



PATIENT: Number 644  
 SEX: Female  
 AGE: 32

**Toxic & Essential Elements; Hair**

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 <sup>th</sup> 95 <sup>th</sup>
Aluminum (Al)	1.7	< 7.0	
Antimony (Sb)	< 0.01	< 0.050	
Arsenic (As)	0.15	< 0.060	
Barium (Ba)	0.20	< 2.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	0.28	< 2.0	
Cadmium (Cd)	0.010	< 0.050	
Lead (Pb)	0.19	< 0.60	
Mercury (Hg)	0.75	< 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)	0.11	< 0.30	
Silver (Ag)	0.04	< 0.15	
Tin (Sn)	0.10	< 0.30	
Titanium (Ti)	0.24	< 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)	309	300- 1200			
Magnesium (Mg)	20	35- 120			
Sodium (Na)	23	20- 250			
Potassium (K)	4	8- 75			
Copper (Cu)	9.7	11- 37			
Zinc (Zn)	200	140- 220			
Manganese (Mn)	0.14	0.08- 0.60			
Chromium (Cr)	0.48	0.40- 0.65			
Vanadium (V)	0.074	0.018- 0.065			
Molybdenum (Mo)	0.044	0.020- 0.050			
Boron (B)	1.2	0.25- 1.5			
Iodine (I)	2.1	0.25- 1.8			
Lithium (Li)	< 0.004	0.007- 0.020			
Phosphorus (P)	178	150- 220			
Selenium (Se)	0.66	0.55- 1.1			
Strontium (Sr)	0.49	0.50- 7.6			
Sulfur (S)	47500	44000- 50000			
Cobalt (Co)	0.004	0.005- 0.040			
Iron (Fe)	8.2	7.0- 16			
Germanium (Ge)	0.023	0.030- 0.040			
Rubidium (Rb)	0.006	0.007- 0.096			
Zirconium (Zr)	0.053	0.020- 0.42			

SPECIMEN DATA		RATIOS	
<b>COMMENTS:</b>		<b>ELEMENTS</b>	<b>RATIOS</b>
Date Collected: 7/23/2012		Ca/Mg	15.5
Date Received: 7/26/2012		Ca/P	1.74
Date Completed: 7/27/2012		Na/K	5.75
Methodology: ICP/MS		Zn/Cu	20.6
Sample Size: 0.202 g		Zn/Cd	> 999
Sample Type: Head			
Hair Color: Blond			
Treatment:			
Shampoo: Dr Mercola			
		<b>RANGE</b>	
		4- 30	
		1- 12	
		0.5- 10	
		4- 20	
		> 800	

# Toxic & Essential Elements; Hair

Metal Au + Al2O3

TOXIC METALS			
		RESULT µg/g	REFERENCE INTERVAL
Aluminum (Al)		1.0	< 7.0
Antimony (Sb)		< 0.01	< 0.050
Arsenic (As)		0.067	< 0.060
Barium (Ba)		0.23	< 2.0
Beryllium (Be)		< 0.01	< 0.020
Bismuth (Bi)		0.006	< 2.0
Cadmium (Cd)		< 0.009	< 0.050
Lead (Pb)		0.09	< 0.60
Mercury (Hg)		0.04	< 0.80
Platinum (Pt)		< 0.003	< 0.005
Thallium (Tl)		< 0.001	< 0.002
Thorium (Th)		< 0.001	< 0.002
Uranium (U)		0.005	< 0.060
Nickel (Ni)		0.02	< 0.30
Silver (Ag)		< 0.006	< 0.15
Tin (Sn)		0.04	< 0.30
Titanium (Ti)		0.15	< 0.70
Total Toxic Representation			

① PS/PSOC + DHA + All in One + Be Calm + Lithium orotate

② Once lithium is in balance + Black Bear orally source molyb/hydroxy hydrology

③ Methyl Meta A+B

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)		165	300- 1200					
Magnesium (Mg)		120	35- 120					
Sodium (Na)		210	20- 250					
Potassium (K)		23	8- 75					
Copper (Cu)		8.1	11- 37					
Zinc (Zn)		200	140- 220					
Manganese (Mn)		0.19	0.08- 0.60					
Chromium (Cr)		0.43	0.40- 0.65					
Vanadium (V)		0.070	0.018- 0.065					
Molybdenum (Mo)		0.17	0.020- 0.050					
Boron (B)		0.47	0.25- 1.5					
Iodine (I)		0.74	0.25- 1.8					
Lithium (Li)		< 0.004	0.007- 0.020					
Phosphorus (P)		182	150- 220					
Selenium (Se)		0.65	0.55- 1.1					
Strontium (Sr)	All in One	0.19	0.50- 7.6					
Sulfur (S)		48600	44000- 50000					
Cobalt (Co)		0.004	0.005- 0.040					
Iron (Fe)		6.3	7.0- 16					
Germanium (Ge)		0.022	0.030- 0.040					
Rubidium (Rb)		0.030	0.007- 0.096					
Zirconium (Zr)		< 0.007	0.020- 0.42					

Be sure that high level of oxidation due to molyb support

+ All in One + Be Calm + Lithium orotate

Oratplex

SPECIMEN DATA		RATIOS	
<b>COMMENTS:</b>		ELEMENTS	RATIOS
Date Collected: 10/04/2013	Sample Size: 0.202 g	Ca/Mg	1.38
Date Received: 10/08/2013	Sample Type: Head	Ca/P	0.907
Date Completed: 10/10/2013	Hair Color: Brown	Na/K	9.13
Methodology: ICP/MS	Treatment:	Zn/Cu	24.7
	Shampoo: Avalon	Zn/Cd	> 999
		RANGE	
			4- 30
			1- 12
			0.5- 10
			4- 20
			> 800

## **Health history for hair test 644**

### **1) What are your current symptoms and health history?**

5 1/2 years ago I came down with a sudden, mono-like viral illness. I never recovered. Symptoms and their intensity have gone up and down at various points, I guess as I've 'pushed and crashed' along the way. Western medicine, as well as alternative therapies, have not given any lasting relief. Most recently, over the last year and a half, I adopted The Body Ecology Diet (similar to GAPS), and that has given me significant relief. Unfortunately, diet alone took me to a point of wasting away and getting even more sick, further making me realize there had to be more to the puzzle than candidiasis and abstaining from further toxins and non-organic foods.

My greatest symptoms that remain, are intense fatigue, as well as neurological/cognitive symptoms (brain fog). I have really bad chemical sensitivity, to the point that I don't really go out anymore. 5 minutes in a store will do me in for hours, an hour at a friend's house (with scented products in their home), will have me in bed for a day and a half. Food sensitivities are also really bad. There are only a few vegetables, and plain, whole foods I am able to eat without much reaction. No seasoning, spices, sweet vegetables, sulfur foods, etc.

I also get the 'usual' symptoms, nasal inflammation/drowsiness, blurred vision, dizzy upon standing, anger/irritability, depression, insomnia when having a reaction, etc.

### **2) Dental history (wisdom teeth removed? First root canal placed? Braces? First amalgam etc...)**

My wisdom teeth were removed in high school (mid-90's), and I had braces and headgear prior to that. I had a permanent retainer put in after the braces were removed, and just had that removed last month. I had noticed significant lessening in my symptoms within 24 hours of having the retainer removed (stainless steel). I really only had 2 amalgams that I know of, but I have only recently realized they may be prime suspects in the onset of my illness. About 7 months prior to my getting sick, I noticed one of the fillings was missing (a pencil tip type plug on the side of one of my molars). I had it replaced with a white composite filling, and I believe the other one was also replaced at this time as well (if not, in the year prior). Neither were replaced safely, by a biological dentist, or practicing safe removal procedure.

### **3) What dental work do you currently have in place? What part of the dental cleanup have you completed?**

I currently have no amalgams or dental work in place. The fillings I do have are all of white, composite material.

### **4) What dentistry did your mother have at any time before or during pregnancy?**

My mother had a lot of her fillings replaced (amalgams for amalgams), when she was pregnant with my brother. My brother is 27 months older than myself, and has no real health issues. My mother still has a full mouth of amalgams, also with no real health issues.



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

I am not entirely sure of my vaccination history, but I do know I have had the ubiquitous series of birth and age appropriate vaccinations recommended throughout my childhood (I'm 32). I've also had at least one or two flu-shots, one I believe, was the spray, administered nasally. I also believe I had the yellow fever vaccination, when I was planning a trip to Africa (the trip never took place).

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

Nothing really substantial taken as far as supplementation goes. A lot of probiotics, various Body Ecology enzymes and minerals, taken sporadically.

7) Other information you feel may be relevant?

Nothing beyond what I've mentioned so far, that I can think of...

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

Wausau, Wisconsin, USA, but the onset of my getting sick, and for the first four years of it, I was living in Las Vegas, Nevada.