

# HAIR ELEMENTS



**PATIENT: Number 240**  
**SEX: Male**  
**AGE: 34**  
**LOCATION: Barto, Pennsylvania**

## POTENTIALLY TOXIC ELEMENTS

TOXIC ELEMENTS	RESULT µg/g	REFERENCE RANGE	PERCENTILE	
			68 <sup>th</sup>	95 <sup>th</sup>
Aluminum	18	< 7.0		
Antimony	0.051	< 0.066		
Arsenic	0.051	< 0.080		
Barium	2.2	< 1.0		
Beryllium	< 0.01	< 0.020		
Bismuth	0.028	< 2.0		
Cadmium	0.064	< 0.065		
Lead	4.4	< 0.80		
Mercury	0.81	< 0.80		
Platinum	0.003	< 0.005		
Thallium	< 0.001	< 0.002		
Thorium	< 0.001	< 0.002		
Uranium	0.004	< 0.060		
Nickel	0.39	< 0.20		
Silver	0.09	< 0.08		
Tin	0.10	< 0.30		
Titanium	0.27	< 0.60		
Total Toxic Representation				

## ESSENTIAL AND OTHER ELEMENTS

ELEMENTS	RESULT µg/g	REFERENCE RANGE	PERCENTILE				
			2.5 <sup>th</sup>	16 <sup>th</sup>	50 <sup>th</sup>	84 <sup>th</sup>	97.5 <sup>th</sup>
Calcium	725	200- 750					
Magnesium	27	25- 75					
Sodium	33	20- 180					
Potassium	18	9- 80					
Copper	23	11- 30					
Zinc	200	130- 200					
Manganese	0.46	0.08- 0.50					
Chromium	0.70	0.40- 0.70					
Vanadium	0.047	0.018- 0.065					
Molybdenum	0.055	0.025- 0.060					
Boron	2.0	0.40- 3.0					
Iodine	0.37	0.25- 1.8					
Lithium	< 0.004	0.007- 0.020					
Phosphorus	174	150- 220					
Selenium	0.95	0.70- 1.2					
Strontium	0.59	0.30- 3.5					
Sulfur	49600	44000- 50000					
Cobalt	0.011	0.004- 0.020					
Iron	29	7.0- 16					
Germanium	0.041	0.030- 0.040					
Rubidium	0.026	0.011- 0.12					
Zirconium	4.5	0.020- 0.44					

### SPECIMEN DATA

**COMMENTS:**  
 Date Collected: 12/22/2008      Sample Size: 0.106 g  
 Date Received: 12/26/2008      Sample Type: Head  
 Date Completed: 12/27/2008      Hair Color: Brown  
 Client Reference:                      Treatment:  
 Methodology: ICP-MS                      Shampoo: Herbal Essence

### RATIOS

ELEMENTS	RATIOS	EXPECTED RANGE
Ca/Mg	26.9	4- 30
Ca/P	4.17	0.8- 8
Na/K	1.83	0.5- 10
Zn/Cu	8.7	4- 20
Zn/Cd	> 999	> 800

1. **What are your current symptoms and health history?** Light sensitivity, blurry vision at times, eyes feel drunk (nystigma?) some muscle pain in right leg (it migrates), brain fog, emotional at times, some fatigue when I first got sick this past July. These symptoms have not gotten worse.

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

I have about six amalgams right now. A few amalgams have been replaced in the past six or seven years. One porcelain crown that was just put in a few weeks ago.

3. **What dental work do you currently have in place? What part of the dental cleanup have you completed?** Right now there are two large amalgam fillings and about four small ones. No dental clean up has taken place thus far. I have an appointment in a week to have them replaced.

4. **What dentistry did your mother have at any time before or during pregnancy?** Not sure about mother's dentistry. I am sure she had amalgam fillings though.

5. **What vaccinations have you had and when (including flu and especially travel shots)?** I have had the flu shot in the past. I did not get one this year. No vaccinations for travel.

6. **Supplements and medications (including dosages) taken at time of hair test, or for the 3-6 months before the sample was taken.** I was taking antibiotics for possible Lyme disease infection. Ceftin, Biaxin, doxycycline (100mg 2 times/day), amoxicillin. Lexapro (10mg once a day). Nystatin (500,000 unit 2 times/day.) I am no longer taking any of these. Vitamin C 1000mg twice a day. Cod liver oil, two teaspoons/day. Multivitamin. Trace mineral supplement.

7. **Other information you feel may be relevant?** I have had thyroid function looked at this past September. It was fine. I had a spit test done for cortisol. My doctor said it was low, but the test showed it in reference range. My testosterone was low as well.

I was sure my sickness was due to Lyme. My symptoms started a few days after a tick bite. Repeated testing showed no Lyme. However, I did test positive for Epstein-Bar (titer was high) and HHV6. I don't know if this points to a current infection or not.

My symptoms may have started back in May. I got sick for a week-fatigue and no appetite, lost 10 pounds. I got better and resumed my normal life. Then, around July fourth, right after a taekwon-do class it really hit. I started with fatigue then the eye symptoms, then the emotional symptoms. It built over about a month. My theory, as far as I can tell from what I am reading on various chelation groups is that I may have mobilized toxins by starting my taekwon-do classes last spring.

My doctor has me on 500mg DMSA every other day (I know this contradicts the philosophy here). He did a urine challenge test (provoked with dmsa) which showed elevated levels of mercury and lead.

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