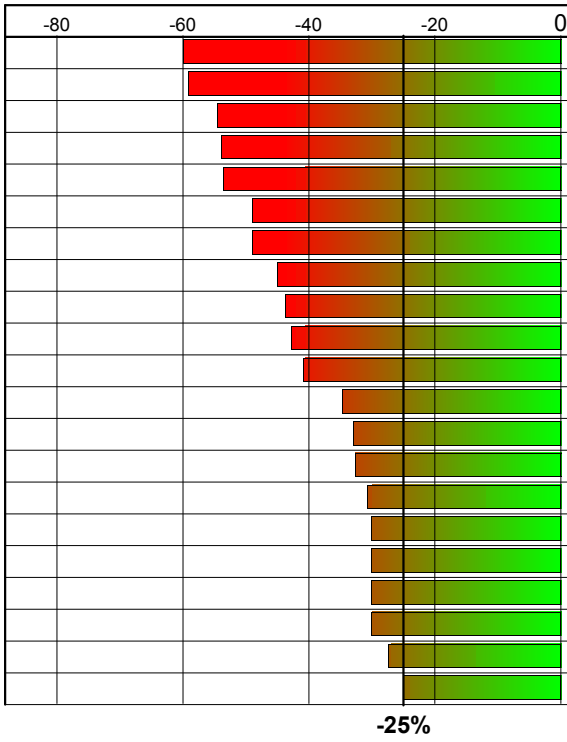
Anna Salanti **Foundational Wellness Profile Date: 10/2/2003**

Female / Age: 51

Client ID:555986644 (8322)

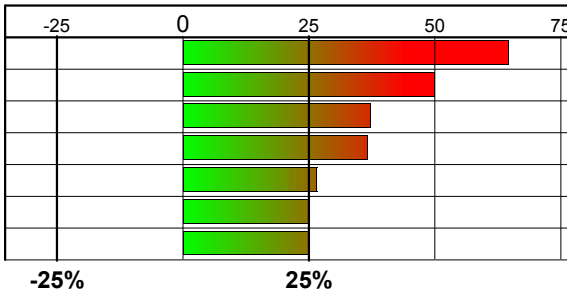
The % Status is the weighted deviation of the laboratory result.

Low Results



	% Status		Result	Low	High
Valine - P	-60.00	L	**145.00**	170.00	420.00
Leucine - P	-59.09	L	**80.00**	90.00	200.00
Aspartic Acid - P	-54.58	L	**4.90**	6.00	30.00
Glutamic Acid - P	-53.81	L	**41.00**	45.00	150.00
Isoleucine - P	-53.64	L	**46.00**	50.00	160.00
Anserine - P	-49.00	L	**0.01**	0.00	1.00
Carnosine - P	-49.00	L	**0.01**	0.00	1.00
Taurine - P	-45.00	L	**60.00**	50.00	250.00
Phenylalanine - P	-43.68	L	**51.00**	45.00	140.00
Histidine - P	-42.86	L	**75.00**	70.00	140.00
Serine - P	-40.83	L	**101.00**	90.00	210.00
Lysine - P	-34.67	L	**173.00**	150.00	300.00
Glutamine - P	-32.89	L	**677.00**	600.00	1050.00
Glycine - P	-32.67	L	**264.00**	225.00	450.00
Proline - P	-30.74	L	**182.00**	130.00	400.00
Phenylalanine/Tyrosine	-30.07	L	**0.74**	0.50	1.70
b-Alanine - P	-30.00	L	**1.00**	0.00	5.00
Methionine - P	-30.00	L	**30.00**	25.00	50.00
Sarcosine - P	-30.00	L	**1.00**	0.00	5.00
Ornithine - P	-27.33	L	**84.00**	50.00	200.00
a-Aminoadipic Acid - P	-25.00	L	**1.00**	0.00	4.00

High Results



	% Status		Result	Low	High
Collagen Related AA	64.67	H	**182.00**	10.00	160.00
3-Methylhistidine - P	50.00	H	**5.00**	0.00	5.00
Citrulline - P	37.27	H	**63.00**	15.00	70.00
Hydroxyproline - P	36.67	H	**26.00**	0.00	30.00
Phosphoethanolamine - P	26.67	H	**23.00**	0.00	30.00
Ethanolamine - P	25.00	H	**6.00**	0.00	8.00
Phosphoserine - P	25.00	H	**9.00**	0.00	12.00

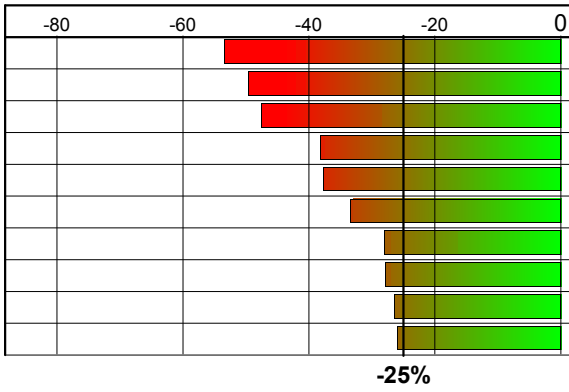
Basic Status High/Low - Blood Test (CWP) on 10/2/2003

Anna **Foundational Wellness Profile Date: 10/2/2003**

Female / Age: 51

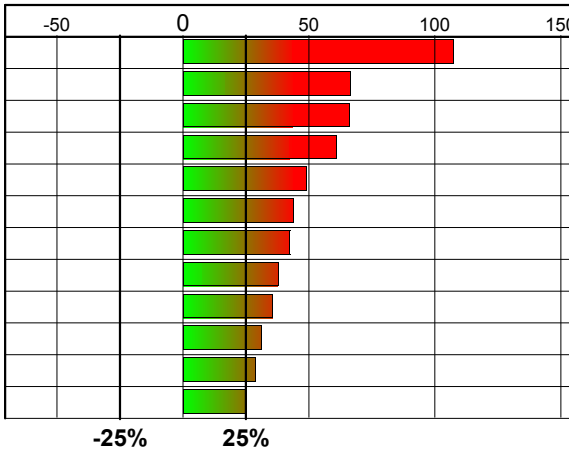
The % Status is the weighted deviation of the laboratory result.

Low Results



	% Status		Result	*Low*	*High*
Lymphocytes	-53.33	**L**	**17.00**	18.00	48.00
Lymphocyte Count	-49.60	**L**	**816.00**	800.00	4800.00
Calcium/Phosphorus Ratio	-47.50	**L**	**2.33**	2.30	3.30
R.B.C.	-38.12	**L**	**4.09**	3.90	5.50
W.B.C.	-37.69	**L**	**4.80**	4.00	10.50
CO2	-33.33	**L**	**22.00**	20.00	32.00
Neutrophil Count	-27.94	**L**	**3168.00**	1800.00	8000.00
Creatinine	-27.78	**L**	**0.80**	0.60	1.50
A/G Ratio	-26.44	**L**	**1.41**	1.10	2.40
Basophil Count	-26.00	**L**	**48.00**	0.00	200.00

High Results



	% Status		Result	*Low*	*High*
sGPT	107.50	**H**	**63.00**	0.00	40.00
Eosinophils	66.67	**H**	**7.00**	0.00	6.00
LDL	66.18	**H**	**141.00**	62.00	130.00
Anion Gap	60.83	**H**	**21.30**	8.00	20.00
Cholesterol	49.00	**H**	**239.00**	140.00	240.00
LDH	43.75	**H**	**200.00**	50.00	210.00
sGOT	42.50	**H**	**37.00**	0.00	40.00
MCH	37.90	**H**	**32.27**	27.00	33.00
HDL-Cholesterol	35.45	**H**	**84.00**	37.00	92.00
Globulin	31.25	**H**	**3.20**	1.90	3.50
MCV	29.04	**H**	**95.60**	79.00	100.00
Phosphorus	25.00	**H**	**4.00**	2.50	4.50

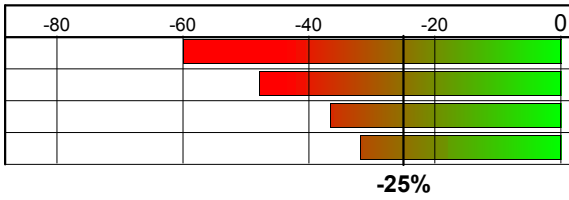
Basic Status High/Low - Urine Organic Acid on 10/2/2003

Anna **Foundational Wellness Profile Date: 10/2/2003**

Female / Age: 51

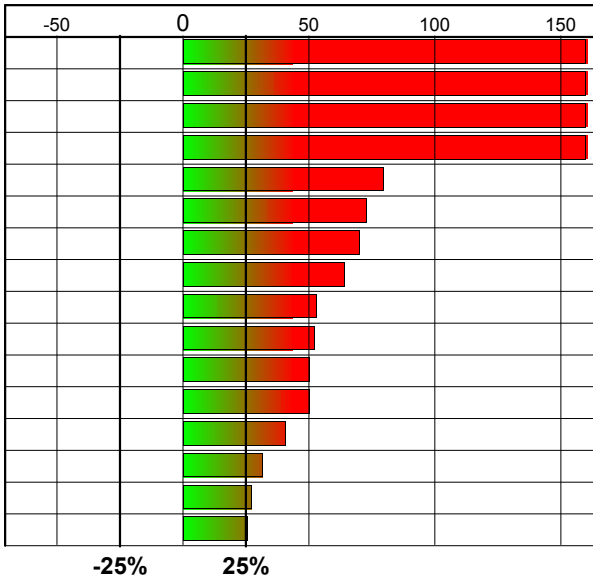
The % Status is the weighted deviation of the laboratory result.

Low Results



	% Status		Result	Low	High
Succinate	-60.00	L	**0.10**	2.00	21.00
b-Hydroxybutyrate	-47.78	L	**0.10**	0.00	4.50
Isocitrate	-36.67	L	**48.00**	40.00	100.00
Homovanillate	-31.82	L	**2.00**	1.00	6.50

High Results



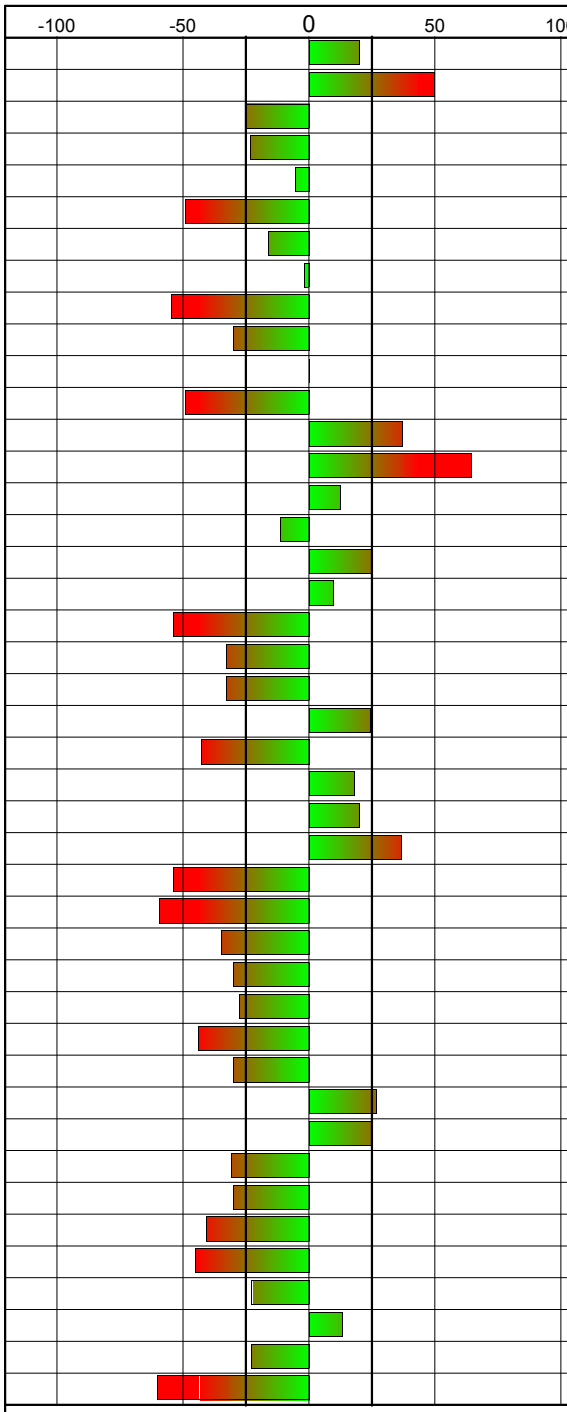
	% Status		Result	Low	High
Formiminoglutamic Acid	343.75	H	**0.63**	0.00	0.16
CA Cycle Entry	266.67	H	**380.00**	0.00	120.00
Hippurate	180.00	H	**644.00**	0.00	280.00
Phenylacetate	171.43	H	**0.31**	0.00	0.14
2-Methylhippurate	79.73	H	**0.10**	0.00	0.07
Tricarballylate	73.08	H	**1.60**	0.00	1.30
a-Ketoisocaproate	70.00	H	**0.60**	0.00	0.50
Glucarate	64.09	H	**170.00**	0.00	149.00
Quinolinate	52.86	H	**3.60**	0.00	3.50
Pyroglutamate	52.50	H	**16.40**	0.00	16.00
DHPP	50.00	H	**0.80**	0.00	0.80
Orotate	50.00	H	**1.10**	0.00	1.10
Tartarate	40.91	H	**10.00**	0.00	11.00
8-Hydroxy-2-deoxyguan	31.82	H	**0.09**	0.00	0.11
Methylmalonate	27.08	H	**3.70**	0.00	4.80
P-Hydroxyphenylacetate	25.56	H	**34.00**	0.00	45.00

Basic Status Alphabetic - Plasma Amino Acid on 10/2/2003

Anna **Foundational Wellness Profile Date: 10/2/2003**

Female / Age: 51

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



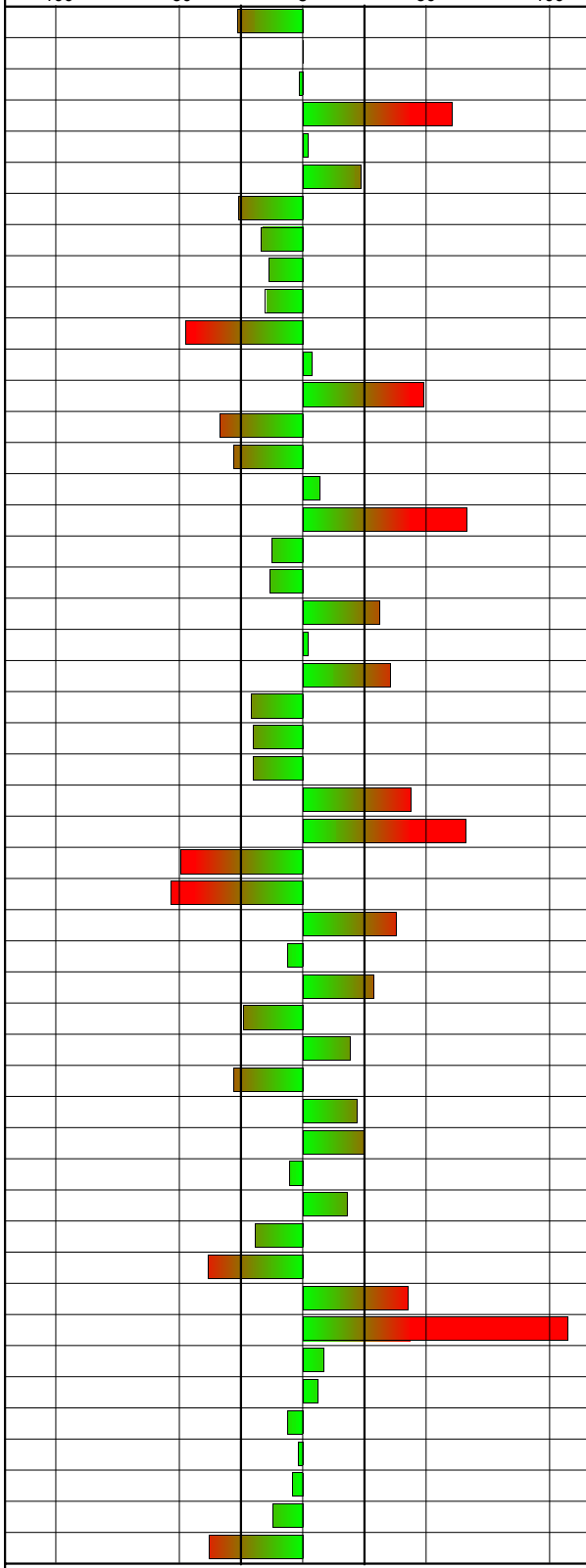
	% Status		Result	Low	High
1-Methylhistidine - P	20.00		14.00	0.00	20.00
3-Methylhistidine - P	**50.00**	**H**	**5.00**	0.00	5.00
a-Aminoadipic Acid - P	**-25.00**	**L**	**1.00**	0.00	4.00
a-Amino-N-Butyric Acid - P	-23.33		18.00	10.00	40.00
Alanine - P	-5.43		406.00	250.00	600.00
Anserine - P	**-49.00**	**L**	**0.01**	0.00	1.00
Arginine - P	-16.36		87.00	50.00	160.00
Asparagine - P	-1.76		86.00	45.00	130.00
Aspartic Acid - P	**-54.58**	**L**	**4.90**	6.00	30.00
b-Alanine - P	**-30.00**	**L**	**1.00**	0.00	5.00
b-Aminoisobutyric Acid - P	0.00		1.00	0.00	2.00
Carnosine - P	**-49.00**	**L**	**0.01**	0.00	1.00
Citrulline - P	**37.27**	**H**	**63.00**	15.00	70.00
Collagen Related AA	**64.67**	**H**	**182.00**	10.00	160.00
Cystathionine - P	12.50		2.50	0.00	4.00
Cystine - P	-11.25		41.00	10.00	90.00
Ethanolamine - P	**25.00**	**H**	**6.00**	0.00	8.00
GABA-P	10.00		3.00	0.00	5.00
Glutamic Acid - P	**-53.81**	**L**	**41.00**	45.00	150.00
Glutamine - P	**-32.89**	**L**	**677.00**	600.00	1050.00
Glycine - P	**-32.67**	**L**	**264.00**	225.00	450.00
Glycine/Serine Ratio	24.26		2.61	1.50	3.00
Histidine - P	**-42.86**	**L**	**75.00**	70.00	140.00
Homocystine - P	18.00		0.68	0.00	1.00
Hydroxylysine - P	20.00		0.70	0.00	1.00
Hydroxyproline - P	**36.67**	**H**	**26.00**	0.00	30.00
Isoleucine - P	**-53.64**	**L**	**46.00**	50.00	160.00
Leucine - P	**-59.09**	**L**	**80.00**	90.00	200.00
Lysine - P	**-34.67**	**L**	**173.00**	150.00	300.00
Methionine - P	**-30.00**	**L**	**30.00**	25.00	50.00
Ornithine - P	**-27.33**	**L**	**84.00**	50.00	200.00
Phenylalanine - P	**-43.68**	**L**	**51.00**	45.00	140.00
Phenylalanine/Tyrosine	**-30.07**	**L**	**0.74**	0.50	1.70
Phosphoethanolamine - P	**26.67**	**H**	**23.00**	0.00	30.00
Phosphoserine - P	**25.00**	**H**	**9.00**	0.00	12.00
Proline - P	**-30.74**	**L**	**182.00**	130.00	400.00
Sarcosine - P	**-30.00**	**L**	**1.00**	0.00	5.00
Serine - P	**-40.83**	**L**	**101.00**	90.00	210.00
Taurine - P	**-45.00**	**L**	**60.00**	50.00	250.00
Threonine - P	-22.67		141.00	100.00	250.00
Tryptophan - P	13.33		54.00	35.00	65.00
Tyrosine - P	-22.86		69.00	50.00	120.00
Valine - P	**-60.00**	**L**	**145.00**	170.00	420.00
Total Status Deviation	**32.37**				
Total Status Skew	**-15.70**				

Basic Status Alphabetic - Blood Test (CWP) on 10/2/2003

Anna **Foundational Wellness Profile Date: 10/2/2003**

Female / Age: 51

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



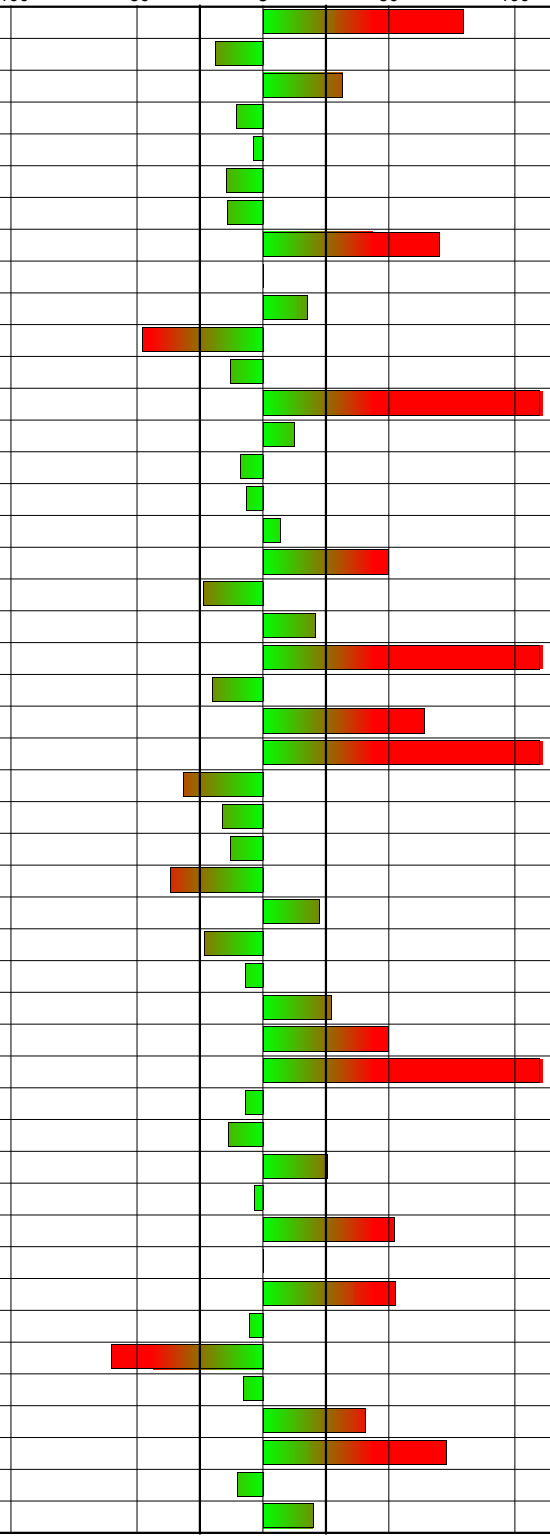
	% Status		Result	Low	High
A/G Ratio	**-26.44**	**L**	**1.41**	1.10	2.40
Albumin	0.00		4.50	3.50	5.50
Alkaline Phosphatase	-1.20		86.00	25.00	150.00
Anion Gap	**60.83**	**H**	**21.30**	8.00	20.00
B.U.N.	2.38		16.00	5.00	26.00
B.U.N./Creatinine Ratio	23.68		20.00	6.00	25.00
Basophil Count	**-26.00**	**L**	**48.00**	0.00	200.00
Basophils	-16.67		1.00	0.00	3.00
Bilirubin, Total	-13.64		0.50	0.10	1.20
Calcium	-15.22		9.30	8.50	10.80
Calcium/Phosphorus Ratio	**-47.50**	**L**	**2.33**	2.30	3.30
Chloride	3.85		103.00	96.00	109.00
Cholesterol	**49.00**	**H**	**239.00**	140.00	240.00
CO2	**-33.33**	**L**	**22.00**	20.00	32.00
Creatinine	**-27.78**	**L**	**0.80**	0.60	1.50
Eosinophil Count	7.20		336.00	50.00	550.00
Eosinophils	**66.67**	**H**	**7.00**	0.00	6.00
Free T4 Index (T7)	-12.50		7.00	4.00	12.00
GGT	-13.33		22.00	0.00	60.00
Globulin	**31.25**	**H**	**3.20**	1.90	3.50
Glucose	2.27		88.00	65.00	109.00
HDL-Cholesterol	**35.45**	**H**	**84.00**	37.00	92.00
Hematocrit	-20.71		39.10	35.00	49.00
Hemoglobin	-20.00		13.20	12.00	16.00
Iron, Total	-20.00		71.00	35.00	155.00
LDH	**43.75**	**H**	**200.00**	50.00	210.00
LDL	**66.18**	**H**	**141.00**	62.00	130.00
Lymphocyte Count	**-49.60**	**L**	**816.00**	800.00	4800.00
Lymphocytes	**-53.33**	**L**	**17.00**	18.00	48.00
MCH	**37.90**	**H**	**32.27**	27.00	33.00
MCHC	-6.01		33.76	32.00	36.00
MCV	**29.04**	**H**	**95.60**	79.00	100.00
Monocyte Count	-24.22		432.00	200.00	1100.00
Monocytes	19.23		9.00	0.00	13.00
Neutrophil Count	**-27.94**	**L**	**3168.00**	1800.00	8000.00
Neutrophils	22.00		66.00	48.00	73.00
Phosphorus	**25.00**	**H**	**4.00**	2.50	4.50
Potassium	-5.56		4.30	3.50	5.30
Protein, Total	18.00		7.70	6.00	8.50
Protein/Globulin Ratio	-19.37		2.41	2.10	3.10
R.B.C.	**-38.12**	**L**	**4.09**	3.90	5.50
sGOT	**42.50**	**H**	**37.00**	0.00	40.00
sGPT	**107.50**	**H**	**63.00**	0.00	40.00
Sodium	8.33		142.00	135.00	147.00
T-3 Uptake	6.00		32.40	24.00	39.00
Thyroxine (T4)	-6.25		7.50	4.00	12.00
Triglycerides	-1.68		72.00	0.00	149.00
Ultra-Sensitive TSH	-4.21		2.71	0.35	5.50
Uric Acid	-12.07		4.60	2.40	8.20
W.B.C.	**-37.69**	**L**	**4.80**	4.00	10.50
Total Status Deviation	**25.43**				
Total Status Skew	**2.67**				

Basic Status Alphabetic - Urine Organic Acid on 10/2/2003

Anna **Foundational Wellness Profile Date: 10/2/2003**

Female / Age: 51

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



	% Status		Result	Low	High
2-Methylhippurate	**79.73**	**H**	**0.10**	0.00	0.07
5-Hydroxyindoleacetate	-18.85		3.40	1.50	7.60
8-Hydroxy-2-deoxyguan	**31.82**	**H**	**0.09**	0.00	0.11
Adipate	-10.71		3.30	0.00	8.40
a-Hydroxybutyrate	-3.64		5.10	0.00	11.00
a-Keto-b-methylvalerate	-14.29		0.50	0.00	1.40
a-Ketoglutarate	-13.93		12.10	2.00	30.00
a-Ketoisocaproate	**70.00**	**H**	**0.60**	0.00	0.50
a-Ketoisovalerate	0.00		0.40	0.00	0.80
Benzoate	17.65		3.45	0.00	5.10
b-Hydroxybutyrate	**-47.78**	**L**	**0.10**	0.00	4.50
b-Hydroxyisovalerate	-12.73		4.10	0.00	11.00
CA Cycle Entry	**266.67**	**H**	**380.00**	0.00	120.00
CA Cycle Return	12.69		886.67	125.00	1340.00
cis-Aconitate	-8.82		78.00	50.00	118.00
Citramalate	-6.67		2.60	0.00	6.00
Citrate	7.12		532.00	175.00	800.00
DHPP	**50.00**	**H**	**0.80**	0.00	0.80
D-Lactate	-23.68		0.50	0.00	1.90
Ethylmalonate	20.83		8.50	0.00	12.00
Formiminoglutamic Acid	**343.75**	**H**	**0.63**	0.00	0.16
Fumarate	-20.00		0.30	0.00	1.00
Glucarate	**64.09**	**H**	**170.00**	0.00	149.00
Hippurate	**180.00**	**H**	**644.00**	0.00	280.00
Homovanillate	**-31.82**	**L**	**2.00**	1.00	6.50
Hydroxymethylglutarate	-16.13		4.10	2.00	8.20
Indican	-12.79		32.00	0.00	86.00
Isocitrate	**-36.67**	**L**	**48.00**	40.00	100.00
Kynurenate	22.50		2.90	0.00	4.00
Lactate	-23.33		4.40	2.00	11.00
Malate	-7.14		0.60	0.00	1.40
Methylmalonate	**27.08**	**H**	**3.70**	0.00	4.80
Orotate	**50.00**	**H**	**1.10**	0.00	1.10
Phenylacetate	**171.43**	**H**	**0.31**	0.00	0.14
Phenylpropionate	-7.14		0.03	0.00	0.07
p-Hydroxybenzoate	-13.64		0.40	0.00	1.10
P-Hydroxyphenylacetate	**25.56**	**H**	**34.00**	0.00	45.00
p-Hydroxyphenyllactate	-3.42		0.34	0.00	0.73
Pyroglutamate	**52.50**	**H**	**16.40**	0.00	16.00
Pyruvate	0.00		1.40	0.00	2.80
Quinolinate	**52.86**	**H**	**3.60**	0.00	3.50
Suberate	-5.56		1.20	0.00	2.70
Succinate	**-60.00**	**L**	**0.10**	2.00	21.00
Sulfate	-7.78		256.00	180.00	360.00
Tartarate	**40.91**	**H**	**10.00**	0.00	11.00
Tricarballylate	**73.08**	**H**	**1.60**	0.00	1.30
Vanillylmandelate	-10.00		2.80	0.80	5.80
Xanthurenate	20.00		0.70	0.00	1.00
Total Status Deviation	**43.21**				
Total Status Skew	**15.63**				

Nutritional Support

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

- ☐ **1-CAC Entry Protocol**
  See Nutrition Detail
- ☐ **1-Customized Amino Acids**
  8-10 grams daily
- ☐ **1-Detoxification Protocol**
  See Nutrition Detail
- ☐ **1-Digestive Enzymes**
  With meals
- ☐ **1-Folic Acid**
  2x daily 800 mcg
- ☐ **1-Oral Electrolyte - Sports Formula**
  2x daily
- ☐ **1-Saccharomyces boulardii**
  1-2 capsules with each meal
- ☐ **1-Yeast Reduction Protocol2**
  See Nutrition Detail
- ☐ **2-Glutathione (reduced)**
  2x daily 250 mg
- ☐ **2-Glycine**
  2x daily 500 mg
- ☐ **2-Magnesium Citrate or Glycinate**
  2x daily 150 mg
- ☐ **2-Magnesium, B6 & Manganese**
  2x daily see details
- ☐ **2-Trace Minerals**
  1x daily
- ☐ **2-Vitamin C**
  1x daily 1000 mg
- ☐ **3-Bromelain**
  3x daily 500 mg (Before meals)
- ☐ **H - Garlic**
  1 - 3 times daily
- ☐ **H - Green Tea**
  1 - 3 times daily (Can be used as a drink)
- ☐ **H - Milk thistle**
  1 - 3 times daily
- ☐ **H - Turmeric**
  1 - 3 times daily

Nutritional Supplements to AVOID

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

Phosphorus

Food Recommendations

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

Apricots, Dried	Artichoke	Blackberries	Bok Choy Cabbage
Boysenberries	Broccoli	Brussel Sprouts	Butter Beans
Cauliflower	Cucumber	Escarole	Fava Beans
Flounder	Grapefruit	Green Beans	Guava
Haddock	Halibut	Honeydew Melon	Kale
Kidney Beans	Loganberries	Mustard Greens	Peanuts
Rabbit	Red Peppers	Sole	Strawberries
Sturgeon	Wild Rice	Yams	

Foods to AVOID

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

Carrot Juice	Coffee	Eggplant	Hydrogenated Fats
Liver	Liver Pate	Milk, Nonfat Dry	Mozarella Cheese
Poultry Giblets	Pumpkin Seeds	Rice Bran	Squash
Sunflower Seeds			

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	64.38%	30.84%
Liver Detox Indicators	46.61%	44.02%
Intestinal Dysbiosis	44.36%	37.65%
Fat Metabolism	42.43%	-42.43%
Muscle Metabolites	42.00%	-7.00%
Allergy	41.63%	5.22%
Inflammatory Process	39.91%	36.05%
Essential Amino Acid	37.63%	-34.96%
Connective Tissue	37.22%	-10.55%
Differential	35.58%	7.58%
Liver Function	30.65%	23.60%
Neuroendocrine Met.	30.27%	-26.27%
Pulmonary Function	29.93%	14.47%
CNS Metabolism	29.30%	-11.12%
Ammonia/Energy	28.85%	-23.53%
Amino Acid Catabolism	28.10%	18.57%
Gastrointest. Function	27.55%	18.54%
Adrenal Function	27.35%	25.13%
Athletic Potential	27.21%	12.40%
Neurotransmitters	27.21%	2.94%
Hematology	27.07%	-7.94%
Differential Count	26.99%	-24.11%
Lipid	25.38%	24.83%

Lab Reported out-of-range Values

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

Formiminoglutamic Acid (343.75%)

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

CA Cycle Entry (266.67%)

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.

Hippurate (180.00%)

A high reading of this organic acid may be indicative of an overgrowth of intestinal microbiota. The use of glycine may help lower the results. The presence of this acid may be due to the action of bacteria on phenylalanine.

Drugs which may have an adverse affect:
Aspirin

Phenylacetate (171.43%)

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.

sGPT (107.50%)

Serum Glutamic Pyruvic Transaminase or ALT is an enzyme found primarily in the liver but also in the heart and other tissues. It is more useful in diagnosing liver function than sGOT levels are. Increased levels are seen in mononucleosis, alcoholism, liver damage, kidney infection, chemical pollutants, or myocardial infarction.

Drugs which may have an adverse affect:
Acetaminophen, Allopurinol, Amitriptyline, Ampicillin, Aspirin, Carbamazepine, Chlorpromazine, Clindamycin, Clofibrate, Codeine, Cortisone, Coumadin, Desipramine, Diazepam, Erythromycin, Fluphenazine, Flurazepam, Furosemide, Gentamicin, Griseofulvin, Guanethidine, Haloperidol, Hydralazine, Ibuprofen, Imipramine, Indomethacin, Itraconazole, Kanamycin, Ketocanazole, Levodopa, Levothyroxine, Lincomycin, Lovastatin, MAO Inhibitors, Mercaptopurine, Methimazole, Methotrexate, Methyldopa, Morphine, Naproxen, Nitrofurantoin, Paramethadione, Penicillamine, Phenelzine, Phenobarbital, Phenylbutazone, Phenytoin, Piroxicam, Polythiazide, Pravastatin, Procainamide, Progesterone, Progestins, Propranolol, Protriptyline, Rifampin, Spectinomycin, Sulfamethizole, Sulfamethoxazole, Sulfasalazine, Sulfisoxazole, Tetracycline, Trimethadione, Valproic Acid

Foods which may have an adverse affect:
Carrot Juice, Eggplant, Mozarella Cheese, Squash

CA Cycle Phase 6 (83.33%)

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.

2-Methylhippurate (79.73%)

This organic acid is an indication of exposure to or xylene. A comprehensive detoxification program should be undertaken to help the body excrete these petrochemicals. The use of antioxidants and glycine are recommended.

Tricarballylate (73.08%)

Elevated levels may be due to an overgrowth of intestinal bacteria. This organic acid binds very tightly to magnesium and may induce a deficiency in this important trace mineral. The bacteria that produces this element is also very fast growing.

Bacteria2 (71.43%)

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

a-Ketoisocaproate (70.00%)

This organic acid is elevated due to poor amino acid metabolism. Supplementation with a B complex may be necessary.

Eosinophils (66.67%)

Eosinophils protect the body from parasites and allergic reactions, therefore, elevated levels may indicate an allergic response.

Drugs which may have an adverse affect:
Allopurinol, Ampicillin, Carbamazepine, Chlorpromazine, Clindamycin, Desipramine, Erythromycin, Fluorides, Fluphenazine, Haloperidol, Imipramine, Indomethacin, Kanamycin, Methyldopa, Naproxen, Nitrofurantoin, Penicillamine, Penicillin, Phenylbutazone, Phenytoin, Procainamide, Protriptyline, Rifampin, Streptomycin, Sulfamethoxazole, Sulfasalazine, Sulfisoxazole, Tetracycline, Triameterene, Viomycin

LDL (66.18%)

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.

Collagen Related AA (64.67%)

A high reading of this combination of Proline, Hydroxyproline and Hydroxylysine may be indicative of connective tissue breakdown. Use of vitamin C and iron may be helpful in balancing this ratio.

Glucarate (64.09%)

Glucarate is a by-product of oxidation in the Phase 1 detoxification process involving cytochrome p450. Elevations may be indicative of toxic exposures, especially pesticides. Glycine and N-acetyl-cysteine are helpful supplements in reducing this reading.

Anion Gap (60.83%)

The anion gap is used to measure the concentration of cations (sodium and potassium) and the anions (chloride and CO2) in the extracellular fluid of the blood. Numerous clinical implications can be gathered from the Anion Gap. An increased measurement is associated with metabolic acidosis due to the overproduction of acids or severe dehydration.

Succinate (-60.00%)

A low reading of this organic acid may be indicative of a need for BCAA's (Branched Chain Amino Acids).

Valine - P (-60.00%)

Valine is one of the branched chain amino acids (BCAA) a group of essential amino acids (with leucine and isoleucine) involved in handling of stress, energy production, and muscle metabolism. Balanced supplementation of BCAA's has been reported to be effective in chronic liver disease, anorexia, recovery from surgery, and endocrine functioning. A low plasma level of valine may be due to muscle loss or inadequate stomach acid if other essential amino acids are also low.

Leucine - P (-59.09%)

Leucine is one of the branched chain amino acids (BCAA) a group of essential amino acids (with isoleucine and valine) involved in handling of stress, energy production, and muscle metabolism. Balanced supplementation of BCAA's has been reported to be effective in chronic liver disease, anorexia, recovery from surgery, and endocrine functioning. A low plasma level of leucine may be indicative of catabolization of skeletal muscle. Especially true if 3-methylhistidine is high.

AA Competency (-55.91%)

This ratio evaluates the general levels of the essential amino acids. Since they can only be gotten from diet or supplements it is important to increase intake of these components of protein.

Aspartic Acid - P (-54.58%)

Aspartic acid is a non-essential amino acid made from glutamate utilizing vitamin B6 in this conversion. It is involved in the urea and Krebs cycle (ammonia metabolism and carbohydrate metabolism). An excitatory amino acid, aspartic acid has been studied for the treatment of unipolar depression. This reading may be indicative of the inability to detoxify, especially ammonia. Fatigue may result from low levels.

AA Competency-2 (-53.85%)

This ratio evaluates the general levels of the essential amino acids. Since they can only be gotten from diet or supplements it is important to increase intake of these components of protein.

Glutamic Acid - P (-53.81%)

Glutamic acid is considered a excitatory nerotransmitter. It is critical in removing excess ammonia from the brain as well as helping deal with symptoms such as headache, irritability, and fatigue. A low plasma level of glutamic acid may be indicative of hyperammonemia especially if high glutamine is present.

Isoleucine - P (-53.64%)

Isoleucine is one of the branched chain amino acids (BCAA) a group of essential amino acids (with leucine and valine) involved in handling of stress, energy production, and muscle metabolism. Balanced supplementation of BCAA's has been reported to be effective in chronic liver disease, anorexia, recovery from surgery, and endocrine functioning. A low reading could be indicative of hypoglycemia, loss of muscle mass or the inability to build muscle.

Lymphocytes (-53.33%)

Lymphocytes are involved in protection of the body from viral infections such as measles, rubella, chickenpox, or infectious mononucleosis. Depressed levels may indicate an exhausted immune system or an active infection if the neutrophils are elevated.

Drugs which may have an adverse affect:
Hydrocortisone, Ibuprofen, Lithium, Prednisone

Quinolinate (52.86%)

A high reading of quinolinate is indicative of oxidative stress that may be favorably resolved by the use of vitamin E.

Pyroglutamate (52.50%)
A high level may be due to glutathione depletion as this organic acid is formed in the kidney from the amino acid glutathione.

3-Methylhistidine - P (50.00%)
May be indicative of the need for additional antioxidants.

Drugs which may have an adverse affect:
Cortisol

Bacteria Markers (-50.00%)
A low reading is consistant with health gut flora.

DHPP (50.00%)
Elevated levels may occur with an overgrowth of Clostridium. There are approximately 100 species of which 50 are known to be pathogenic. Clostridium is susceptible to Saccharomyces boulardii, flagyl, vancomycin, and biocidin, but antifungals result in increased overgrowth

Orotate (50.00%)
An elevated reading of this organic acid may be due to an arginine deficiency, ammonia intoxication, and by excessive lysine. Arginine, aspartic acid, alpha ketoglutarate, and magnesium may be helpful.

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1-CAC Entry Protocol See Nutrition Detail

Rationale

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 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.

Decreased	Normal	Increased
		CA Cycle Entry

1-Customized Amino Acids 8-10 grams daily

CUSTOMIZED AMINO ACIDS

A pattern suggesting amino acid insufficiency may be due to inadequate protein intake, chronic illness or malabsorption. Intake of a customized free-form amino acid supplement with appropriate nutrient cofactors (such as My AminoPlex) is advised.

Decreased	Normal	Increased
AA Competency		

1-Detoxification Protocol See Nutrition Detail

DETOXIFICATION PROTOCOL

Due to the elevated level of 2-Methylhippurate, is is important that you avoid xylene, a compound found in fossil fuels and as a solvent as well as toluene and styrene. A comprehensive detoxification protocol should include at least 250 mg of glycine daily along with a balanced amino acid complex and a broad spectrum antioxidant formula with Vitamin C and CoEnzyme Q10.
Adults:
Glycine - 500 mg 2x daily
Amino Acid Complex - 5 grams 2x daily
Broad Spectrum Antioxidant - 2x daily
Children:
Glycine - 250 mg 2x daily
Amino Acid Complex 2.5 grams 2x daily
Broad Spectrum Antioxidant - 1x daily

Decreased	Normal	Increased
		2-Methylhippurate Hippurate

1-Digestive Enzymes With meals

DIGESTIVE ENZYMES

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

Decreased	Normal	Increased
	Triglycerides	Cholesterol LDL

1-Folic Acid 2x daily 800 mcg

FOLIC ACID

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-Oral Electrolyte - Sports Formula 2x daily

ORAL ELECTROLYTE

The main electrolytes in the human body are sodium, potassium, phosphorus, calcium, chloride, magnesium and bicarbonate. During illness, the equilibrium present in healthy individuals, is disturbed. A well balanced formula is helpful in restoring a state of equilibrium. A sports formula will have greater levels of bicarbonate yet still keeping the proportion of the other salts in line.

Decreased	Normal	Increased
CO2		

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1-Saccharomyces boulardii 1-2 capsules with each meal

Rationale

Decreased	Normal	Increased
SACCHAROMYCES BOULARDII The beneficial organism S. boulardii is helpful in individuals with a high Dihydroxypheylpropionate (DHPP) level in their urine.		DHPP

1-Yeast Reduction Protocol2 See Nutrition Detail

Decreased	Normal	Increased
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.		Bacteria2

2-Glutathione (reduced) 2x daily 250 mg

Decreased	Normal	Increased
GLUTATHIONE Glutathione is a tripeptide made in the body from cysteine, glutamic acid and glycine. An accumulation of Pyroglutamate is indicative of glutathione depletion.		Pyroglutamate

2-Glycine 2x daily 500 mg

Decreased	Normal	Increased
GLYCINE Glycine is an important amino acid and it is helpful in lowering the levels of Benzoate and Hippurate.	Benzoate	Hippurate

2-Magnesium Citrate or Glycinate 2x daily 150 mg

Decreased	Normal	Increased
MAGNESIUM (Mg) Second most abundant 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		Ethanolamine - P

2-Magnesium, B6 & Manganese 2x daily see details

Decreased	Normal	Increased
MAGNESIUM (Mg) 250 mg Second most abundant cation 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. PYRIDOXINE (B6) 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. MANGANESE (Mn) 15 mg Concentrated in mitochondria, it stimulates the synthesis of cholesterol and fatty acids. Associated with a large number of enzymes in numerous areas of metabolism. Improves glucose tolerance, neurotransmission, vestibular and neuromuscular function.	Serine - P	Threonine - P	Phosphoserine - P

Anna **Foundational Wellness Profile Date: 10/2/2003**

Female / Age: 51

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2-Trace Minerals 1x daily

TRACE MINERALS - In addition to Protocols

Trace minerals are critical in almost all enzymatic reactions. A proper balance is crucial in the proper utilization of vitamins, fats and carbohydrates.

Rationale

Decreased	Normal	Increased
Lymphocyte Count		
Neutrophil Count		
R.B.C.		
W.B.C.		

2-Vitamin C 1x daily 1000 mg

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. Increases protection mechanism of the immune system. Also improves iron and calcium absorption as well as trace mineral utilization.

Decreased	Normal	Increased
W.B.C.	Triglycerides	LDL
	Alkaline Phosphatase	LDH

3-Bromelain 3x daily 500 mg Before meals

BROMELAIN

A enzyme present in pineapple stems, it has been shown to alter inflammatory protaglandin synthesis through interference with the arachadonic cascade.

Decreased	Normal	Increased
W.B.C.		Eosinophils
		LDH

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 - Green Tea 1 - 3 times daily Can be used as a drink

GREEN TEA

Green tea has been extensively reported to be very beneficial in the prevention of many forms of cancer as well as an potent antioxidant. Caution should be used when consuming green tea as it may contain caffeine. As with any herb, caution should be taken with its use.

Decreased	Normal	Increased
		Anion Gap
		Cholesterol

H - Milk thistle 1 - 3 times daily

MILK THISTLE

The herb milk thistle (Silybum marianum) has been reported to be effective in improving liver function. As with all herbs, caution should be taken with its use. Use only under the direction of a health care practitioner if you have chronic liver disease.

Decreased	Normal	Increased
		sGPT
		sGOT

H - Turmeric 1 - 3 times daily

TURMERIC

The herb Turmeric (Curcuma longa) and shown benfeits in the treatment of liver disorders as well as in inflammatory conditions, cancer prevention and in lowering cholesterol levels. The main ingredient in turmeric with the most therapeutic action is circumin. As with any herb, caution should be taken with its use. Discontinue use if there is significant gastrointestinal discomfort.

Decreased	Normal	Increased
		sGOT
		sGPT
		Cholesterol

AVOID THE FOLLOWING SUPPLEMENTS

AVOID Phosphorus

PHOSPHORUS (P)

Decreased	Normal	Increased
		Phosphorus

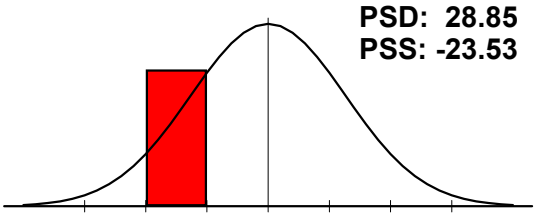
Drugs listed below tend to further aggravate elements of blood chemistry that are out of range (H or L). The (#) after each drug denotes the number of times that drug is flagged as being potentially harmful.

Acetaminophen(4)
Acetazolamide(2)
Acyclovir(2)
Allopurinol(5)
Amantadine(2)
Amitriptyline(4)
Amoxicillin
Ampicillin(5)
Aspirin
Aspirin(7)
Busulfan(2)
Carbamazepine(7)
Chlorpromazine(7)
Clindamycin(5)
Clofibrate(5)
Codeine(3)
Cortisol
Cortisone(3)
Coumadin(2)
Desipramine(5)
Diazepam(3)
Dilantin
Epinephrine(2)
Erythromycin(4)
Fluorides(5)
Fluphenazine(6)
Flurazepam(2)
Furosemide(6)
Gentamicin(3)
Griseofulvin(3)
Guanethidine(2)
Haloperidol(6)
Hydralazine
Hydrocortisone
Hydroxyurea(3)
Ibuprofen(8)
Imipramine(6)
Indomethacin(5)
Itraconazole(3)
Kanamycin(4)
Ketocanazole(2)
Levodopa(4)
Levothyroxine
Lincomycin(3)
Lithium(2)
Lovastatin(2)
MAO Inhibitors(4)
Mercaptopurine(4)
Methimazole(5)
Methotrexate(6)
Methyldopa(6)
Miconazole(2)
Morphine(3)
Naproxen(4)
Neomycin(3)
Nifedipine
Nitrofurantoin(6)
Oxacillin
Paramethadione(5)
Penicillamine(6)
Penicillin(4)
Phenelzine(3)
Phenobarbital(6)
Phenylbutazone(7)
Phenytoin(7)
Piroxicam(4)
Polythiazide(3)
Pravastatin(2)
Prednisone(4)
Procainamide(6)
Procarbazine(2)
Progesterone(2)
Progestins(2)
Propranolol(3)
Protriptyline(4)
Ramipril
Rifampin(5)
Salicylates
Salicylates
Spectinomycin
Steroids
Streptomycin(3)
Sulfamethizole(4)
Sulfamethoxazole(6)
Sulfasalazine(6)
Sulfisoxazole(6)
Tamoxifen(2)
Tetracycline(8)
Triameterene(4)
Trimethadione(6)
Valproic Acid(4)
Vancomycin
Vasopressin(2)
Viomycin(3)

Ammonia/Energy

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

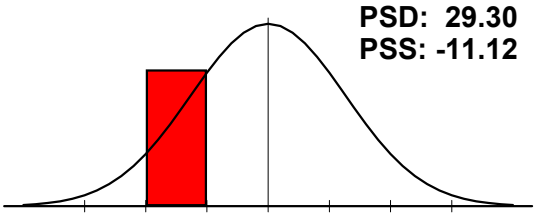
A panel profile such as this may be indicative of inadequate protein intake, poor absorption or poor quality protein intake.



CNS Metabolism

Arginine - P, Tryptophan - P, GABA-P, Glycine - P[L], Serine - P[L], Taurine - P[L], Aspartic Acid - P[L], Glutamine - P[L], Ethanolamine -.

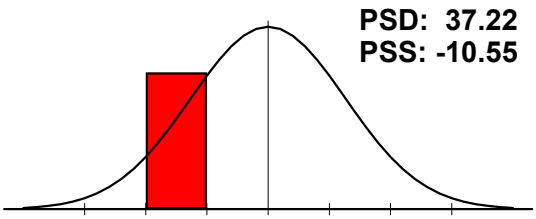
The panel profile seen here may be indicative of poor central nervous system functioning including memory loss, fatigue, poor concentration.



Connective Tissue

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

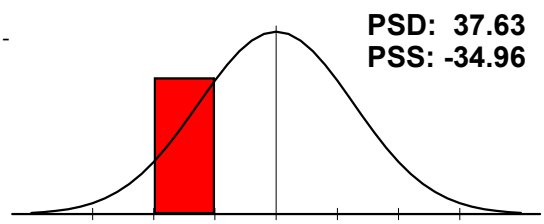
A profile such as this may be indicative of poor collagen and other tissue formation.



Essential Amino Acid

Arginine - P, Histidine - P[L], Isoleucine - P[L], Leucine - P[L], Lysine - P[L], Methionine - P[L], Phenylalanine - P[L], Threonine - P, Tr.

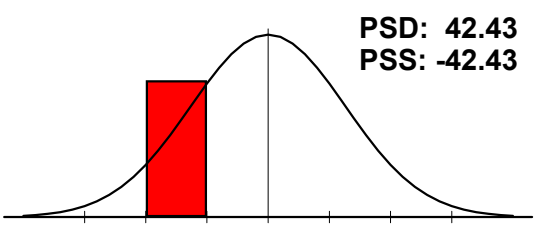
The panel profile seen here indicates a low density of essential amino acids. Since they cannot be synthesized in the human body, these building blocks must be taken in via diet or supplements.



Fat Metabolism

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

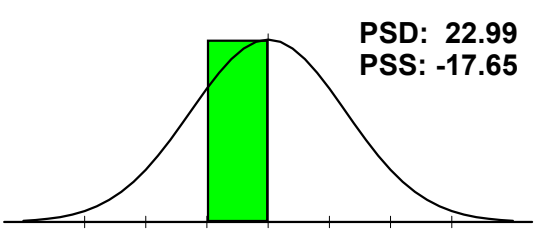
A panel profile such as this may indicate an inability of the body to properly metabolize dietary fats. Check for dysbiosis, or try supplementation with lipase digestive enzymes as well as broad spectrum amino acids.



Gluconeogen

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

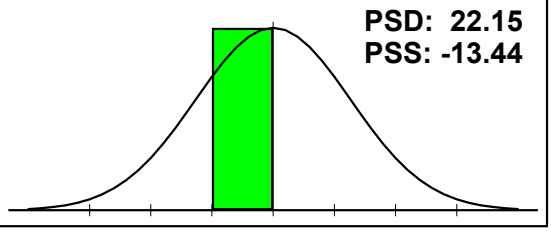
This panel profile is indicative of having the proper amino acids in balance to handle blood sugar issues.



Hepatic Metabolism

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

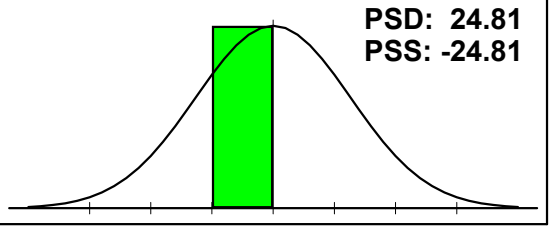
This panel is consistant with adequate stores of amino acids relevant to optimal liver function. This is important as the liver is responsible for detoxification.



Immune Metabolites

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

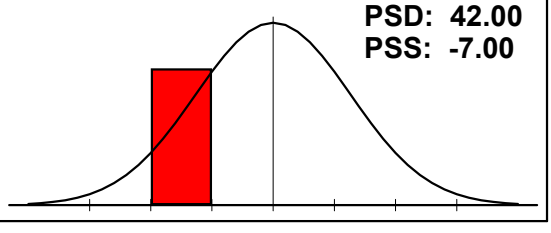
The panel profile seen here is indicative of having adequate amounts of the listed amino acids needed for proper immune system responses.



Muscle Metabolites

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

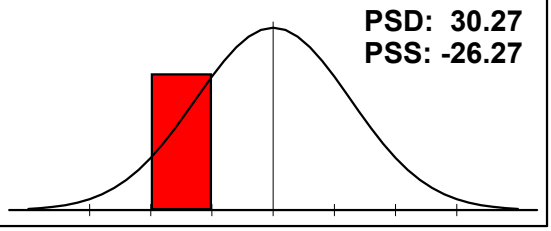
This panel profile may be indicative of the lack of ability in building muscle or a poor dietary intake of protein.



Neuroendocrine Met.

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

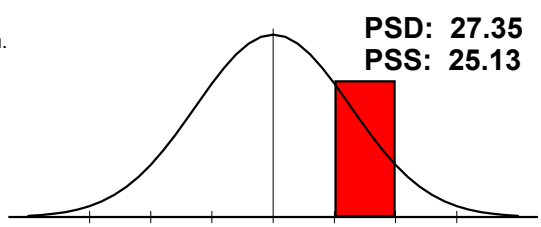
This panel profile may be indicative of an underfunctioning endocrine system or poor dietary intake of protein.



Adrenal Function

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

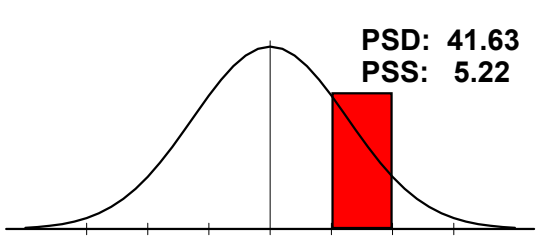
This profile may be in part due to poor nutritional habits, allergies and inadequate fluid intake. Clinical signs may include inability to handle stress, poor circulation, and fatigue.



Allergy

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

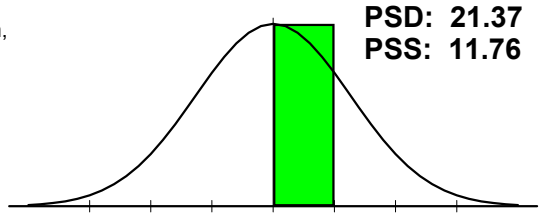
This panel profile may be due to allergies or a compromised immune system. Review the Differential and the Differential Count Panels for additional information. If Eosinophils are up and the CO2 is normal or depressed the likelihood of allergies is higher. If the Eosinophils and the CO2 are elevated than suspect parasites.



Anti Oxidant Status

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

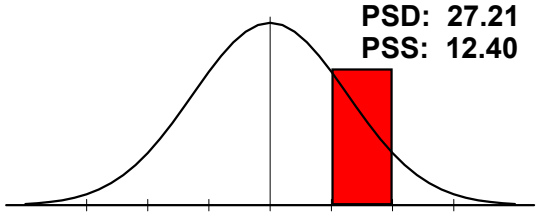
The elements in this panel help represent the antioxidant status of the individual. Excesses of deficiencies in this panel may indicate the need for additional antioxidants. The deviation was below 25% so no abnormalities were found.



Athletic Potential

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

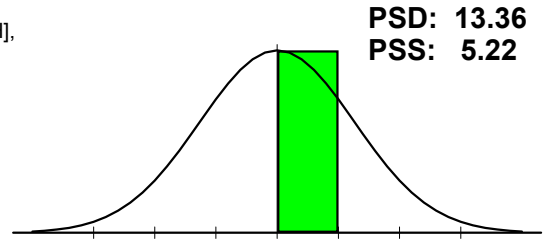
This profile indicates that the patient should have a complete physical before embarking on any exercise routine.



Bone/Joint

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

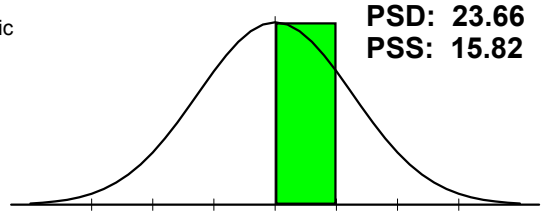
This panel may be helpful in assessing bone and joint health. Keeping the elements of this panel in a normal range may be helpful in reducing the risk of osteoporosis and other bone and joint disorders. The deviation was below 25% so no abnormalities were found.



Cardiac Marker

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

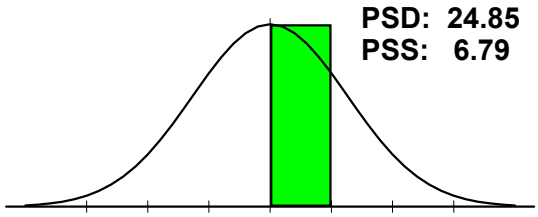
This panel may be helpful in assessing cardiovascular disease risk. Keeping the elements in this panel in a normal range is important in reducing the risk of CVD. The deviation was below 25% so no abnormalities were found.



Cellular Distortions

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

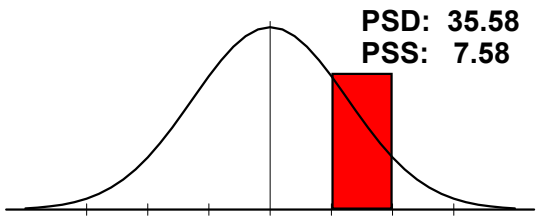
This panel may be helpful in determining the ability of the body to properly produce healthy cells. The deviation was below 25% so no abnormalities were found.



Differential

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

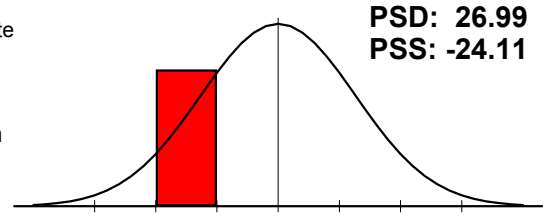
This panel profile may be indicative of a hightened immune system response. A careful review of the individual components of this panel is recommended.



Differential Count

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

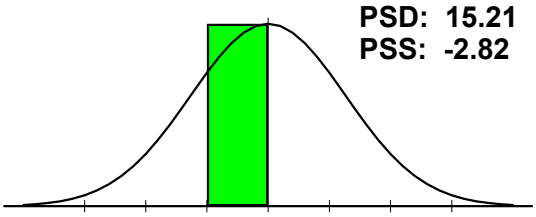
The negative Panel Status Skew may be due to the immune system being at rest if the Differential Panels Deviation is less than 25%, if it is higher than 25% than suspect a weakened or compromised immune system.



Electrolyte

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

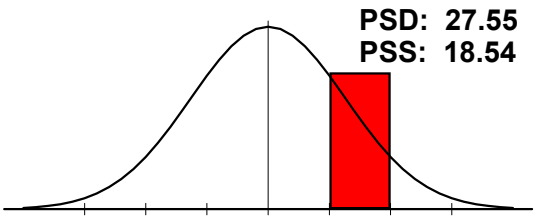
This panel is a representation of electrolyte balance in blood. Balance is critical in maintaining and achieving optimal health. The deviation was below 25% so no abnormalities were found.



Gastrointest. Function

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

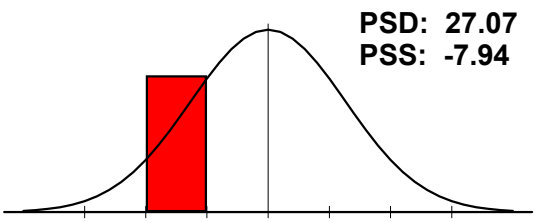
This panel profile indicates the need for further evaluation of gastrointestinal integrity, digestion and absorption. Check for dysbiosis, food allergies or "leaky gut" syndrome.



Hematology

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

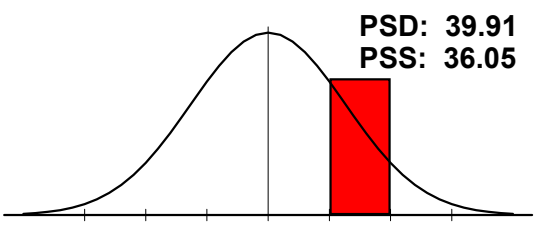
A profile such as this indicates the potential for anemias, overhydration, malnutrition, nutrient depletion, and heavy metal exposure (this list is not all-inclusive).



Inflammatory Process

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

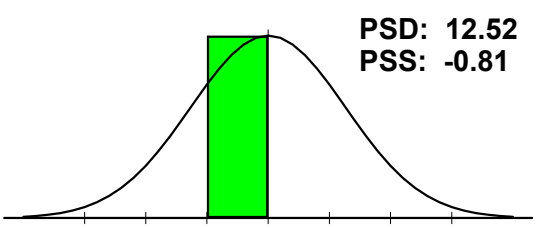
This panel profile may indicate the presence of an ongoing inflammatory process. Consider increasing B-complex vitamins and having the patient avoid saturated and trans fats as well.



Kidney Function

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

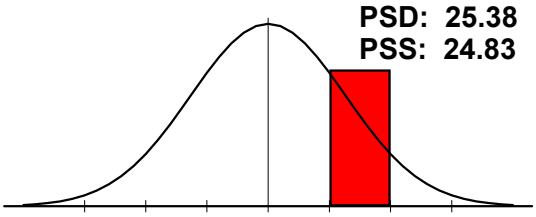
This panel may be helpful in assessing kidney function. It is important to keep the elements of this subset in balance to help the body eliminate waste material. The deviation was below 25% so no abnormalities were found.



Lipid

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

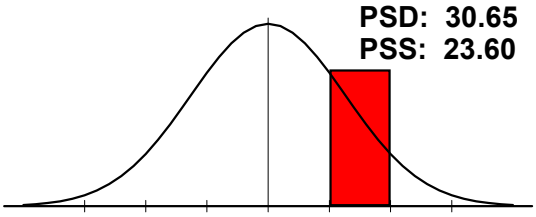
The panel profile seen here suggests that the patient may be at a greater risk for coronary heart disease than the general population. A dietary evaluation should be undertaken as well to educate the patient about saturated and trans fats.



Liver Function

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

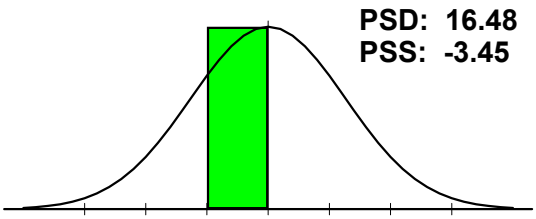
The panel profile seen here indicates that a review of medication intake with a careful assessment of toxic exposure, alcohol ingestion, cardiac involvement and liver disease (this list is not all-inclusive) may be helpful.



Nitrogen

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

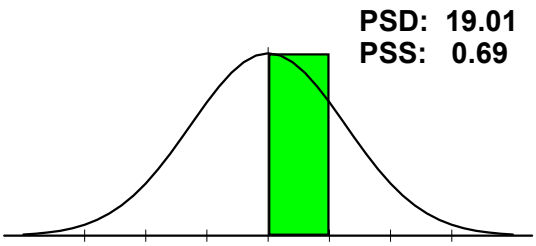
Nitrogen is an important element in achieving optimal wellness. The elements in this panel are important in determining nitrogen competency. The deviation was below 25% so no abnormalities were found.



Protein

A/G Ratio[L], Albumin, Globulin[H], Protein, Total, Protein/Globulin Ratio.

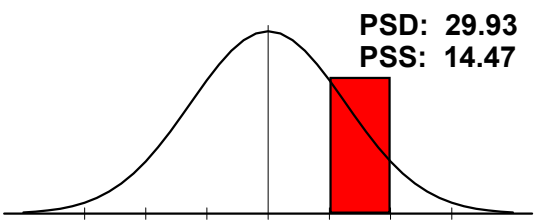
Proteins are the basic building blocks of hormones, muscle, neurotransmitters, immune systems responses and more. Assessing their competency is crucial in achieving optimal wellness. The deviation was below 25% so no abnormalities were found.



Pulmonary Function

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

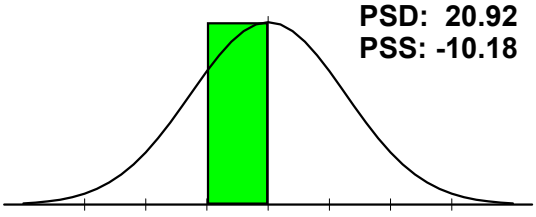
This panel profile should make one suspect abnormal pulmonary respiration, lung diseases, and toxic or viral infections.



Ratios

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

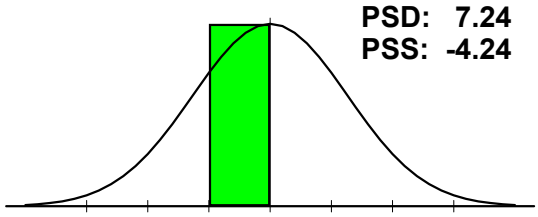
This panel may be helpful in determining the general balance of the overall chemistry of the individual. The deviation was below 25% so no abnormalities were found.



Thyroid

Thyroxine (T4), T-3 Uptake, Free T4 Index (T7), Ultra-Sensitive TSH.

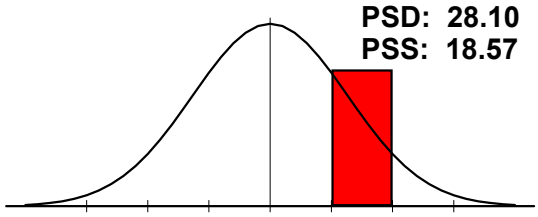
This panel may be helpful in determining the overal health of the thyroid gland. The deviation was below 25% so no abnormalities were found.



Amino Acid Catabolism

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

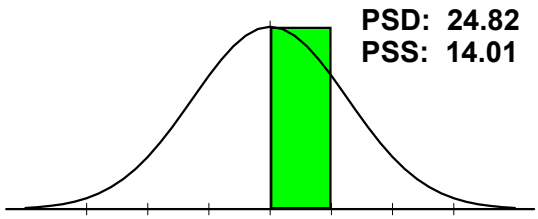
This panel profile may be due to the lack of precursors in the metabolism of the branched chain amino acids (Leucine, Isoleucine and Valine). Supplementation of B-complex vitamins may be helpful as well as lipoic acid. Review Nutritional Support for further details.



B-Complex Markers

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

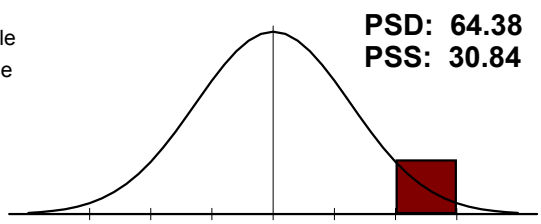
A normal panel profile such as this is an indicator of adequate intake of B-complex vitamins.



CAC Cycle Ratios

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

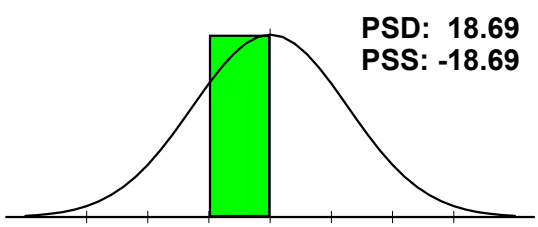
This panel reflects steps of the citric acid cycle. A high reading may be indicative of poor energy production and/or vitamin, mineral and amino acid deficiencies.



Carbohydrate Metabolism

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

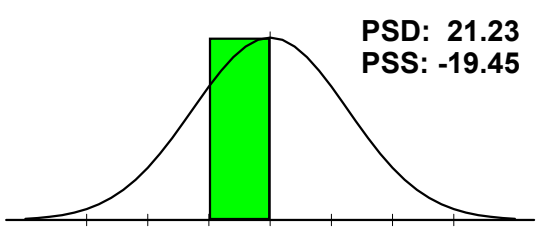
A normal reading is consistant with the proper metabolism of dietary carbohydrates.



Citric Acid Cycle

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

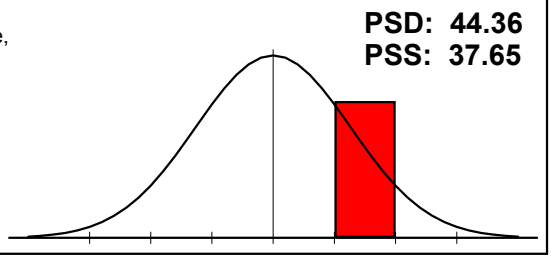
A normal reading such as this is consistant with a properly functioning citric acid cycle.



Intestinal Dysbiosis

Hippurate[H], Benzoate, p-Hydroxybenzoate, p-Hydroxyphenyllactate, Phenylacetate[H], Phenylpropionate, Tricarballylate[H], DHPP[H], Citramal.

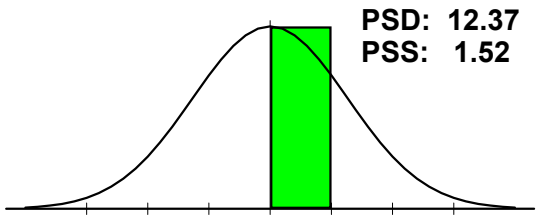
This panel profile may be indicative of intestinal dysbiosis. Poor absorption and metabolism of proteins, fats and carbohydrates may occur. A review of potential bacteria, protozoa, Clostridial spp., yeast or fungus may be necessary.



Lipid Metabolism

Adipate, Suberate, Ethylmalonate.

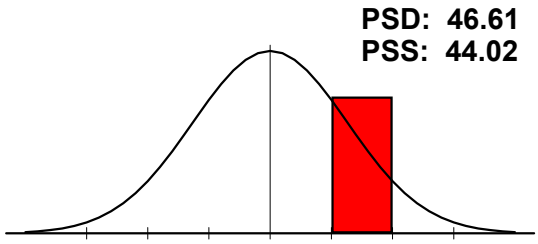
This panel profile is indicative of proper lipid metabolism.



Liver Detox Indicators

2-Methylhippurate[H], Glucarate[H], P-Hydroxyphenylacetate[H], Orotate[H], Pyroglutamate[H], Sulfate.

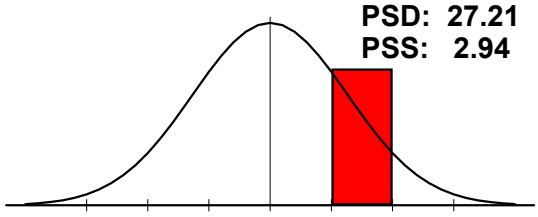
This panel profile may be due in part to environmental toxins, improper regulation of cell growth, hereditary deficiencies, and a depressed ability of the liver to detoxify itself. A program of detoxification may be helpful in this case. Review Nutritional Status for additional recommendations.



Neurotransmitters

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

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



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.

Fatigue/Low Cellular Energy Production () 100.00% (1 of 1)

Decreased	*Normal*	*Increased*
-54.58 Aspartic Acid - P		

Impaired Ca+ and Zn Transport () 100.00% (2 of 2)

Decreased	*Normal*	*Increased*
-49.00 Anserine - P		
-49.00 Carnosine - P		

Mild Hyperammonemia () 100.00% (1 of 1)

Decreased	*Normal*	*Increased*
-53.81 Glutamic Acid - P		

Potential Excessive Oxidative Damage () 100.00% (1 of 1)

Decreased	*Normal*	*Increased*
-45.00 Taurine - P		

Potential Rheumatoid Arthritis () 100.00% (1 of 1)

Decreased	*Normal*	*Increased*
-42.86 Histidine - P		

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

Decreased	*Normal*	*Increased*
-59.09 Leucine - P		**50.00 3-Methylhistidine - P**
-60.00 Valine - P		
20.00 Hydroxylysine - P		
-30.74 Proline - P		

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.

Decreased Pulmonary Function () 77.78% (7 of 9)

Decreased	*Normal*	*Increased*
-33.33 CO2	**0.00 Albumin**	**43.75 LDH**
	2.38 B.U.N.	**42.50 sGOT**
	-27.78 Creatinine	**107.50 sGPT**
	-20.71 Hematocrit	-37.69 W.B.C.

A blood chemistry which matches this pattern may suggest sub-optimal breathing and/or lung capacity.

Ammonia Toxicity/Buildup () 75.00% (3 of 4)

Decreased	*Normal*	*Increased*
-53.64 Isoleucine - P		-32.89 Glutamine - P
-54.58 Aspartic Acid - P		
-53.81 Glutamic Acid - P		

Anna **Foundational Wellness Profile Date: 10/2/2003**

Female / Age: 51

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.

Hypothermia (991.60) 66.67% (4 of 6)

Decreased	*Normal*	*Increased*
-33.33 CO2		2.27 Glucose
8.33 Sodium		**43.75 LDH**
		42.50 sGOT
		107.50 sGPT

Tetanus (37.00) 66.67% (4 of 6)

Decreased	*Normal*	*Increased*
-53.33 Lymphocytes		**43.75 LDH**
		22.00 Neutrophils
		42.50 sGOT
		107.50 sGPT
		-37.69 W.B.C.

Anna **Foundational Wellness Profile Date: 10/2/2003**

Female / Age: 51

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

Status % on:	6/10/2003		10/2/2003		+/- change
Collagen Related AA	15.33		**64.67**	**H**	**- 49.33**
3-Methylhistidine - P	10.00		**50.00**	**H**	**- 40.00**
Citrulline - P	-2.73		**37.27**	**H**	**- 34.55**
a-Aminoadipic Acid - P	0.00		**-25.00**	**L**	**- 25.00**
Asparagine - P	**-64.12**	**L**	-1.76		+ 62.35
Histidine - P	**-104.29**	**L**	**-42.86**	**L**	**+ 61.43**
Glutamine - P	**-90.67**	**L**	**-32.89**	**L**	**+ 57.78**
Tryptophan - P	**-66.67**	**L**	13.33		+ 53.33
Tyrosine - P	**-67.14**	**L**	-22.86		+ 44.29
Threonine - P	**-64.67**	**L**	-22.67		+ 42.00
Methionine - P	**-66.00**	**L**	**-30.00**	**L**	**+ 36.00**
Cystine - P	**-42.50**	**L**	-11.25		+ 31.25
Glycine - P	**-62.44**	**L**	**-32.67**	**L**	**+ 29.78**
Proline - P	**-58.15**	**L**	**-30.74**	**L**	**+ 27.41**
1-Methylhistidine - P	**-45.00**	**L**	20.00		+ 25.00

Comparison Report

Anna **Foundational Wellness Profile Date: 10/2/2003**

Female / Age: 51

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:	6/10/2003		10/2/2003	
-45.00 → 20.00	+	1-Methylhistidine - P	**-45.00**	L	20.00	
10.00 → **50.00**	-	3-Methylhistidine - P	10.00		**50.00**	H
-25.00 ← 0.00	-	a-Aminoadipic Acid - P	0.00		**-25.00**	L
-36.67 → -23.33	+	a-Amino-N-Butyric Acid - P	**-36.67**	L	-23.33	
-28.86 → -5.43	+	Alanine - P	**-28.86**	L	-5.43	
		Anserine - P	**-49.00**	L	**-49.00**	L
-33.64 → -16.36	+	Arginine - P	**-33.64**	L	-16.36	
-64.12 → -1.76	+	Asparagine - P	**-64.12**	L	-1.76	
		Aspartic Acid - P	**-54.17**	L	**-54.58**	L
		b-Alanine - P	**-30.00**	L	**-30.00**	L
		b-Aminoisobutyric Acid - P	0.00		0.00	
		Carnosine - P	**-49.00**	L	**-49.00**	L
-2.73 → **37.27**	-	Citrulline - P	-2.73		**37.27**	H
15.33 → **64.67**	-	Collagen Related AA	15.33		**64.67**	H
12.50 ← **25.00**	+	Cystathionine - P	**25.00**	H	12.50	
-42.50 → -11.25	+	Cystine - P	**-42.50**	L	-11.25	
		Ethanolamine - P	**25.00**	H	**25.00**	H
-30.00 → 10.00	+	GABA-P	**-30.00**	L	10.00	
		Glutamic Acid - P	**-60.48**	L	**-53.81**	L
-90.67 → **-32.89**	+	Glutamine - P	**-90.67**	L	**-32.89**	L
-62.44 → **-32.67**	+	Glycine - P	**-62.44**	L	**-32.67**	L
8.23 → 24.26	-	Glycine/Serine Ratio	8.23		24.26	
-104.29 → **-42.86**	+	Histidine - P	**-104.29**	L	**-42.86**	L
		Homocystine - P	18.00		18.00	
		Hydroxylysine - P	16.00		20.00	
		Hydroxyproline - P	**-33.33**	L	**36.67**	H
-65.45 → **-53.64**	+	Isoleucine - P	**-65.45**	L	**-53.64**	L
		Leucine - P	**-64.55**	L	**-59.09**	L
-54.67 → **-34.67**	+	Lysine - P	**-54.67**	L	**-34.67**	L
-66.00 → **-30.00**	+	Methionine - P	**-66.00**	L	**-30.00**	L
-48.67 → **-27.33**	+	Ornithine - P	**-48.67**	L	**-27.33**	L
-61.58 → **-43.68**	+	Phenylalanine - P	**-61.58**	L	**-43.68**	L
-30.07 ← -17.11	-	Phenylalanine/Tyrosine	-17.11		**-30.07**	L
		Phosphoethanolamine - P	**-26.67**	L	**26.67**	H
8.33 → **25.00**	-	Phosphoserine - P	8.33		**25.00**	H
-58.15 → **-30.74**	+	Proline - P	**-58.15**	L	**-30.74**	L
		Sarcosine - P	**-30.00**	L	**-30.00**	L
-55.83 → **-40.83**	+	Serine - P	**-55.83**	L	**-40.83**	L
-56.50 → **-45.00**	+	Taurine - P	**-56.50**	L	**-45.00**	L
-64.67 → -22.67	+	Threonine - P	**-64.67**	L	-22.67	
-66.67 → 13.33	+	Tryptophan - P	**-66.67**	L	13.33	
-67.14 → -22.86	+	Tyrosine - P	**-67.14**	L	-22.86	
-69.20 → **-60.00**	+	Valine - P	**-69.20**	L	**-60.00**	L
		Total Status Deviation	**43.76**		**32.37**	
		Total Status Skew	**-38.29**		**-15.70**	

Comparison Progress Report

Anna **Foundational Wellness Profile Date: 10/2/2003**

Female / Age: 51 Anna Salanti (2718)

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

Status % on:	6/10/2003		10/2/2003		+/- change
sGPT	7.50		**107.50**	**H**	**- 100.00**
sGOT	7.50		**42.50**	**H**	**- 35.00**
Eosinophils	**33.33**	**H**	**66.67**	**H**	**- 33.33**
Lymphocytes	**-26.67**	**L**	**-53.33**	**L**	**- 26.67**
HDL-Cholesterol	10.00		**35.45**	**H**	**- 25.45**
CO2	-8.33		**-33.33**	**L**	**- 25.00**
Basophils	**-50.00**	**L**	-16.67		+ 33.33
Ultra-Sensitive TSH	**-34.47**	**L**	-4.21		+ 30.25

Comparison Report

Anna — **Foundational Wellness Profile Date: 10/2/2003**

Female / Age: 51

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:	6/10/2003		10/2/2003	
		A/G Ratio	**-26.92**	**L**	**-26.44**	**L**
-15.00 → 0.00	+	Albumin	-15.00		0.00	
		Alkaline Phosphatase	2.80		-1.20	
36.67 → **60.83**	-	Anion Gap	**36.67**	**H**	**60.83**	**H**
2.38 ← 11.90	+	B.U.N.	11.90		2.38	
23.68 ← **36.84**	+	B.U.N./Creatinine Ratio	**36.84**	**H**	23.68	
-50.00 → **-26.00**	+	Basophil Count	**-50.00**	**L**	**-26.00**	**L**
-50.00 → -16.67	+	Basophils	**-50.00**	**L**	-16.67	
-22.73 → -13.64	+	Bilirubin, Total	-22.73		-13.64	
		Calcium	-19.57		-15.22	
-47.50 ← -24.44	-	Calcium/Phosphorus Ratio	-24.44		**-47.50**	**L**
3.85 ← 19.23	+	Chloride	19.23		3.85	
		Cholesterol	**48.00**	**H**	**49.00**	**H**
-33.33 ← -8.33	-	CO2	-8.33		**-33.33**	**L**
		Creatinine	**-27.78**	**L**	**-27.78**	**L**
-24.00 → 7.20	+	Eosinophil Count	-24.00		7.20	
33.33 → **66.67**	-	Eosinophils	**33.33**	**H**	**66.67**	**H**
-23.75 → -12.50	+	Free T4 Index (T7)	-23.75		-12.50	
-23.33 → -13.33	+	GGT	-23.33		-13.33	
18.75 → **31.25**	-	Globulin	18.75		**31.25**	**H**
		Glucose	-2.27		2.27	
10.00 → **35.45**	-	HDL-Cholesterol	10.00		**35.45**	**H**
		Hematocrit	-17.14		-20.71	
		Hemoglobin	-17.50		-20.00	
-31.67 → -20.00	+	Iron, Total	**-31.67**	**L**	-20.00	
		LDH	**38.13**	**H**	**43.75**	**H**
66.18 ← **85.29**	+	LDL	**85.29**	**H**	**66.18**	**H**
		Lymphocyte Count	**-47.50**	**L**	**-49.60**	**L**
-53.33 ← **-26.67**	-	Lymphocytes	**-26.67**	**L**	**-53.33**	**L**
		MCH	**36.72**	**H**	**37.90**	**H**
		MCHC	-10.35		-6.01	
		MCV	**30.40**	**H**	**29.04**	**H**
-36.22 → -24.22	+	Monocyte Count	**-36.22**	**L**	-24.22	
		Monocytes	19.23		19.23	
-43.61 → **-27.94**	+	Neutrophil Count	**-43.61**	**L**	**-27.94**	**L**
2.00 → 22.00	-	Neutrophils	2.00		22.00	
5.00 → **25.00**	-	Phosphorus	5.00		**25.00**	**H**
		Potassium	0.00		-5.56	
-2.00 → 18.00	-	Protein, Total	-2.00		18.00	
		Protein/Globulin Ratio	-20.00		-19.37	
		R.B.C.	**-35.62**	**L**	**-38.12**	**L**
7.50 → **42.50**	-	sGOT	7.50		**42.50**	**H**
7.50 → **107.50**	-	sGPT	7.50		**107.50**	**H**
8.33 ← **25.00**	+	Sodium	**25.00**	**H**	8.33	
		T-3 Uptake	2.67		6.00	
-17.50 → -6.25	+	Thyroxine (T4)	-17.50		-6.25	
		Triglycerides	-2.35		-1.68	
-34.47 → -4.21	+	Ultra-Sensitive TSH	**-34.47**	**L**	-4.21	
		Uric Acid	-12.07		-12.07	
-56.15 → **-37.69**	+	W.B.C.	**-56.15**	**L**	**-37.69**	**L**
		Total Status Deviation	**23.76**		**25.43**	
		Total Status Skew	**-4.82**		**2.67**	

Comparison Progress Report

Anna **Foundational Wellness Profile Date: 10/2/2003**

Female / Age: 51

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

Status % on:	6/10/2003		10/2/2003		+/- change
CA Cycle Entry	**103.51**	**H**	**266.67**	**H**	**- 163.16**
Hippurate	**35.71**	**H**	**180.00**	**H**	**- 144.29**
Formiminoglutamic Acid	**231.25**	**H**	**343.75**	**H**	**- 112.50**
Phenylacetate	**92.86**	**H**	**171.43**	**H**	**- 78.57**
CA Cycle Phase 6	-19.70		**83.33**	**H**	**- 63.64**
a-Ketoisocaproate	-10.00		**70.00**	**H**	**- 60.00**
Succinate	1.58		**-60.00**	**L**	**- 58.42**
Glucarate	-17.79		**64.09**	**H**	**- 46.31**
Orotate	-4.55		**50.00**	**H**	**- 45.45**
b-Hydroxybutyrate	3.33		**-47.78**	**L**	**- 44.44**
Homovanillate	-6.36		**-31.82**	**L**	**- 25.45**
Bacteria2	**46.43**	**H**	**71.43**	**H**	**- 25.00**
Benzoate	**386.86**	**H**	17.65		+ 369.22
p-Hydroxybenzoate	**104.55**	**H**	-13.64		+ 90.91
Pyruvate	**85.71**	**H**	0.00		+ 85.71
DHPP	**125.00**	**H**	**50.00**	**H**	**+ 75.00**
a-Hydroxybutyrate	**60.91**	**H**	-3.64		+ 57.27
8-Hydroxy-2-deoxyguan	**86.36**	**H**	**31.82**	**H**	**+ 54.55**
Phenylpropionate	**50.00**	**H**	-7.14		+ 42.86
CA Cycle Return	**54.94**	**H**	12.69		+ 42.25
cis-Aconitate	**50.00**	**H**	-8.82		+ 41.18
Fumarate	**60.00**	**H**	-20.00		+ 40.00
Kynurenate	**52.50**	**H**	22.50		+ 30.00
2-Methylhippurate	**109.46**	**H**	**79.73**	**H**	**+ 29.73**
Pyroglutamate	**80.00**	**H**	**52.50**	**H**	**+ 27.50**
Citrate	**34.00**	**H**	7.12		+ 26.88
Ethylmalonate	**47.50**	**H**	20.83		+ 26.67

Comparison Report

Anna **Foundational Wellness Profile Date: 10/2/2003**

Female / Age: 51

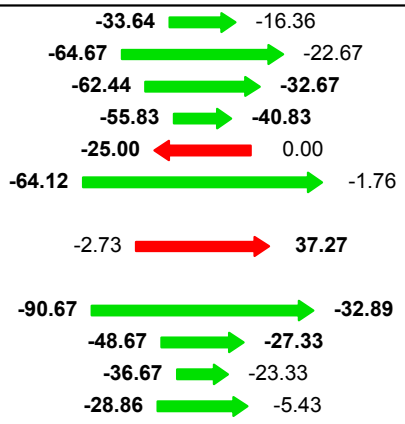
The arrow's length is proportional to change. Left to right is increase. Right to left is decrease.
Green is improvement. Red is decline.

	+/-	Status % on:	6/10/2003		10/2/2003	
79.73 ← **109.46**	+	2-Methylhippurate	**109.46**	H	**79.73**	H
		5-Hydroxyindoleacetate	**25.41**	H	-18.85	
31.82 ← **86.36**	+	8-Hydroxy-2-deoxyguan	**86.36**	H	**31.82**	H
		Adipate	-11.90		-10.71	
-3.64 ← **60.91**	+	a-Hydroxybutyrate	**60.91**	H	-3.64	
		a-Keto-b-methylvalerate	-21.43		-14.29	
		a-Ketoglutarate	8.21		-13.93	
-10.00 → **70.00**	-	a-Ketoisocaproate	-10.00		**70.00**	H
-12.50 → 0.00	+	a-Ketoisovalerate	-12.50		0.00	
17.65 ← **386.86**	+	Benzoate	**386.86**	H	17.65	
-47.78 ← 3.33	-	b-Hydroxybutyrate	3.33		**-47.78**	L
		b-Hydroxyisovalerate	7.27		-12.73	
103.51 → **266.67**	-	CA Cycle Entry	**103.51**	H	**266.67**	H
12.69 ← **54.94**	+	CA Cycle Return	**54.94**	H	12.69	
-8.82 ← **50.00**	+	cis-Aconitate	**50.00**	H	-8.82	
		Citramalate	5.00		-6.67	
7.12 ← **34.00**	+	Citrate	**34.00**	H	7.12	
50.00 ← **125.00**	+	DHPP	**125.00**	H	**50.00**	H
-23.68 ← 7.89	-	D-Lactate	7.89		-23.68	
20.83 ← **47.50**	+	Ethylmalonate	**47.50**	H	20.83	
231.25 → **343.75**	-	Formiminoglutamic Acid	**231.25**	H	**343.75**	H
-20.00 ← **60.00**	+	Fumarate	**60.00**	H	-20.00	
-17.79 → **64.09**	-	Glucarate	-17.79		**64.09**	H
35.71 → **180.00**	-	Hippurate	**35.71**	H	**180.00**	H
-31.82 ← -6.36	-	Homovanillate	-6.36		**-31.82**	L
-16.13 ← 8.06	-	Hydroxymethylglutarate	8.06		-16.13	
		Indican	16.28		-12.79	
-36.67 ← -21.67	-	Isocitrate	-21.67		**-36.67**	L
22.50 ← **52.50**	+	Kynurenate	**52.50**	H	22.50	
		Lactate	23.33		-23.33	
		Malate	-14.29		-7.14	
14.58 → **27.08**	-	Methylmalonate	14.58		**27.08**	H
-4.55 → **50.00**	-	Orotate	-4.55		**50.00**	H
92.86 → **171.43**	-	Phenylacetate	**92.86**	H	**171.43**	H
-7.14 ← **50.00**	+	Phenylpropionate	**50.00**	H	-7.14	
-13.64 ← **104.55**	+	p-Hydroxybenzoate	**104.55**	H	-13.64	
10.00 → **25.56**	-	P-Hydroxyphenylacetate	10.00		**25.56**	H
		p-Hydroxyphenyllactate	-6.16		-3.42	
52.50 ← **80.00**	+	Pyroglutamate	**80.00**	H	**52.50**	H
0.00 ← **85.71**	+	Pyruvate	**85.71**	H	0.00	
52.86 ← **61.43**	+	Quinolinate	**61.43**	H	**52.86**	H
		Suberate	5.56		-5.56	
-60.00 ← 1.58	-	Succinate	1.58		**-60.00**	L
		Sulfate	7.78		-7.78	
-24.55 → **40.91**	-	Tartarate	-24.55		**40.91**	H
65.38 → **73.08**	-	Tricarballylate	**65.38**	H	**73.08**	H
-10.00 ← **26.00**	+	Vanillylmandelate	**26.00**	H	-10.00	
20.00 ← **40.00**	+	Xanthurenate	**40.00**	H	20.00	
		Total Status Deviation	**44.78**		**43.21**	
		Total Status Skew	**26.46**		**15.63**	

Anna
Female / Age: 51

Foundational Wellness Profile Date: 10/2/2003

Ammonia/Energy	6/10/2003		10/2/2003		+/-
Arginine - P	**-33.64**	L	-16.36		+
Threonine - P	**-64.67**	L	-22.67		+
Glycine - P	**-62.44**	L	**-32.67**	L	+
Serine - P	**-55.83**	L	**-40.83**	L	+
a-Aminoadipic Acid - P	0.00		**-25.00**	L	-
Asparagine - P	**-64.12**	L	-1.76		+
Aspartic Acid - P	**-54.17**	L	**-54.58**	L	
Citrulline - P	-2.73		**37.27**	H	-
Glutamic Acid - P	**-60.48**	L	**-53.81**	L	
Glutamine - P	**-90.67**	L	**-32.89**	L	+
Ornithine - P	**-48.67**	L	**-27.33**	L	+
a-Amino-N-Butyric Acid - P	**-36.67**	L	-23.33		+
Alanine - P	**-28.86**	L	-5.43		+
b-Alanine - P	**-30.00**	L	**-30.00**	L	
PSS / PSD	-45.21 / 45.21		-23.53 / 28.85		



CNS Metabolism	6/10/2003		10/2/2003		+/-
Arginine - P	**-33.64**	L	-16.36		+
Tryptophan - P	**-66.67**	L	13.33		+
GABA-P	**-30.00**	L	10.00		+
Glycine - P	**-62.44**	L	**-32.67**	L	+
Serine - P	**-55.83**	L	**-40.83**	L	+
Taurine - P	**-56.50**	L	**-45.00**	L	+
Aspartic Acid - P	**-54.17**	L	**-54.58**	L	
Glutamine - P	**-90.67**	L	**-32.89**	L	+
Ethanolamine - P	**25.00**	H	**25.00**	H	
Phosphoethanolamine - P	**-26.67**	L	**26.67**	H	
Phosphoserine - P	8.33		**25.00**	H	-
PSS / PSD	-40.30 / 46.36		-11.12 / 29.30		

Connective Tissue	6/10/2003		10/2/2003		+/-
Leucine - P	**-64.55**	L	**-59.09**	L	
Methionine - P	**-66.00**	L	**-30.00**	L	+
Valine - P	**-69.20**	L	**-60.00**	L	+
Cystine - P	**-42.50**	L	-11.25		+
Hydroxylysine - P	16.00		20.00		
Hydroxyproline - P	**-33.33**	L	**36.67**	H	
3-Methylhistidine - P	10.00		**50.00**	H	-
Proline - P	**-58.15**	L	**-30.74**	L	+
PSS / PSD	-38.47 / 44.97		-10.55 / 37.22		

Anna
Female / Age: 51

Foundational Wellness Profile Date: 10/2/2003

Essential Amino Acid	6/10/2003		10/2/2003		+/-
Arginine - P	**-33.64**	**L**	-16.36		+
Histidine - P	**-104.29**	**L**	**-42.86**	**L**	+
Isoleucine - P	**-65.45**	**L**	**-53.64**	**L**	+
Leucine - P	**-64.55**	**L**	**-59.09**	**L**	
Lysine - P	**-54.67**	**L**	**-34.67**	**L**	+
Methionine - P	**-66.00**	**L**	**-30.00**	**L**	+
Phenylalanine - P	**-61.58**	**L**	**-43.68**	**L**	+
Threonine - P	**-64.67**	**L**	-22.67		+
Tryptophan - P	**-66.67**	**L**	13.33		+
Valine - P	**-69.20**	**L**	**-60.00**	**L**	+
PSS / PSD	-65.07 / 65.07		-34.96 / 37.63		

Fat Metabolism	6/10/2003		10/2/2003		+/-
Arginine - P	**-33.64**	**L**	-16.36		+
Isoleucine - P	**-65.45**	**L**	**-53.64**	**L**	+
Leucine - P	**-64.55**	**L**	**-59.09**	**L**	
Valine - P	**-69.20**	**L**	**-60.00**	**L**	+
Taurine - P	**-56.50**	**L**	**-45.00**	**L**	+
Glutamine - P	**-90.67**	**L**	**-32.89**	**L**	+
Sarcosine - P	**-30.00**	**L**	**-30.00**	**L**	
PSS / PSD	-58.57 / 58.57		-42.43 / 42.43		

Gluconeogen	6/10/2003		10/2/2003		+/-
Threonine - P	**-64.67**	**L**	-22.67		+
Tryptophan - P	**-66.67**	**L**	13.33		+
Glycine - P	**-62.44**	**L**	**-32.67**	**L**	+
Serine - P	**-55.83**	**L**	**-40.83**	**L**	+
Alanine - P	**-28.86**	**L**	-5.43		+
PSS / PSD	-55.69 / 55.69		-17.65 / 22.99		

Hepatic Metabolism	6/10/2003		10/2/2003		+/-
Methionine - P	**-66.00**	**L**	**-30.00**	**L**	+
Taurine - P	**-56.50**	**L**	**-45.00**	**L**	+
Glutamine - P	**-90.67**	**L**	**-32.89**	**L**	+
Cystine - P	**-42.50**	**L**	-11.25		+
Cystathionine - P	**25.00**	**H**	12.50		+
Homocystine - P	18.00		18.00		
Alanine - P	**-28.86**	**L**	-5.43		+
PSS / PSD	-34.50 / 46.79		-13.44 / 22.15		

Immune Metabolites	6/10/2003		10/2/2003		+/-
Arginine - P	**-33.64**	**L**	-16.36		+
Threonine - P	**-64.67**	**L**	-22.67		+
Glutamine - P	**-90.67**	**L**	**-32.89**	**L**	+
Ornithine - P	**-48.67**	**L**	**-27.33**	**L**	+
PSS / PSD	-59.41 / 59.41		-24.81 / 24.81		

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Muscle Metabolites	6/10/2003		10/2/2003		+/-
Anserine - P	**-49.00**	**L**	**-49.00**	**L**	
Carnosine - P	**-49.00**	**L**	**-49.00**	**L**	
1-Methylhistidine - P	**-45.00**	**L**	20.00		+
3-Methylhistidine - P	10.00		**50.00**	**H**	-
PSS / PSD	-33.25 / 38.25		-7.00 / 42.00		

Neuroendocrine Met.	6/10/2003		10/2/2003		+/-
GABA-P	**-30.00**	**L**	10.00		+
Glycine - P	**-62.44**	**L**	**-32.67**	**L**	+
Serine - P	**-55.83**	**L**	**-40.83**	**L**	+
Taurine - P	**-56.50**	**L**	**-45.00**	**L**	+
Tyrosine - P	**-67.14**	**L**	-22.86		+
PSS / PSD	-54.38 / 54.38		-26.27 / 30.27		

Adrenal Function	6/10/2003		10/2/2003		+/-
Cholesterol	**48.00**	**H**	**49.00**	**H**	
Eosinophils	**33.33**	**H**	**66.67**	**H**	-
Eosinophil Count	-24.00		7.20		+
Potassium	0.00		-5.56		
Sodium	**25.00**	**H**	8.33		+
PSS / PSD	16.47 / 26.07		25.13 / 27.35		

Allergy	6/10/2003		10/2/2003		+/-
Eosinophils	**33.33**	**H**	**66.67**	**H**	-
Globulin	18.75		**31.25**	**H**	-
Lymphocytes	**-26.67**	**L**	**-53.33**	**L**	-
Monocytes	19.23		19.23		
W.B.C.	**-56.15**	**L**	**-37.69**	**L**	+
PSS / PSD	-2.30 / 30.83		5.22 / 41.63		

Anti Oxidant Status	6/10/2003		10/2/2003		+/-
Anion Gap	**36.67**	**H**	**60.83**	**H**	-
Bilirubin, Total	-22.73		-13.64		+
Chloride	19.23		3.85		+
Cholesterol	**48.00**	**H**	**49.00**	**H**	
Glucose	-2.27		2.27		
Iron, Total	**-31.67**	**L**	-20.00		+
PSS / PSD	6.75 / 22.94		11.76 / 21.37		

Athletic Potential	6/10/2003		10/2/2003		+/-
B.U.N./Creatinine Ratio	**36.84**	**H**	23.68		+
Cholesterol	**48.00**	**H**	**49.00**	**H**	
CO2	-8.33		**-33.33**	**L**	-
Creatinine	**-27.78**	**L**	**-27.78**	**L**	
LDH	**38.13**	**H**	**43.75**	**H**	
Potassium	0.00		-5.56		
Protein, Total	-2.00		18.00		-
Sodium	**25.00**	**H**	8.33		+
HDL-Cholesterol	10.00		**35.45**	**H**	-
PSS / PSD	13.32 / 21.79		12.40 / 27.21		

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Bone/Joint	6/10/2003		10/2/2003		+/-	
Albumin	-15.00		0.00		+	-15.00 → 0.00
Alkaline Phosphatase	2.80		-1.20			
Calcium	-19.57		-15.22			
Neutrophils	2.00		22.00		-	2.00 → 22.00
Phosphorus	5.00		**25.00**	**H**	-	5.00 → **25.00**
Protein, Total	-2.00		18.00		-	-2.00 → 18.00
Uric Acid	-12.07		-12.07			
PSS / PSD	-5.55 / 8.35		5.22 / 13.36			

Cardiac Marker	6/10/2003		10/2/2003		+/-	
Cholesterol	**48.00**	**H**	**49.00**	**H**		
GGT	-23.33		-13.33		+	-23.33 → -13.33
Iron, Total	**-31.67**	**L**	-20.00		+	**-31.67** → -20.00
LDH	**38.13**	**H**	**43.75**	**H**		
sGOT	7.50		**42.50**	**H**	-	7.50 → **42.50**
Triglycerides	-2.35		-1.68			
Uric Acid	-12.07		-12.07			
HDL-Cholesterol	10.00		**35.45**	**H**	-	10.00 → **35.45**
LDL	**85.29**	**H**	**66.18**	**H**	+	**66.18** ← **85.29**
PSS / PSD	9.96 / 21.53		15.82 / 23.66			

Cellular Distortions	6/10/2003		10/2/2003		+/-	
Alkaline Phosphatase	2.80		-1.20			
Anion Gap	**36.67**	**H**	**60.83**	**H**	-	**36.67** → **60.83**
GGT	-23.33		-13.33		+	-23.33 → -13.33
Iron, Total	**-31.67**	**L**	-20.00		+	**-31.67** → -20.00
LDH	**38.13**	**H**	**43.75**	**H**		
Neutrophils	2.00		22.00		-	2.00 → 22.00
W.B.C.	**-56.15**	**L**	**-37.69**	**L**	+	**-56.15** → **-37.69**
PSS / PSD	-3.95 / 23.84		6.79 / 24.85			

Differential	6/10/2003		10/2/2003		+/-	
Basophils	**-50.00**	**L**	-16.67		+	**-50.00** → -16.67
Eosinophils	**33.33**	**H**	**66.67**	**H**	-	**33.33** → **66.67**
Lymphocytes	**-26.67**	**L**	**-53.33**	**L**	-	**-53.33** ← **-26.67**
Monocytes	19.23		19.23			
Neutrophils	2.00		22.00		-	2.00 → 22.00
PSS / PSD	-4.42 / 26.25		7.58 / 35.58			

Differential Count	6/10/2003		10/2/2003		+/-	
Basophil Count	**-50.00**	**L**	**-26.00**	**L**	+	**-50.00** → **-26.00**
Eosinophil Count	-24.00		7.20		+	-24.00 → 7.20
Lymphocyte Count	**-47.50**	**L**	**-49.60**	**L**		
Monocyte Count	**-36.22**	**L**	-24.22		+	**-36.22** → -24.22
Neutrophil Count	**-43.61**	**L**	**-27.94**	**L**	+	**-43.61** → **-27.94**
PSS / PSD	-40.27 / 40.27		-24.11 / 26.99			

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Electrolyte	6/10/2003		10/2/2003		+/-
Calcium	-19.57		-15.22		
Chloride	19.23		3.85		+
CO2	-8.33		**-33.33**	L	-
Phosphorus	5.00		**25.00**	H	-
Potassium	0.00		-5.56		
Sodium	**25.00**	H	8.33		+
PSS / PSD	3.56 / 12.85		-2.82 / 15.21		

Gastrointest. Function	6/10/2003		10/2/2003		+/-
Anion Gap	**36.67**	H	**60.83**	H	-
Chloride	19.23		3.85		+
Cholesterol	**48.00**	H	**49.00**	H	
CO2	-8.33		**-33.33**	L	-
Monocytes	19.23		19.23		
Potassium	0.00		-5.56		
Sodium	**25.00**	H	8.33		+
Triglycerides	-2.35		-1.68		
LDL	**85.29**	H	**66.18**	H	+
PSS / PSD	24.75 / 27.12		18.54 / 27.55		

Hematology	6/10/2003		10/2/2003		+/-
Hematocrit	-17.14		-20.71		
Hemoglobin	-17.50		-20.00		
MCH	**36.72**	H	**37.90**	H	
MCHC	-10.35		-6.01		
MCV	**30.40**	H	**29.04**	H	
R.B.C.	**-35.62**	L	**-38.12**	L	
W.B.C.	**-56.15**	L	**-37.69**	L	+
PSS / PSD	-9.95 / 29.13		-7.94 / 27.07		

Inflammatory Process	6/10/2003		10/2/2003		+/-
Eosinophils	**33.33**	H	**66.67**	H	-
Globulin	18.75		**31.25**	H	-
LDH	**38.13**	H	**43.75**	H	
Neutrophils	2.00		22.00		-
Potassium	0.00		-5.56		
sGOT	7.50		**42.50**	H	-
sGPT	7.50		**107.50**	H	-
Triglycerides	-2.35		-1.68		
Uric Acid	-12.07		-12.07		
LDL	**85.29**	H	**66.18**	H	+
PSS / PSD	17.81 / 20.69		36.05 / 39.91		

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Kidney Function	6/10/2003		10/2/2003		+/-
Albumin	-15.00		0.00		+
B.U.N.	11.90		2.38		+
B.U.N./Creatinine Ratio	**36.84**	**H**	23.68		+
Chloride	19.23		3.85		+
CO2	-8.33		**-33.33**	**L**	-
Creatinine	**-27.78**	**L**	**-27.78**	**L**	
Glucose	-2.27		2.27		
Potassium	0.00		-5.56		
Protein, Total	-2.00		18.00		-
Sodium	**25.00**	**H**	8.33		+
PSS / PSD	3.76 / 14.84		-0.81 / 12.52		

Lipid	6/10/2003		10/2/2003		+/-
Cholesterol	**48.00**	**H**	**49.00**	**H**	
Triglycerides	-2.35		-1.68		
HDL-Cholesterol	10.00		**35.45**	**H**	-
LDL	**85.29**	**H**	**66.18**	**H**	+
PSS / PSD	23.49 / 24.27		24.83 / 25.38		

Liver Function	6/10/2003		10/2/2003		+/-
Albumin	-15.00		0.00		+
Alkaline Phosphatase	2.80		-1.20		
Bilirubin, Total	-22.73		-13.64		+
Cholesterol	**48.00**	**H**	**49.00**	**H**	
GGT	-23.33		-13.33		+
Protein, Total	-2.00		18.00		-
sGOT	7.50		**42.50**	**H**	-
sGPT	7.50		**107.50**	**H**	-
PSS / PSD	0.34 / 16.11		23.60 / 30.65		

Nitrogen	6/10/2003		10/2/2003		+/-
B.U.N.	11.90		2.38		+
B.U.N./Creatinine Ratio	**36.84**	**H**	23.68		+
Creatinine	**-27.78**	**L**	**-27.78**	**L**	
Uric Acid	-12.07		-12.07		
PSS / PSD	2.23 / 22.15		-3.45 / 16.48		

Protein	6/10/2003		10/2/2003		+/-
A/G Ratio	**-26.92**	**L**	**-26.44**	**L**	
Albumin	-15.00		0.00		+
Globulin	18.75		**31.25**	**H**	-
Protein, Total	-2.00		18.00		-
Protein/Globulin Ratio	-20.00		-19.37		
PSS / PSD	-9.03 / 16.53		0.69 / 19.01		

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Pulmonary Function	6/10/2003		10/2/2003		+/-
Anion Gap	**36.67**	H	**60.83**	H	-
Calcium	-19.57		-15.22		
CO2	-8.33		**-33.33**	L	-
LDH	**38.13**	H	**43.75**	H	
Potassium	0.00		-5.56		
sGOT	7.50		**42.50**	H	-
Sodium	**25.00**	H	8.33		+
PSS / PSD	11.34 / 19.31		14.47 / 29.93		

Ratios	6/10/2003		10/2/2003		+/-
A/G Ratio	**-26.92**	L	**-26.44**	L	
B.U.N./Creatinine Ratio	**36.84**	H	23.68		+
Calcium/Phosphorus Ratio	-24.44		**-47.50**	L	-
Sodium/Potassium Ratio	6.06		8.53		
Protein/Globulin Ratio	-20.00		-19.37		
PSS / PSD	-4.74 / 19.05		-10.18 / 20.92		

Thyroid	6/10/2003		10/2/2003		+/-
Thyroxine (T4)	-17.50		-6.25		+
T-3 Uptake	2.67		6.00		
Free T4 Index (T7)	-23.75		-12.50		+
Ultra-Sensitive TSH	**-34.47**	L	-4.21		+
PSS / PSD	-18.26 / 19.60		-4.24 / 7.24		

Amino Acid Catabolism	6/10/2003		10/2/2003		+/-
a-Ketoisovalerate	-12.50		0.00		+
a-Ketoisocaproate	-10.00		**70.00**	H	-
a-Keto-b-methylvalerate	-21.43		-14.29		
PSS / PSD	-14.64 / 14.64		18.57 / 28.10		

B-Complex Markers	6/10/2003		10/2/2003		+/-
b-Hydroxyisovalerate	7.27		-12.73		
a-Ketoisovalerate	-12.50		0.00		+
a-Ketoisocaproate	-10.00		**70.00**	H	-
a-Keto-b-methylvalerate	-21.43		-14.29		
Methylmalonate	14.58		**27.08**	H	-
PSS / PSD	-4.41 / 13.16		14.01 / 24.82		

CAC Cycle Ratios	6/10/2003		10/2/2003		+/-
CA Cycle Entry	**103.51**	H	**266.67**	H	-
CA Cycle Phase 1	9.32		18.21		-
CA Cycle Phase 2	**-37.92**	L	**-34.62**	L	
CA Cycle Phase 3	-11.07		-0.41		+
CA Cycle Phase 4	**-33.88**	L	**-49.79**	L	-
CA Cycle Phase 5	**-28.55**	L	**-49.33**	L	-
CA Cycle Phase 6	-19.70		**83.33**	H	-
CA Cycle Return	**54.94**	H	12.69		+
PSS / PSD	4.58 / 37.36		30.84 / 64.38		

Carbohydrate Metabolism	6/10/2003		10/2/2003		+/-
Lactate	23.33		-23.33		
Pyruvate	**85.71**	H	0.00		+
a-Hydroxybutyrate	**60.91**	H	-3.64		+
b-Hydroxybutyrate	3.33		**-47.78**	L	-
PSS / PSD	43.32 / 43.32		-18.69 / 18.69		

Citric Acid Cycle	6/10/2003		10/2/2003		+/-
Citrate	**34.00**	H	7.12		+
cis-Aconitate	**50.00**	H	-8.82		+
Isocitrate	-21.67		**-36.67**	L	-
a-Ketoglutarate	8.21		-13.93		
Succinate	1.58		**-60.00**	L	-
Fumarate	**60.00**	H	-20.00		+
Malate	-14.29		-7.14		
Hydroxymethylglutarate	8.06		-16.13		-
PSS / PSD	15.74 / 24.73		-19.45 / 21.23		

Intestinal Dysbiosis	6/10/2003		10/2/2003		+/-
Hippurate	**35.71**	H	**180.00**	H	-
Benzoate	**386.86**	H	17.65		+
p-Hydroxybenzoate	**104.55**	H	-13.64		+
p-Hydroxyphenyllactate	-6.16		-3.42		
Phenylacetate	**92.86**	H	**171.43**	H	-
Phenylpropionate	**50.00**	H	-7.14		+
Tricarballylate	**65.38**	H	**73.08**	H	-
DHPP	**125.00**	H	**50.00**	H	+
Citramalate	5.00		-6.67		
Tartarate	-24.55		**40.91**	H	-
Indican	16.28		-12.79		
PSS / PSD	65.46 / 70.18		37.65 / 44.36		

Lipid Metabolism	6/10/2003		10/2/2003		+/-
Adipate	-11.90		-10.71		
Suberate	5.56		-5.56		
Ethylmalonate	**47.50**	H	20.83		+
PSS / PSD	13.72 / 21.65		1.52 / 12.37		

Liver Detox Indicators	6/10/2003		10/2/2003		+/-
2-Methylhippurate	**109.46**	H	**79.73**	H	+
Glucarate	-17.79		**64.09**	H	-
P-Hydroxyphenylacetate	10.00		**25.56**	H	-
Orotate	-4.55		**50.00**	H	-
Pyroglutamate	**80.00**	H	**52.50**	H	+
Sulfate	7.78		-7.78		
PSS / PSD	30.82 / 38.26		44.02 / 46.61		

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Neurotransmitters	6/10/2003		10/2/2003		+/-	
Vanillylmandelate	**26.00**	**H**	-10.00		**+**	-10.00 ← **26.00**
Homovanillate	-6.36		**-31.82**	**L**	**-**	**-31.82** ← -6.36
5-Hydroxyindoleacetate	**25.41**	**H**	-18.85			
Kynurenate	**52.50**	**H**	22.50		**+**	22.50 ← **52.50**
Quinolinate	**61.43**	**H**	**52.86**	**H**	**+**	**52.86** ← **61.43**
PSS / PSD	31.79 / 34.34		2.94 / 27.21			