CELLMATE™ WELLNESS SYSTEMS

P.O. Box 4549
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**ANNA SALANTI**

Test date: 3/11/2003
(accession: A0303120089)
Entered: 3/24/2003

Next Test Due: 9/9/2003

# *CellMate™ Plasma Amino Acid Report*

## *Practitioner*

*Printed on Thursday, April 3, 2003 for:*

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

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If there is a problem with this report, please contact us as soon as possible at: (775) 832-8485 or Fax (775) 832-8488

# Basic Status Report (High/Low)

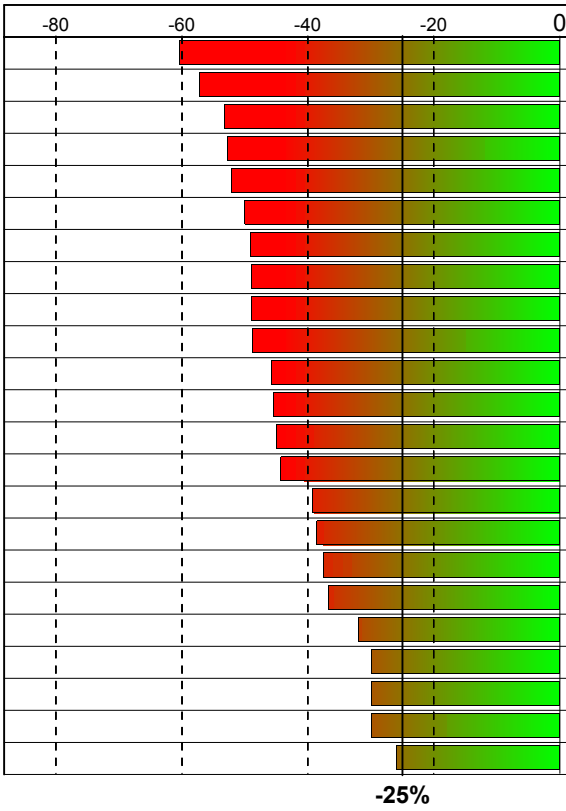
**ANNA SALANTI** — **Plasma Amino Acid Date: 3/11/2003**

Female / Age: 51 — Anna Salanti (2718)

Client ID:555986644 (8322) — 503-977-2660

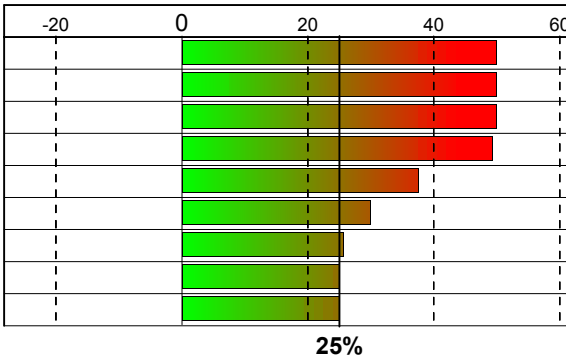
The % Status is the weighted deviation of the laboratory result.

## *Low Results*




| | % Status | | Result | *Low* | *High* |
|---|---|---|---|---|---|
| Glutamic Acid - P | -60.48 | **L** | **34.00** | 45.00 | 150.00 |
| Isoleucine - P | -57.27 | **L** | **42.00** | 50.00 | 160.00 |
| Tryptophan - P | -53.33 | **L** | **34.00** | 35.00 | 65.00 |
| Valine - P | -52.80 | **L** | **163.00** | 170.00 | 420.00 |
| Phenylalanine - P | -52.11 | **L** | **43.00** | 45.00 | 140.00 |
| Methionine - P | -50.00 | **L** | **25.00** | 25.00 | 50.00 |
| Leucine - P | -49.09 | **L** | **91.00** | 90.00 | 200.00 |
| Anserine - P | -49.00 | **L** | **0.01** | 0.00 | 1.00 |
| Carnosine - P | -49.00 | **L** | **0.01** | 0.00 | 1.00 |
| Asparagine - P | -48.82 | **L** | **46.00** | 45.00 | 130.00 |
| Aspartic Acid - P | -45.83 | **L** | **7.00** | 6.00 | 30.00 |
| Taurine - P | -45.50 | **L** | **59.00** | 50.00 | 250.00 |
| Serine - P | -45.00 | **L** | **96.00** | 90.00 | 210.00 |
| Histidine - P | -44.29 | **L** | **74.00** | 70.00 | 140.00 |
| Proline - P | -39.26 | **L** | **159.00** | 130.00 | 400.00 |
| Tyrosine - P | -38.57 | **L** | **58.00** | 50.00 | 120.00 |
| Glycine - P | -37.56 | **L** | **253.00** | 225.00 | 450.00 |
| Ornithine - P | -36.67 | **L** | **70.00** | 50.00 | 200.00 |
| Glutamine - P | -32.00 | **L** | **681.00** | 600.00 | 1050.00 |
| b-Alanine - P | -30.00 | **L** | **1.00** | 0.00 | 5.00 |
| Sarcosine - P | -30.00 | **L** | **1.00** | 0.00 | 5.00 |
| Phenylalanine/Tyrosine | -29.89 | **L** | **0.74** | 0.50 | 1.70 |
| Threonine - P | -26.00 | **L** | **136.00** | 100.00 | 250.00 |

## *High Results*



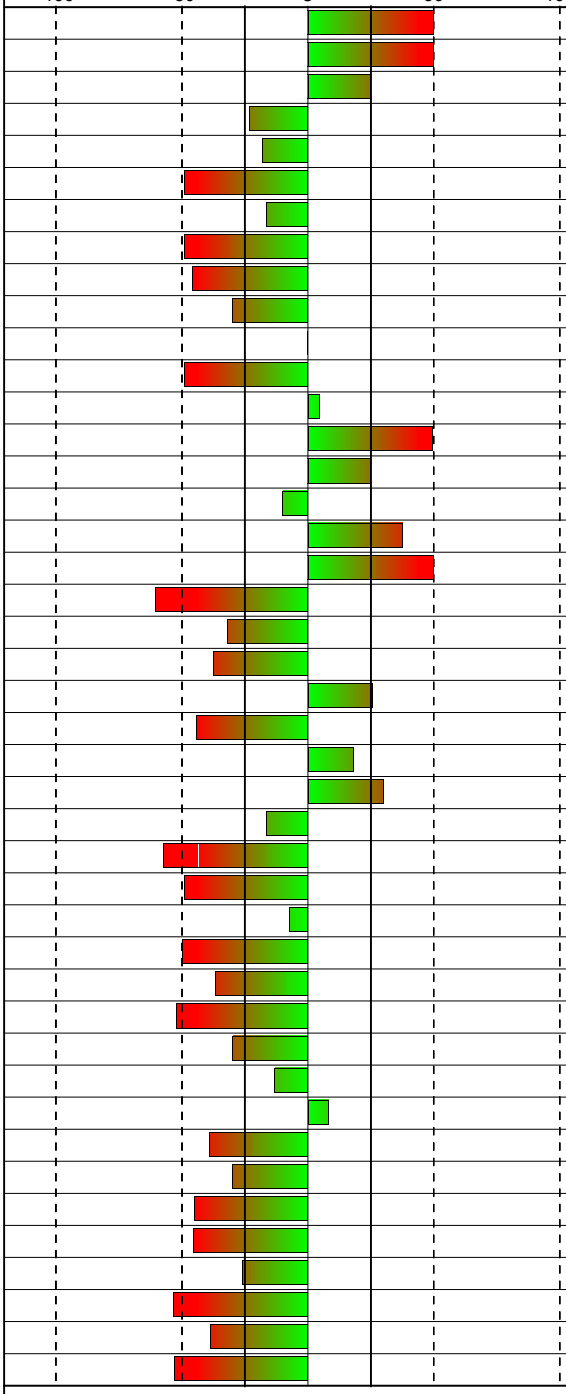

| | % Status | | Result | *Low* | *High* |
|---|---|---|---|---|---|
| 1-Methylhistidine - P | 50.00 | **H** | **20.00** | 0.00 | 20.00 |
| 3-Methylhistidine - P | 50.00 | **H** | **5.00** | 0.00 | 5.00 |
| Gamma-aminobutyric Acid-P | 50.00 | **H** | **5.00** | 0.00 | 5.00 |
| Collagen Related AA | 49.33 | **H** | **159.00** | 10.00 | 160.00 |
| Ethanolamine - P | 37.50 | **H** | **7.00** | 0.00 | 8.00 |
| Hydroxylysine - P | 30.00 | **H** | **0.80** | 0.00 | 1.00 |
| Glycine/Serine Ratio | 25.69 | **H** | **2.64** | 1.50 | 3.00 |
| a-Aminoadipic Acid - P | 25.00 | **H** | **3.00** | 0.00 | 4.00 |
| Cystathionine - P | 25.00 | **H** | **3.00** | 0.00 | 4.00 |

# Basic Status Report (Alphabetic)

**ANNA SALANTI** — **Plasma Amino Acid Date: 3/11/2003**

Female / Age: 51 — Anna Salanti (2718)

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




| | % Status | | Result | Low | High |
|---|---|---|---|---|---|
| **1-Methylhistidine - P** | **50.00** | **H** | **20.00** | 0.00 | 20.00 |
| **3-Methylhistidine - P** | **50.00** | **H** | **5.00** | 0.00 | 5.00 |
| **a-Aminoadipic Acid - P** | **25.00** | **H** | **3.00** | 0.00 | 4.00 |
| a-Amino-N-Butyric Acid - P | -23.33 | | 18.00 | 10.00 | 40.00 |
| Alanine - P | -18.00 | | 362.00 | 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** | **-48.82** | **L** | **46.00** | 45.00 | 130.00 |
| **Aspartic Acid - P** | **-45.83** | **L** | **7.00** | 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 | 4.55 | | 45.00 | 15.00 | 70.00 |
| **Collagen Related AA** | **49.33** | **H** | **159.00** | 10.00 | 160.00 |
| **Cystathionine - P** | **25.00** | **H** | **3.00** | 0.00 | 4.00 |
| Cystine - P | -10.00 | | 42.00 | 10.00 | 90.00 |
| **Ethanolamine - P** | **37.50** | **H** | **7.00** | 0.00 | 8.00 |
| **Gamma-aminobutyric Acid-P** | **50.00** | **H** | **5.00** | 0.00 | 5.00 |
| **Glutamic Acid - P** | **-60.48** | **L** | **34.00** | 45.00 | 150.00 |
| **Glutamine - P** | **-32.00** | **L** | **681.00** | 600.00 | 1050.00 |
| **Glycine - P** | **-37.56** | **L** | **253.00** | 225.00 | 450.00 |
| **Glycine/Serine Ratio** | **25.69** | **H** | **2.64** | 1.50 | 3.00 |
| **Histidine - P** | **-44.29** | **L** | **74.00** | 70.00 | 140.00 |
| Homocystine - P | 18.00 | | 0.68 | 0.00 | 1.00 |
| **Hydroxylysine - P** | **30.00** | **H** | **0.80** | 0.00 | 1.00 |
| Hydroxyproline - P | -16.67 | | 10.00 | 0.00 | 30.00 |
| **Isoleucine - P** | **-57.27** | **L** | **42.00** | 50.00 | 160.00 |
| **Leucine - P** | **-49.09** | **L** | **91.00** | 90.00 | 200.00 |
| Lysine - P | -7.33 | | 214.00 | 150.00 | 300.00 |
| **Methionine - P** | **-50.00** | **L** | **25.00** | 25.00 | 50.00 |
| **Ornithine - P** | **-36.67** | **L** | **70.00** | 50.00 | 200.00 |
| **Phenylalanine - P** | **-52.11** | **L** | **43.00** | 45.00 | 140.00 |
| **Phenylalanine/Tyrosine** | **-29.89** | **L** | **0.74** | 0.50 | 1.70 |
| Phosphoethanolamine - P | -13.33 | | 11.00 | 0.00 | 30.00 |
| Phosphoserine - P | 8.33 | | 7.00 | 0.00 | 12.00 |
| **Proline - P** | **-39.26** | **L** | **159.00** | 130.00 | 400.00 |
| **Sarcosine - P** | **-30.00** | **L** | **1.00** | 0.00 | 5.00 |
| **Serine - P** | **-45.00** | **L** | **96.00** | 90.00 | 210.00 |
| **Taurine - P** | **-45.50** | **L** | **59.00** | 50.00 | 250.00 |
| **Threonine - P** | **-26.00** | **L** | **136.00** | 100.00 | 250.00 |
| **Tryptophan - P** | **-53.33** | **L** | **34.00** | 35.00 | 65.00 |
| **Tyrosine - P** | **-38.57** | **L** | **58.00** | 50.00 | 120.00 |
| **Valine - P** | **-52.80** | **L** | **163.00** | 170.00 | 420.00 |
| **Total Status Deviation** | **35.09** | | | | |
| **Total Status Skew** | **-18.86** | | | | |

**ANNA SALANTI** **Plasma Amino Acid Date: 3/11/2003**

Female / Age: 51 Anna Salanti (2718)

## Nutritional Support

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

- ☐ **1-Customized Amino Acids**
  **8-10 grams daily**
- ☐ **1-Pyridoxal-5-Phosphate**
  **2x daily 50 mg**
- ☐ **2-Betaine HCL**
  **2 tablets at mealtime**
- ☐ **2-Vitamin E & Beta-carotene**
  **1x daily see details**
- ☐ **1-Probiotics**
  **3x daily**
- ☐ **1-Taurine**
  **2x daily 500 mg**
- ☐ **2-Magnesium Citrate or Glycinate**
  **2x daily 150 mg**
- ☐ **3-5-Hydroxy-Tryptophan (5-HTP)**
  **2x daily 50 mg**

## Food Recommendations

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

Turkey

## 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 |
|---|---|---|
| Muscle Metabolites | 49.50% | 0.50% |
| Neuroendocrine Met. | 43.33% | -23.33% |
| Essential Amino Acid | 40.86% | -40.86% |
| Fat Metabolism | 40.43% | -40.43% |
| Connective Tissue | 37.23% | -17.23% |
| Gluconeogen | 35.98% | -35.98% |
| CNS Metabolism | 34.98% | -17.55% |
| Ammonia/Energy | 32.11% | -27.89% |
| Hepatic Metabolism | 28.36% | -16.07% |
| Immune Metabolites | 27.76% | -27.76% |

## Lab Reported out-of-range Values

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

**Glutamic Acid - P ( -60.48%)**

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 ( -57.27%)**

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.

**AA Competency ( -53.36%)**

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.

**Tryptophan - P ( -53.33%)**

Tryptophan metabolism requires B6, folic acid, and magnesium. Also, niacin and glutamine are important requirements for normal metabolism. Niacin can be made from tryptophan. A low result may be indicative of depression and insomnia.

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

**AA Competency-2 ( -52.88%)**

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.

**Valine - P ( -52.80%)**

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.

**Phenylalanine - P ( -52.11%)**

May be indicative of altered thyroid function or catecholamine deficits. Symptoms may include depression, memory loss, fatigue, cognitive disorders, stress, and autonomic dysfunction. Phenylalanine is an essential amino acid and is converted to tyrosine in the liver by phenylalanine hydroxylase. Nutrients needed for this amino acid's metabolism are folic acid, iron, niacin, pyridoxine, copper, and vitamin C.

**1-Methylhistidine - P ( 50.00%)**

May be indicative of inadequate methyl group transfer or impaired methionine metabolism. If 3-Methylhistidine is also elevated, consider using TMG (trimethylglycine).

**3-Methylhistidine - P ( 50.00%)**

May be indicative of the need for additional antioxidants.

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

**Gamma-aminobutyric Acid-P ( 50.00%)**

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

**Methionine - P ( -50.00%)**

An essential amino acid, you can only get methionine from dietary or supplemental sources. It is important that adequate vitamin B6 is available, otherwise methionine may over convert to homocysteine and throw arginine and/or ornithine out of balance. Low plasma levels may be indicative of poor dietary intake of protein or poor quality of protein. May adversely effect sulfur metabolism.

**ANNA SALANTI** **Plasma Amino Acid Date: 3/11/2003**

Female / Age: 51 Anna Salanti (2718)

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

## 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.

***Rationale***

| Decreased | Normal | Increased |
|---|---|---|
| AA Competency | | |

## 1-Probiotics 3x daily

PROBIOTICS

A comprehensive probiotic protocol has shown promise in relieving intestinal bacteria and parasitic infections. It is important to use a broad spectrum of probiotic organisms with a high concentration, preferably 20-25 billion of live organisms per capsule.

| Decreased | Normal | Increased |
|---|---|---|
| | | a-Aminoadipic Acid - P |

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

PYRIDOXINE (B6)

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.

| Decreased | Normal | Increased |
|---|---|---|
| | | Cystathionine - P |

## 1-Taurine 2x daily 500 mg

TAURINE

An amino-sulfonic acid and modulator of cation flux, especially for Ca. A neuromodulator indirectly depressing neuroexcitation through control over glutamate. It also mediates contractility in the cardiac muscle.

| Decreased | Normal | Increased |
|---|---|---|
| Taurine - P | | a-Aminoadipic Acid - P |

## 2-Betaine HCL 2 tablets at mealtime

BETAIN HCl

When this pattern of imbalances show up, it may be due to a BCl/betaine deficiency and suggests muscle/collagen catabolism and inadequate synthesis due to inadequate quality and/or quantity of protein.

| Decreased | Normal | Increased |
|---|---|---|
| Proline - P | Hydroxyproline - P | 3-Methylhistidine - P |

## 2-Magnesium Citrate or Glycinate 2x daily 150 mg

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

| Decreased | Normal | Increased |
|---|---|---|
| | | Ethanolamine - P |

## 2-Vitamin E & Beta-carotene 1x daily see details

VITAMIN E

800 IU - Adult, 400 IU - Children

Vitamin E is a major antioxidant, scavenging free radicals - enhancing lymphocyte production, increasing nitrogen retention, maintaining cellular integrity, and aiding in the biosynthesis of heme proteins.

BETA-CAROTENE

25,000 IU - Adult, 12,500 - Children

Beta-carotene 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. Do not take if pregnant.

| Decreased | Normal | Increased |
|---|---|---|
| | | 1-Methylhistidine - P |

**ANNA SALANTI** **Plasma Amino Acid Date: 3/11/2003**

Female / Age: 51 Anna Salanti (2718)

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

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

TRYPTOPHAN

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

***Rationale***

| Decreased | Normal | Increased |
|---|---|---|
| Tryptophan - P | | |

**ANNA SALANTI** **Plasma Amino Acid Date: 3/11/2003**

Female / Age: 51 Anna Salanti (2718)

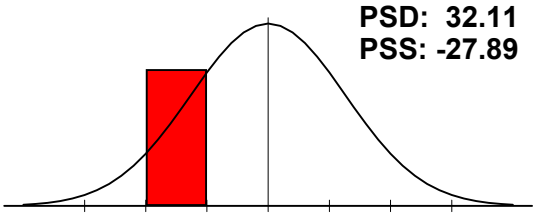
Drugs listed below tend to further aggravate elements of blood chemistry that are out of range (H or L). The (#) after each drug denotes the number of times that drug is flagged as being potentially harmful.

| | | | |
|---|---|---|---|
| Aspirin | Cortisol | Salicylates | Steroids |
| Valproic Acid | | | |

## Ammonia/Energy

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

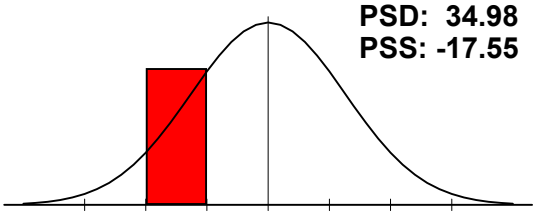
A panel profile such as this may be indicative of inadequate protein intake, poor absorption or poor quality protein intake.




## CNS Metabolism

Arginine - P, Tryptophan - P[L], Gamma-aminobutyric Acid-P[H], Glycine - P[L], Serine - P[L], Taurine - P[L], Aspartic Acid - P[L], Glutamin.

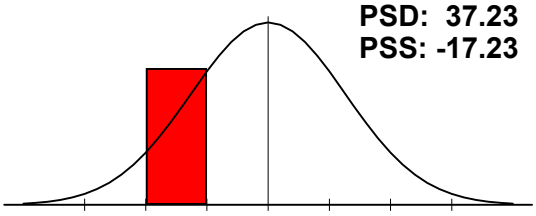
The panel profile seen here may be indicative of poor central nervous system functioning including memory loss, fatigue, poor concentration.




## Connective Tissue

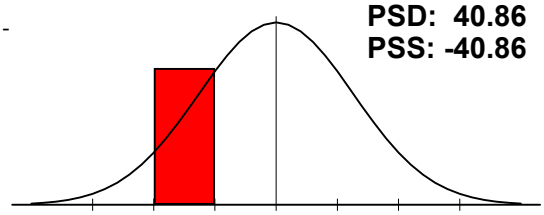
Leucine - P[L], Methionine - P[L], Valine - P[L], Cystine - P, Hydroxylysine - P[H], Hydroxyproline - P, 3-Methylhistidine - P[H], Proline -.

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




## Essential Amino Acid

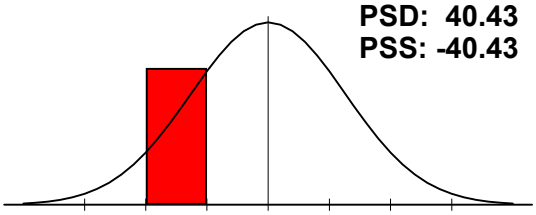
Arginine - P, Histidine - P[L], Isoleucine - P[L], Leucine - P[L], Lysine - P, Methionine - P[L], Phenylalanine - P[L], Threonine - P[L], Tr.




## Fat Metabolism

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

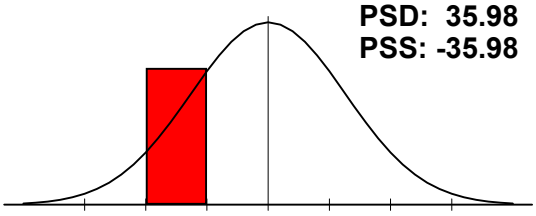
A panel profile such as this may indicate an inability of the body to properly metabolize dietary fats. Check for dysbiosis, or try supplementation with lipase digestive enzymes as well as broad spectrum amino acids.




## Gluconeogen

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

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



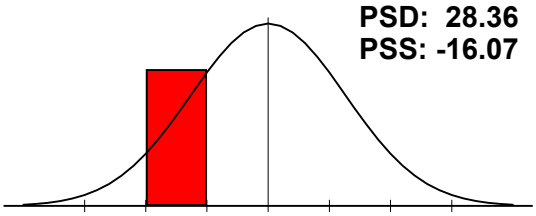
**ANNA SALANTI** **Plasma Amino Acid Date: 3/11/2003**

Female / Age: 51 Anna Salanti (2718)

## Hepatic Metabolism

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

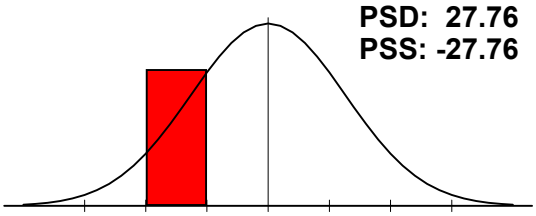
A panel profile such as this may be indicative of an underfunctioning liver or poor dietary protein intake.




## Immune Metabolites

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

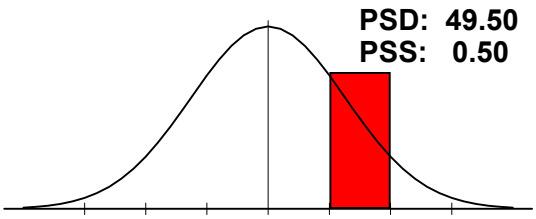
A panel profile such as this may be indicative of a poor functioning immune system or low dietary intake of protein.




## Muscle Metabolites

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

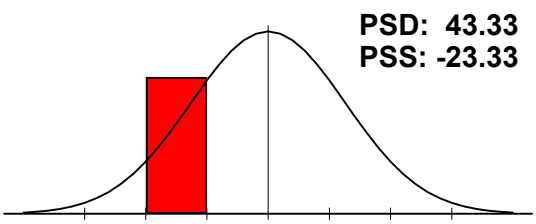
This panel profile may be indicative of abnormal protein metabolism especially if 1-methylhistidine is elevated.




## Neuroendocrine Met.

Gamma-aminobutyric Acid-P[H], Glycine - P[L], Serine - P[L], Taurine - P[L], Tyrosine - P[L].

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



**ANNA SALANTI** **Plasma Amino Acid Date: 3/11/2003**

Female / Age: 51 Anna Salanti (2718)

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

## Cystathioninuria (270.4) 100.00% (1 of 1)

| *Decreased* | *Normal* | *Increased* |
|---|---|---|
| | | **25.00 Cystathionine - P** |

## Depression () 100.00% (4 of 4)

| *Decreased* | *Normal* | *Increased* |
|---|---|---|
| **-50.00 Methionine - P** | | |
| **-52.11 Phenylalanine - P** | | |
| **-53.33 Tryptophan - P** | | |
| **-38.57 Tyrosine - P** | | |

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

| *Decreased* | *Normal* | *Increased* |
|---|---|---|
| **-45.83 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* |
|---|---|---|
| **-60.48 Glutamic Acid - P** | | |

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

| *Decreased* | *Normal* | *Increased* |
|---|---|---|
| **-45.50 Taurine - P** | | |

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

| *Decreased* | *Normal* | *Increased* |
|---|---|---|
| **-44.29 Histidine - P** | | |

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

| *Decreased* | *Normal* | *Increased* |
|---|---|---|
| **-49.09 Leucine - P** | | **50.00 3-Methylhistidine - P** |
| **-52.80 Valine - P** | | |
| 30.00 Hydroxylysine - P | | |
| **-39.26 Proline - P** | | |

This profile may be indicative of an individual who is either catabolising their muscle tissue or is unable to

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.

## Muscle/Collagen Catabolism (continued)

build proper muscle tissue due to amino acid deficiencies. Further investigation into amino acid competency may be helpful.

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

| *Decreased* | *Normal* | *Increased* |
|---|---|---|
| **-57.27 Isoleucine - P** | | -32.00 Glutamine - P |
| **-45.83 Aspartic Acid - P** | | |
| **-60.48 Glutamic Acid - P** | | |

**ANNA SALANTI** **Plasma Amino Acid Date: 3/11/2003**

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: | 11/19/2002 | | 3/11/2003 | | +/- change |
|---|---|---|---|---|---|
| 1-Methylhistidine - P | 15.00 | | **50.00** | **H** | **- 35.00** |
| Tryptophan - P | -23.33 | | **-53.33** | **L** | **- 30.00** |
| Tyrosine - P | -10.00 | | **-38.57** | **L** | **- 28.57** |
| Serine - P | -17.50 | | **-45.00** | **L** | **- 27.50** |
| a-Aminoadipic Acid - P | 0.00 | | **25.00** | **H** | **- 25.00** |
| Lysine - P | **-39.33** | **L** | -7.33 | | + 32.00 |
| Cystathionine - P | **50.00** | **H** | **25.00** | **H** | **+ 25.00** |

# Comparison Report

**ANNA SALANTI** — **Plasma Amino Acid Date: 3/11/2003**

Female / Age: 51 — Anna Salanti (2718)

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

| | +/- | Status % on: | 11/19/2002 | | 3/11/2003 | |
|---|---|---|---|---|---|---|
| 15.00 → **50.00** | - | 1-Methylhistidine - P | 15.00 | | **50.00** | **H** |
| **30.00** → **50.00** | - | 3-Methylhistidine - P | **30.00** | **H** | **50.00** | **H** |
| | | AA Competency | **-47.45** | **L** | **-53.36** | **L** |
| **-35.19** → **-27.04** | + | AA Competency-1 | **-35.19** | **L** | **-27.04** | **L** |
| **-52.88** → **-38.27** | - | AA Competency-2 | **-38.27** | **L** | **-52.88** | **L** |
| 0.00 → **25.00** | - | a-Aminoadipic Acid - P | 0.00 | | **25.00** | **H** |
| -23.33 → -13.33 | - | a-Amino-N-Butyric Acid - P | -13.33 | | -23.33 | |
| | | Alanine - P | 16.86 | | -18.00 | |
| | | Anserine - P | **-49.00** | **L** | **-49.00** | **L** |
| **-25.45** → -16.36 | + | Arginine - P | **-25.45** | **L** | -16.36 | |
| **-48.82** → **-30.00** | - | Asparagine - P | **-30.00** | **L** | **-48.82** | **L** |
| **-45.83** → **-33.33** | - | Aspartic Acid - P | **-33.33** | **L** | **-45.83** | **L** |
| | | b-Alanine - P | **30.00** | **H** | **-30.00** | **L** |
| | | b-Aminoisobutyric Acid - P | 0.00 | | 0.00 | |
| | | Carnosine - P | **-49.00** | **L** | **-49.00** | **L** |
| 4.55 → 19.09 | + | Citrulline - P | 19.09 | | 4.55 | |
| **49.33** → **69.33** | + | Collagen Related AA | **69.33** | **H** | **49.33** | **H** |
| **25.00** → **50.00** | + | Cystathionine - P | **50.00** | **H** | **25.00** | **H** |
| | | Cystine - P | -7.50 | | -10.00 | |
| **25.00** → **37.50** | - | Ethanolamine - P | **25.00** | **H** | **37.50** | **H** |
| **-30.00** → **50.00** | - | Gamma-aminobutyric Acid-P | **-30.00** | **L** | **50.00** | **H** |
| **-60.48** → **-47.14** | - | Glutamic Acid - P | **-47.14** | **L** | **-60.48** | **L** |
| | | Glutamine - P | **-37.11** | **L** | **-32.00** | **L** |
| **-37.56** → -13.11 | - | Glycine - P | -13.11 | | **-37.56** | **L** |
| 9.17 → **25.69** | - | Glycine/Serine Ratio | 9.17 | | **25.69** | **H** |
| **-44.29** → **-30.00** | - | Histidine - P | **-30.00** | **L** | **-44.29** | **L** |
| | | Homocystine - P | 18.00 | | 18.00 | |
| **30.00** → **50.00** | + | Hydroxylysine - P | **50.00** | **H** | **30.00** | **H** |
| -16.67 → **40.00** | + | Hydroxyproline - P | **40.00** | **H** | -16.67 | |
| **-57.27** → **-46.36** | - | Isoleucine - P | **-46.36** | **L** | **-57.27** | **L** |
| | | Leucine - P | **-43.64** | **L** | **-49.09** | **L** |
| **-39.33** → -7.33 | + | Lysine - P | **-39.33** | **L** | -7.33 | |
| **-50.00** → **-38.00** | - | Methionine - P | **-38.00** | **L** | **-50.00** | **L** |
| **-36.67** → -21.33 | - | Ornithine - P | -21.33 | | **-36.67** | **L** |
| **-52.11** → **-27.89** | - | Phenylalanine - P | **-27.89** | **L** | **-52.11** | **L** |
| **-29.89** → -21.15 | - | Phenylalanine/Tyrosine | -21.15 | | **-29.89** | **L** |
| | | Phosphoethanolamine - P | -20.00 | | -13.33 | |
| | | Phosphoserine - P | 8.33 | | 8.33 | |
| **-39.26** → **-28.15** | - | Proline - P | **-28.15** | **L** | **-39.26** | **L** |
| | | Sarcosine - P | **-30.00** | **L** | **-30.00** | **L** |
| **-45.00** → -17.50 | - | Serine - P | -17.50 | | **-45.00** | **L** |
| **-45.50** → **-34.50** | - | Taurine - P | **-34.50** | **L** | **-45.50** | **L** |
| | | Threonine - P | -18.67 | | **-26.00** | **L** |
| **-53.33** → -23.33 | - | Tryptophan - P | -23.33 | | **-53.33** | **L** |
| **-38.57** → -10.00 | - | Tyrosine - P | -10.00 | | **-38.57** | **L** |
| **-52.80** → **-33.20** | - | Valine - P | **-33.20** | **L** | **-52.80** | **L** |
| | | **Total Status Deviation** | **28.69** | | **35.09** | |
| | | **Total Status Skew** | **-12.13** | | **-18.86** | |

**ANNA SALANTI** — **Plasma Amino Acid Date: 3/11/2003**

Female / Age: 51 — Anna Salanti (2718)

| Ammonia/Energy | 11/19/2002 | | 3/11/2003 | | +/- | |
|---|---|---|---|---|---|---|
| Arginine - P | **-25.45** | L | -16.36 | | + | **-25.45** → -16.36 |
| Threonine - P | -18.67 | | **-26.00** | L | | |
| Glycine - P | -13.11 | | **-37.56** | L | - | **-37.56** ← -13.11 |
| Serine - P | -17.50 | | **-45.00** | L | - | **-45.00** ← -17.50 |
| a-Aminoadipic Acid - P | 0.00 | | **25.00** | H | - | 0.00 → **25.00** |
| Asparagine - P | **-30.00** | L | **-48.82** | L | - | **-48.82** ← **-30.00** |
| Aspartic Acid - P | **-33.33** | L | **-45.83** | L | - | **-45.83** ← **-33.33** |
| Citrulline - P | 19.09 | | 4.55 | | + | 4.55 ← 19.09 |
| Glutamic Acid - P | **-47.14** | L | **-60.48** | L | - | **-60.48** ← **-47.14** |
| Glutamine - P | **-37.11** | L | **-32.00** | L | | |
| Ornithine - P | -21.33 | | **-36.67** | L | - | **-36.67** ← -21.33 |
| a-Amino-N-Butyric Acid - P | -13.33 | | -23.33 | | - | -23.33 ← -13.33 |
| Alanine - P | 16.86 | | -18.00 | | | |
| b-Alanine - P | **30.00** | H | **-30.00** | L | | |
| **PSS / PSD** | -13.65 / 23.07 | | -27.89 / 32.11 | | | |

| CNS Metabolism | 11/19/2002 | | 3/11/2003 | | +/- | |
|---|---|---|---|---|---|---|
| Arginine - P | **-25.45** | L | -16.36 | | + | **-25.45** → -16.36 |
| Tryptophan - P | -23.33 | | **-53.33** | L | - | **-53.33** ← -23.33 |
| Gamma-aminobutyric Acid-P | **-30.00** | L | **50.00** | H | - | **-30.00** → **50.00** |
| Glycine - P | -13.11 | | **-37.56** | L | - | **-37.56** ← -13.11 |
| Serine - P | -17.50 | | **-45.00** | L | - | **-45.00** ← -17.50 |
| Taurine - P | **-34.50** | L | **-45.50** | L | - | **-45.50** ← **-34.50** |
| Aspartic Acid - P | **-33.33** | L | **-45.83** | L | - | **-45.83** ← **-33.33** |
| Glutamine - P | **-37.11** | L | **-32.00** | L | | |
| Ethanolamine - P | **25.00** | H | **37.50** | H | - | **25.00** → **37.50** |
| Phosphoethanolamine - P | -20.00 | | -13.33 | | | |
| Phosphoserine - P | 8.33 | | 8.33 | | | |
| **PSS / PSD** | -18.27 / 24.33 | | -17.55 / 34.98 | | | |

| Connective Tissue | 11/19/2002 | | 3/11/2003 | | +/- | |
|---|---|---|---|---|---|---|
| Leucine - P | **-43.64** | L | **-49.09** | L | | |
| Methionine - P | **-38.00** | L | **-50.00** | L | - | **-50.00** ← **-38.00** |
| Valine - P | **-33.20** | L | **-52.80** | L | - | **-52.80** ← **-33.20** |
| Cystine - P | -7.50 | | -10.00 | | | |
| Hydroxylysine - P | **50.00** | H | **30.00** | H | + | **30.00** ← **50.00** |
| Hydroxyproline - P | **40.00** | H | -16.67 | | + | -16.67 ← **40.00** |
| 3-Methylhistidine - P | **30.00** | H | **50.00** | H | - | **30.00** → **50.00** |
| Proline - P | **-28.15** | L | **-39.26** | L | - | **-39.26** ← **-28.15** |
| **PSS / PSD** | -3.81 / 33.81 | | -17.23 / 37.23 | | | |

**ANNA SALANTI** — **Plasma Amino Acid Date: 3/11/2003**

Female / Age: 51 — Anna Salanti (2718)

| Essential Amino Acid | 11/19/2002 | | 3/11/2003 | | +/- | |
|---|---|---|---|---|---|---|
| Arginine - P | **-25.45** | L | -16.36 | | + | **-25.45** → -16.36 |
| Histidine - P | **-30.00** | L | **-44.29** | L | - | **-44.29** ← **-30.00** |
| Isoleucine - P | **-46.36** | L | **-57.27** | L | - | **-57.27** ← **-46.36** |
| Leucine - P | **-43.64** | L | **-49.09** | L | | |
| Lysine - P | **-39.33** | L | -7.33 | | + | **-39.33** → -7.33 |
| Methionine - P | **-38.00** | L | **-50.00** | L | - | **-50.00** ← **-38.00** |
| Phenylalanine - P | **-27.89** | L | **-52.11** | L | - | **-52.11** ← **-27.89** |
| Threonine - P | -18.67 | | **-26.00** | L | | |
| Tryptophan - P | -23.33 | | **-53.33** | L | - | **-53.33** ← -23.33 |
| Valine - P | **-33.20** | L | **-52.80** | L | - | **-52.80** ← **-33.20** |
| **PSS / PSD** | -32.59 / 32.59 | | -40.86 / 40.86 | | | |

| Fat Metabolism | 11/19/2002 | | 3/11/2003 | | +/- | |
|---|---|---|---|---|---|---|
| Arginine - P | **-25.45** | L | -16.36 | | + | **-25.45** → -16.36 |
| Isoleucine - P | **-46.36** | L | **-57.27** | L | - | **-57.27** ← **-46.36** |
| Leucine - P | **-43.64** | L | **-49.09** | L | | |
| Valine - P | **-33.20** | L | **-52.80** | L | - | **-52.80** ← **-33.20** |
| Taurine - P | **-34.50** | L | **-45.50** | L | - | **-45.50** ← **-34.50** |
| Glutamine - P | **-37.11** | L | **-32.00** | L | | |
| Sarcosine - P | **-30.00** | L | **-30.00** | L | | |
| **PSS / PSD** | -35.75 / 35.75 | | -40.43 / 40.43 | | | |

| Gluconeogen | 11/19/2002 | | 3/11/2003 | | +/- | |
|---|---|---|---|---|---|---|
| Threonine - P | -18.67 | | **-26.00** | L | | |
| Tryptophan - P | -23.33 | | **-53.33** | L | - | **-53.33** ← -23.33 |
| Glycine - P | -13.11 | | **-37.56** | L | - | **-37.56** ← -13.11 |
| Serine - P | -17.50 | | **-45.00** | L | - | **-45.00** ← -17.50 |
| Alanine - P | 16.86 | | -18.00 | | | |
| **PSS / PSD** | -11.15 / 17.89 | | -35.98 / 35.98 | | | |

| Hepatic Metabolism | 11/19/2002 | | 3/11/2003 | | +/- | |
|---|---|---|---|---|---|---|
| Methionine - P | **-38.00** | L | **-50.00** | L | - | **-50.00** ← **-38.00** |
| Taurine - P | **-34.50** | L | **-45.50** | L | - | **-45.50** ← **-34.50** |
| Glutamine - P | **-37.11** | L | **-32.00** | L | | |
| Cystine - P | -7.50 | | -10.00 | | | |
| Cystathionine - P | **50.00** | H | **25.00** | H | + | **25.00** → **50.00** |
| Homocystine - P | 18.00 | | 18.00 | | | |
| Alanine - P | 16.86 | | -18.00 | | | |
| **PSS / PSD** | -4.61 / 28.85 | | -16.07 / 28.36 | | | |

| Immune Metabolites | 11/19/2002 | | 3/11/2003 | | +/- | |
|---|---|---|---|---|---|---|
| Arginine - P | **-25.45** | L | -16.36 | | + | **-25.45** → -16.36 |
| Threonine - P | -18.67 | | **-26.00** | L | | |
| Glutamine - P | **-37.11** | L | **-32.00** | L | | |
| Ornithine - P | -21.33 | | **-36.67** | L | - | **-36.67** ← -21.33 |
| **PSS / PSD** | -25.64 / 25.64 | | -27.76 / 27.76 | | | |

**ANNA SALANTI** — **Plasma Amino Acid Date: 3/11/2003**

Female / Age: 51 — Anna Salanti (2718)

| Muscle Metabolites | 11/19/2002 | | 3/11/2003 | | +/- | |
|---|---|---|---|---|---|---|
| Anserine - P | **-49.00** | **L** | **-49.00** | **L** | | |
| Carnosine - P | **-49.00** | **L** | **-49.00** | **L** | | |
| 1-Methylhistidine - P | 15.00 | | **50.00** | **H** | - | 15.00 → **50.00** |
| 3-Methylhistidine - P | **30.00** | **H** | **50.00** | **H** | - | **30.00** → **50.00** |
| **PSS / PSD** | -13.25 / 35.75 | | 0.50 / 49.50 | | | |

| Neuroendocrine Met. | 11/19/2002 | | 3/11/2003 | | +/- | |
|---|---|---|---|---|---|---|
| Gamma-aminobutyric Acid-P | **-30.00** | **L** | **50.00** | **H** | - | **-30.00** → **50.00** |
| Glycine - P | -13.11 | | **-37.56** | **L** | - | **-37.56** ← -13.11 |
| Serine - P | -17.50 | | **-45.00** | **L** | - | **-45.00** ← -17.50 |
| Taurine - P | **-34.50** | **L** | **-45.50** | **L** | - | **-45.50** ← **-34.50** |
| Tyrosine - P | -10.00 | | **-38.57** | **L** | - | **-38.57** ← -10.00 |
| **PSS / PSD** | -21.02 / 21.02 | | -23.33 / 43.33 | | | |