



## Toxic & Essential Elements; Hair

TOXIC METALS				
		RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 <sup>th</sup> 95 <sup>th</sup>
Aluminum (Al)		4.4	< 7.0	
Antimony (Sb)		0.041	< 0.066	
Arsenic (As)		0.088	< 0.080	
Barium (Ba)		0.77	< 1.0	
Beryllium (Be)		< 0.01	< 0.020	
Bismuth (Bi)		0.005	< 2.0	
Cadmium (Cd)		0.41	< 0.065	
Lead (Pb)		0.87	< 0.80	
Mercury (Hg)		0.12	< 0.80	
Platinum (Pt)		< 0.003	< 0.005	
Thallium (Tl)		< 0.001	< 0.002	
Thorium (Th)		< 0.001	< 0.002	
Uranium (U)		0.008	< 0.060	
Nickel (Ni)		0.90	< 0.20	
Silver (Ag)		0.04	< 0.08	
Tin (Sn)		0.07	< 0.30	
Titanium (Ti)		0.20	< 0.60	
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)		625	200- 750			
Magnesium (Mg)		220	25- 75			
Sodium (Na)		770	20- 180			
Potassium (K)		29	9- 80			
Copper (Cu)		13	11- 30			
Zinc (Zn)		180	130- 200			
Manganese (Mn)		3.0	0.08- 0.50			
Chromium (Cr)		3.3	0.40- 0.70			
Vanadium (V)		0.074	0.018- 0.065			
Molybdenum (Mo)		0.028	0.025- 0.060			
Boron (B)		4.6	0.40- 3.0			
Iodine (I)		0.35	0.25- 1.8			
Lithium (Li)		0.029	0.007- 0.020			
Phosphorus (P)		155	150- 220			
Selenium (Se)		1.1	0.70- 1.2			
Strontium (Sr)		3.5	0.30- 3.5			
Sulfur (S)		45600	44000- 50000			
Cobalt (Co)		0.026	0.004- 0.020			
Iron (Fe)		9.3	7.0- 16			
Germanium (Ge)		0.033	0.030- 0.040			
Rubidium (Rb)		0.012	0.011- 0.12			
Zirconium (Zr)		0.037	0.020- 0.44			

SPECIMEN DATA		RATIOS		
<b>COMMENTS:</b> Results checked.		ELEMENTS	RATIOS	RANGE
Date Collected: 2/20/2011	Sample Size: 0.2 g	Ca/Mg	2.84	4- 30
Date Received: 2/28/2012	Sample Type: Head	Ca/P	4.03	0.8- 8
Date Completed: 3/2/2012	Hair Color: Brown	Na/K	26.6	0.5- 10
Methodology: ICP/MS	Treatment:	Zn/Cu	13.8	4- 20
	Shampoo: Bar Soap	Zn/Cd	439	> 800

## Health history for hair test 600

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

Chronic fatigue, depression, brain fog, anxiety, poor intestinal balance, candida, adrenal fatigue

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

Quite a few amalgam fillings since childhood. With time, some were unintentionally replaced with composite. June 2011 had 3 remaining amalgams replaced due to health concerns. Wisdom teeth removed at age 19, 16 years ago. 3 porcelain crowns put in at different times, I believe at least 10+ years ago. Also had braces in middle school.

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

Still have 3 crowns in place. I am 95% sure 1 does not have amalgam. The other 2, I have no idea. I plan to have all three replaced, even though it will cost \$3600..

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

Not sure, possible amalgams.

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

The basics as an infant. Had Hep B when I was 24, right before I came down with mono and began to get chronically fatigued. Also had several tetanus shots (some I am sure before the due date, because of not remembering when I last had one) Travel shots such as hep A, typhoid, ??

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

I believe I laid off supplements around the time of the hair test for the most part. I probably still took probiotics and Metformin for diabetes. At various times in the past 3-6 months, I took probiotics, herbal adrenal supps, fish oil-3/day, zinc-50mg, selenium-200/day, magnesium-400mg/day??, vitamin D-5000-10000/day, folate, B3,6,12(??? on dosage for all B's), and C-3000mg/day. Can't remember if there was anything else.

### **7. What is your age, height and weight?**

35 Y/O, 175 lbs.

### **8. Other information you feel may be relevant?**

When I took test, I had just gone surfing in the ocean. Not sure if that would play a role in my high sodium results. Tested for parasites a year ago. Did some treatment for them, not sure if I still have them. Lots of bad bacteria, and not much good bacteria, despite taking probiotics for quite some time.

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

Northern, California, USA. (I have lived in other states and countries)