



PATIENT: Number 516  
 SEX: Female  
 AGE: 40

## Toxic & Essential Elements; Hair

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 <sup>th</sup> 95 <sup>th</sup>
Aluminum (Al)	2.3	< 7.0	
Antimony (Sb)	< 0.01	< 0.050	
Arsenic (As)	0.035	< 0.060	
Barium (Ba)	1.2	< 2.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	0.014	< 2.0	
Cadmium (Cd)	0.017	< 0.050	
Lead (Pb)	0.21	< 0.60	
Mercury (Hg)	0.41	< 0.80	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	< 0.001	< 0.002	
Thorium (Th)	< 0.001	< 0.002	
Uranium (U)	0.006	< 0.060	
Nickel (Ni)	0.08	< 0.30	
Silver (Ag)	0.01	< 0.15	
Tin (Sn)	0.09	< 0.30	
Titanium (Ti)	0.65	< 0.70	
Total Toxic Representation			

ESSENTIAL AND OTHER ELEMENTS					
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 2.5 <sup>th</sup> 16 <sup>th</sup> 50 <sup>th</sup> 84 <sup>th</sup> 97.5 <sup>th</sup>		
Calcium (Ca)	647	300- 1200			
Magnesium (Mg)	220	35- 120			
Sodium (Na)	50	20- 250			
Potassium (K)	26	8- 75			
Copper (Cu)	10	11- 37			
Zinc (Zn)	190	140- 220			
Manganese (Mn)	0.21	0.08- 0.60			
Chromium (Cr)	0.31	0.40- 0.65			
Vanadium (V)	0.022	0.018- 0.065			
Molybdenum (Mo)	0.019	0.020- 0.050			
Boron (B)	0.51	0.25- 1.5			
Iodine (I)	0.20	0.25- 1.8			
Lithium (Li)	0.011	0.007- 0.020			
Phosphorus (P)	223	150- 220			
Selenium (Se)	0.79	0.55- 1.1			
Strontium (Sr)	0.40	0.50- 7.6			
Sulfur (S)	44200	44000- 50000			
Cobalt (Co)	0.007	0.005- 0.040			
Iron (Fe)	10	7.0- 16			
Germanium (Ge)	0.030	0.030- 0.040			
Rubidium (Rb)	0.023	0.007- 0.096			
Zirconium (Zr)	0.034	0.020- 0.42			

SPECIMEN DATA		RATIOS	
<b>COMMENTS:</b>		<b>ELEMENTS</b>	<b>RATIOS</b>
Date Collected: 8/15/2011	Sample Size: 0.199 g	Ca/Mg	2.94
Date Received: 8/24/2011	Sample Type: Head	Ca/P	2.9
Date Completed: 8/28/2011	Hair Color: Blond	Na/K	1.92
Methodology: ICP/MS	Treatment:	Zn/Cu	19
	Shampoo: Redken Clear	Zn/Cd	> 999
		<b>RANGE</b>	
			4- 30
			1- 12
			0.5- 10
			4- 20
			> 800

## What are your current symptoms and health history?

### Current health symptoms:

- \* Dx in Aug 2010 with Pyrroluria level in the mid-40s
- \* DX in Aug 2010 with high histamine: Normal Range: 40-70 ng/ml, My Results: 112 ng/ml
- \* Dx in Aug 2010 with low zinc: Optimal Range: 90-120 mcg/dL, My results: 80 mcg/dL
- \* Systemic inflammation with severe spinal and brain pain. The inflammation markers have decreased by at least half and the back pain is gone since beginning SCD diet.
- \* I have had elevated liver enzymes since 2009 (maybe before but no tests had been done)
- \* My left lymph node located under my jaw, has been swollen since September of 2001 and had begun to affect my right lymph as well as the lymphs behind my ears. Since beginning SCD my lymph node has been shrinking to the point where it is close to being gone.
- \* My left ear has tinnitus and has been inflamed for the last 5 years. An ear doctor found a Left ear fungus growth in June 2010 and removed it but the inflammation remains. I have also begun to produce excessive amounts of ear wax and that appears to be associated with the food that I eat. So, I am able to control the amount of ear wax a little but not a lot.
- \* I have been suffering from fatigue since 1997. Sometimes it is severe and sometimes less so but as an active person, I am very inactive now. I always think, tomorrow I will go for a walk, jog, find a climbing wall, etc. but nothing ever comes of it because I am tired.
- \* Very low stress tolerance. I will feel something break/stop working and I can end up slurring words, brain malfunction, brain pain, and be bed ridden for several days. Wanting to get up to do something but body is too exhausted to move. I may be combining different situations here.
- \* I have a terrible time with focus and productivity. I did find that I was very productive for part of one day after returning from vacation. Then I felt as though my brain became exhausted followed by my body a few hours later. Now my lack of focus is daily.
- \* Severe chemical sensitivity. I easily react of the chemicals emanating from a smokers skin as well as the smoke, chlorine, perfume, and car exhaust.
- \* Lots of issues with depression but not in a way I would've expected. I am optimistic so depression denial occurs. I found that magnesium stops depression for me so I THINK that I am fine now. I do linger on death but believe that is more about the reality of my poor health and survival without a support system rather than wanting to die. Although, maybe there is a supplement that can help??
- \* Always been shy. I have the feeling that I am social social but stuck unnaturally with shyness.
- \* Anxious and worried all of the time
- \* Low sex drive
- \* Decreased mental abilities with slow memory recall, lack of focus and decreased motivation to important tasks. Historically highly motivated and much more mentally sharp. Once I get mentally latched onto a task, I can get a lot done but it is a war to get to that point.
- \* Serious mental dulling, feeling as though someone pored sludge into my skull. Odd behavior and arm flapping when ingesting certain foods. Began SCD diet but without nuts or beans.
- \* Unstable blood sugar historically but progressed terribly by 2008. It became more stable after beginning SCD in 2010 but when attempting to add beans, blood sugar becomes unstable again. I can go longer than an hour without food now maybe 3 hours but if I do get low blood sugar I turn very irritable. I then need to eat the right food and then I need to isolate myself and wait for the emotions to dissipate. I always feel as though a truck has hit me after this happens.
- \* I isolate myself not because I want to but because my health issues make me an inconsistent friend and I never know how my body will behave. Making plans is difficult because I never know how I will feel on a particular day. In addition, I can only handle 1 or 2 friends to spend time with at the same time. Any more and I withdraw from the group.
- \* I get a racing heart sometimes. This has happened periodically throughout my life. My heart speeds up to a point that whenever I try to take a breath I get heart pain b/c breathing is slow while heart is beating so fast. When I was in grade school this happened and I was unable to breath for a long time due to the heart racing. An ambulance was called but they said I would grow out of it.
- \* My pregnenolone is almost non-existent on lab tests. I cannot supplement with preg b/c it makes me severely irritable.
- \* My cortisol remains very low. I take 5 mg Cortisol in the morning but if I increase my dose, I gain weight.
- \* My DHEAS is very low. I have just began supplementing with 7-Keto DHEA

- \* My cholesterol has increased from 170 to 270 in 6 months. My current HDL = 99, from a June 2011 test.
- \* I don't sweat unless I am doing a very slow exercise for a very long time, consistently over days. Since completing 2 chelation periods, I sweat a little bit. Enough to notice for the first time ever that the wet feeling under the arms is uncomfortable.
- \* Very sound sensitive. Road noise and music coming through speakers hurt my ears.
- \* I am ridiculously easy to feel embarrassed, even for others.
- \* Electrical blanket pads induce panic attacks in me.
- \* Always and still do have problems reading. It's exhausting and I always lose my place on the page.
- \* I am dizzy on standing. When I do yoga or take a bath I have to eat a lot of Celtic or Himalayan Sea Salt to make it through without becoming dizzy and nauseas. My latest blood pressure for week ending Sept 3 was 100/60 while lying down.
- \* My stools have firmed up since beginning the SCD diet and took about 5 months before turning brown. I now have constipation at the beginning of a stool that becomes normal after about an inch of stool is out. I have to make sure to eat enough fruits or else...
- \* I have an active viral overload

### **Health History:**

- \* I must cope with extreme irritability but since increasing my B6 this irritability has significantly decreased. I still have issues with this though.
- \* Had very high rT3 until placed on T3 alone for a year.
- \* Had Hashimotos and this has been greatly reduced. May still be an issue but blood tests show that it is just under the upper range of normal.
- \* Pneumonia 5x and hospitalized 2x before the age of 23
- \* Dx with Fibromyalgia and Chronic Fatigue in 2008; symptoms began in 1997
- \* Was hit by a car while walking to work in Nov 20, 2000. I had found a balance with my CFS until this point. My health began to spiral down after this.
- \* Up until 1996 I used to run or bike up a mountain almost daily for years to go climbing. One day, my body said NO! and I wasn't able to utilize my muscle strength. I began to sleep all day and became very emotional, crying anywhere. I was working 2 jobs and going to school full time. Barely making enough \$\$ for housing and food so skimmed on eating a lot. I recall my eyes becoming extremely watery, affecting my vision and then 3 months later my eyes became so dry that I had to place water on them before attempting to open them in the morning. Skin became very red and dry. I recall that I could muster up energy for 10 or so steps if I was able to cry. I recall that lifting a spoon to my mouth felt like I was lifting an elephant and it was a good day if I could make it from my bedroom 20 steps to the chair on our porch. It was as though my body couldn't reach the action potential for a muscle contraction. I recall that I couldn't inhale on command but was at the mercy of my autonomic nervous system for that action. I began having panic attacks regularly. My face ballooned.
- \* In Jan 2010, my MCV was high until I had begun Fred's wrong diagnosis vitamin B protocol. I have scaled back in the past year after fixing what I believe to have been a methylation block. The protocol put me in bed for 3 months but it was as though my body was finally going to work. My lymph nodes blew up to the point that I was worried that they would pop but after a week they went down.
- \* I had a gut parasite in 2009 treated with Rx.
- \* I had a TERRIBLE reaction to Doxycycline used to treat my C. Pneumoniae (nothing has worked) . Stomach inflammation and unbearable back pain with skin almost instantly becoming dry, cracked and bleeding.
- \* Severe diarrhea, malabsorption and yellow stool until beginning SCD Diet in Oct 2010. Have had soft stools as long as I can remember and into childhood.
- \* Severe insomnia with absolutely no recovery period until I began Thyroid and Cortisol. My work schedule varies from 3p-midnight or midnight-9a or noon. I sleep better now but still have enough issue to take Melatonin regularly.
- \* I have had constant eye twitches for years up until 2009 when I began taking lots of supplements.
- \* Tonsils removed in 1979 due to chronic illness
- \* Ill with Epstein Bar in 1980

**Dental history (Wisdom teeth removed and when? Any other extractions. First root canal placed? Braces? First amalgam etc...)**

\* I had my wisdom teeth removed in the mid/late 1990s. A piece of a root was left behind in one location.

\* I had braces from 2002-2005

\* I had my first amalgam filling in 1990. It fell out in 2006 and I put it back in until I went to the dentist 3 days later. It is now a gold filling.

\* I have the beginnings of another cavity that has yet to be treated

**What dental work do you currently have in place? What part of the dental clean-up have you completed?**

\* I have 1 gold filling and 1 cavity that needs to be treated. No other cavities.

1. What dentistry did your mother have at any time before or during pregnancy?

\* My mother had at least 20 amalgam fillings before I was born.

**What vaccinations have you had and when (including flu and especially travel shots)?**

\* I have had all vaccinations for the 1970-80s kid.

\* I have travelled to Peru and had their travel shots.

\* I have had all US military required shots in 1989

\* I was given several typhoid shots. Each time my reaction became worse. The last time I ended up at the hospital due to inability to breathe although my pulseox was 98.

\* I had received the flu shot each year for 3 years, 2003-2006

**Supplements and medications (including dosages) taken at time of hair test, or for the 3-6 months before the sample was taken?**

Rx & Supplements

Cortisol 5mg 1x/day

Compoundend Triiodo-L-Thyronine 50 mcg/Synthroid 50 mcg Slow Release 1x/day

*Additional Nutritional Information at bottom of page:*

- Biotin: 5 mg 2-4x/day

- Flax Oil: 2 Softgels 5x/day

- Borage Oil: 1 Softgel 4x/day

- P-5-P: 33mg 2-3x/day

- Vit B5: 500mg 2-3x/day

- Vit B Complex: 1-2x/day

- Selenium: 200 mcg 1x/day

- Vit C: 2000mg 5-6x/day. Taken only during chelation during this 3-month hair test (I take it every day now)

- Immoplex Glandular: 2x/day [Adrenal Tissue (Bovine) 125 mg, Pancreas Tissue (Porcine) 125 mg, Thymus Tissue (Ovine) 125 mg, Spleen Tissue (Bovine) 125 mg]

- L-Lysine: 500mg 1x/day

- Vitamin D3: 5000 IU/day. Infrequent use as the daily use for previous 3 years didn't increase test values.

- Taurine: 500mg/day.

- Pekana Detox Kit (20 drops 3x/day)

- Pekana Supren Adrenal Support (20 drops 3x/day)

- Folate 800 mcg

- Melatonin 3mg/day

- Vit E 400 IU

- mB12 lozenges 10 mg 2x/day

**What is your age, height and weight?**

\* 40, 5'4", 135 lbs

**Other information you feel may be relevant?**

Family has a history of cancer (prostate & breast), heart disease, diabetes, high blood pressure, alzheimers, dementia. Alcoholism runs in our family. Mother displays unusual behavior with being irritable, unable to focus, ruminates on childhood, untrusting of others.

I can see that my siblings have untreated health issues that have also shown up in their children. Learning disabilities, social isolation, mood issues.

**What is your location** – city & country (so that we can learn where certain toxins are more prevalent).

1971-1989: Chicago, Illinois

1989-1990: NJ & TX

1990-2007: Boulder, Colorado (CFS symptoms began in 1997)

2007-current: Kaiserslautern, Germany

Flax Oil

## Nutrition Info

Servings Per Container: 33

Serving Size: 3 Softgels

	Amount Per Serving	% Daily Value
Calories	25	
Calories from Fat	24	
Total Fat	3 g	5%*
Saturated Fat	<0.5 g	0%*
Polyunsaturated Fat	2 g	†
Monounsaturated Fat	0.5 g	†
Vitamin A (100% as beta-carotene)	24 IU	<1%
Flax Oil (Linum usitatissimum) (seed)	3 g	†
Omega-3 Fatty Acids (Alpha Linolenic Acid)	1.5 g (1,500 mg)	†
Organic Flax Seed Oil (Linum usitatissimum)	3.0 g (3,000 mg)	†
Omega-6 Fatty Acids (Linoleic Acid)	342 mg	†
Omega-9 Fatty Acids (Oleic Acid)	366 mg	†

\* Percent Daily Values are based on 2,000 calorie diet.

† Daily Value not established.

### Borage Oil

## Nutrition Info

Serving Size: 1 Softgel

Servings Per Container: 120

	Amount Per Serving	% Daily Value
Calories	10	
Calories from Fat	10	
Total Fat	1 g	2%*
Saturated Fat	0 g	0%*
Trans Fat	0 g	†
Polyunsaturated Fat	1 g	†
Monounsaturated Fat	0 g	†
<b>Borage Oil (<i>Borago officinalis</i>) (seed)</b>	<b>1.05 g (1,050 mg)</b>	†
<b>Gamma Linolenic Acid (GLA)</b>	<b>240 mg</b>	†
Other Fatty Acids (Typical Values)		
Linoleic Acid	296 mg	†
Oleic Acid	120 mg	†
Palmitic Acid	85 mg	†
Stearic Acid	60 mg	†

\* Percent Daily Values are based on 2,000 calorie diet.

† Daily Value not established.

### P-5-P

## Nutrition Info

Serving Size: 1 Tablet

Servings Per Container: 60

	Amount Per Serving	% Daily Value
Riboflavin (Vitamin B-2)	17 mg	1000%
Coenzyme Vitamin B-6	33 mg	1650%
Magnesium	100 mg	25%

\* Percent Daily Values are based on 2,000 calorie diet.

† Daily Value not established.

### Jarrow Formulas - B-Right Complex - 100 Capsules

<b>Supplement Facts</b>		
<b>Serving Size: 1 Capsule</b>		
<b>Servings Per Container: 100</b>		
	<b>Amount Per Serving</b>	<b>%DV</b>
Vitamin B1 (as thiamine mononitrate)	25 mg	1667%
Vitamin B2 (as riboflavin)	25 mg	1470%
Vitamin B3 (as niacin)	25 mg	125%
Vitamin B3 (as niacinamide)	100 mg	500%
Vitamin B5 (as calcium D-pantothenate)	100 mg	1000%
Pantethine (vitamin B5 derivative)	25 mg	*
Vitamin B6 (as pyridoxine HCl)	25 mg	1250%
Vitamin B6 (as pyridoxal 5-phosphate)	10 mg	500%
Vitamin B12 (as methylcobalamin)	100 mcg	1667%
Folic Acid (folate)	400 mcg	100%
Biotin	300 mcg	100%
PABA (para-aminobenzoic acid)	30 mg	*
Choline (as choline bitartrate)	50 mg	*
Inositol	50 mg	*
*Daily Value Not Established.		

## Nutrition Info

Serving Size: 1 Capsule

Servings Per Container: 90

	<b>Amount Per Serving</b>	<b>% Daily Value</b>
<b>Selenium (as L-Selenomethionine)</b>	<b>200 mcg</b>	<b>286%</b>

\* Percent Daily Values are based on 2,000 calorie diet.

† Daily Value not established.

Vit C

<b>Supplement Facts</b>		
<b>Serving Size 1 Capsule</b>		
<b>Amount Per Capsule</b>		<b>%DV</b>
Total Carbohydrate	1 g	<1%*
Vitamin C (as L-ascorbic acid)	1000 mg	1667%
*Percent Daily Values (DV) are based on a 2,000 calorie diet.		

Other Ingredients: Vegetable Cellulose, Vegetable Magnesium Stearate, Water. May contain vegetable glycerin.

**SUGGESTED USE:** As a dietary supplement for adults, one (1) vegetable capsule daily, preferably at mealtime, or as directed by a healthcare practitioner.

**If you are pregnant, nursing, taking any medication or have a medical condition, please consult your healthcare practitioner before taking any dietary supplement.**

**Keep out of reach of children.**

Solgar's KOF-K certification #K-1250

## Immoplex Glandular Ingredients

Serving Size 1 capsule  
 Servings per container 60  
 Amount per serving:  
 Adrenal Tissue (Bovine) 125 mg  
 Pancreas Tissue (Porcine) 125 mg  
 Thymus Tissue (Ovine) 125 mg  
 Spleen Tissue (Bovine) 125 mg

### ONE TABLET SUPPLIES:

Folate (as L-5-methyl tetrahydrofolate†) ..... 800 mcg

† As Metabolin® U.S. Patent Nos. 5,997,915; 6,254,904.

## Twinlab - B-5 Pantothenic Acid 500 mg. - 100 Capsules

<b>Supplement Facts</b>		
<b>Serving Size: 1 capsule</b>		
<b>Servings Per Container: 100</b>		
	<b>Amount Per Serving</b>	<b>%DV</b>
Pantothenic Acid (from d-calcium pantothenate)	500 mg	5000%
Calcium (from d-calcium pantothenate)	41 mg	4%
*Daily Value Not Established. †Percent Daily Values are based on a 2,000 calorie diet. Your diet values may be higher or lower depending on your calorie needs.		

**Other Ingredients:** Gelatin purified water, medium chain triglycerides, silica, magnesium stearate. Free of the most common allergens such as corn, soy, yeast, rice, barley, wheat, lactose (milk sugar) and all milk, citrus, fish and egg products. No added flavorings, sugars, salt, artificial sweeteners, colorings, preservatives or salicylates.

<b>Supplement Facts</b>	
<b>Amount Per Serving</b>	
L-Lysine (as L-lysine HCl)	500 mg*
*Daily Value not established.	

If you are pregnant, nursing, taking any medication or have a medical condition, please consult your health-care practitioner before taking any dietary supplement.

**Keep out of reach of children.**

Solgar's KOF-K certification #K-1250

Other Ingredients: Vegetable Cellulose, Microcrystalline Cellulose, Vegetable Magnesium Stearate.

**SUGGESTED USE:** As a dietary supplement for adults, take one (1) to two (2) vegetable capsules daily with juice or water, between meals, or as directed by a healthcare practitioner.

## Nutrition Info

Serving Size: 1 Softgel

Servings Per Container: 100

	Amount Per Serving	% Daily Value
Vitamin A (Fish Liver Oil)	10,000 IU	200%

\* Percent Daily Values are based on a 2,000 calorie diet.

† Daily Value not established.

vitamin D3 5000 IU

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### Solgar - Taurine Antioxidant 500 mg. - 100 Vegetarian Capsules

#### Supplement Facts

Serving Size: 1 Vegetarian Capsule

Servings Per Container: 100

	Amount Per Serving	%DV
Taurine (free form)	500 mg	*

\*Daily Value Not Established.

†Percent Daily Values are based on a 2,000 calorie diet. Your diet values may be higher or lower depending on your calorie needs.