



SEX: Male
AGE: 44

Toxic & Essential Elements; Hair

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 th 95 th
Aluminum (Al)	1.8	< 7.0	
Antimony (Sb)	< 0.01	< 0.066	
Arsenic (As)	0.033	< 0.080	
Barium (Ba)	0.28	< 1.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	0.014	< 2.0	
Cadmium (Cd)	0.019	< 0.065	
Lead (Pb)	0.05	< 0.80	
Mercury (Hg)	0.19	< 0.80	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	< 0.001	< 0.002	
Thorium (Th)	< 0.001	< 0.002	
Uranium (U)	0.001	< 0.060	
Nickel (Ni)	0.04	< 0.20	
Silver (Ag)	0.01	< 0.08	
Tin (Sn)	< 0.02	< 0.30	
Titanium (Ti)	0.33	< 0.60	
Total Toxic Representation			

ESSENTIAL AND OTHER ELEMENTS					
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 2.5 th 16 th 50 th 84 th 97.5 th		
Calcium (Ca)	276	200- 750			
Magnesium (Mg)	26	25- 75			
Sodium (Na)	100	20- 180			
Potassium (K)	27	9- 80			
Copper (Cu)	11	11- 30			
Zinc (Zn)	210	130- 200			
Manganese (Mn)	0.06	0.08- 0.50			
Chromium (Cr)	0.41	0.40- 0.70			
Vanadium (V)	0.041	0.018- 0.065			
Molybdenum (Mo)	0.024	0.025- 0.060			
Boron (B)	0.64	0.40- 3.0			
Iodine (I)	1.8	0.25- 1.8			
Lithium (Li)	< 0.004	0.007- 0.020			
Phosphorus (P)	138	150- 220			
Selenium (Se)	0.93	0.70- 1.2			
Strontium (Sr)	0.46	0.30- 3.5			
Sulfur (S)	50600	44000- 50000			
Cobalt (Co)	0.004	0.004- 0.020			
Iron (Fe)	6.3	7.0- 16			
Germanium (Ge)	0.025	0.030- 0.040			
Rubidium (Rb)	0.037	0.011- 0.12			
Zirconium (Zr)	0.066	0.020- 0.44			

SPECIMEN DATA		RATIOS	
COMMENTS:		ELEMENTS	RATIOS
Date Collected: 02/02/2013		Ca/Mg	10.6
Date Received: 02/05/2013		Ca/P	2
Date Completed: 02/06/2013		Na/K	3.7
Methodology: ICP/MS		Zn/Cu	19.1
Sample Size: 0.201 g		Zn/Cd	> 999
Sample Type: Head			
Hair Color: Brown			
Treatment:			
Shampoo: Pantene			
		RANGE	
		4- 30	
		0.8- 8	
		0.5- 10	
		4- 20	
		> 800	

Health history for hair test 723

1. What are your current symptoms and health history?

- Chronic Fatigue Symptoms for at least 20 years, becoming more severe over time (frequently lethargic and apathetic, low mental clarity and endurance)
- Chronic Epstein Barr (acute infections occur at least a couple times a year, verified by blood test)
- Tested positive for Lupus anti-dsDNA, but negative for ANA in 2011
- Possible Chronic Lyme (contracted and treated for Lyme in 1994). Treated for Chronic Lyme with massive oral antibiotics program for 1 1/2 years (Jemsek protocol).
- Chronically low WBC count (3 to 3.4 range for about 15 years or more)
- Dry eyes
- Tinnitus
- Mild Depression
- Apathy
- Bouts of anger
- Brain fog, confusion, sleepiness, especially after eating rich, heavy foods
- Extreme fatigue upon waking in the morning. Takes a good hour to get going.
- Periodic numbness in extremities, especially during exercise
- Lack of muscle endurance
- Always had a weak stomach growing up (nauseous in cars, throw-up frequently). Got better in my 30's.
- Father diagnosed with and died of Alzheimer's disease.

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

- Two amalgam fillings at 28, which were replaced by composites about 10 years later

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

- Two composite fillings. Amalgams removed by regular dentist.

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

- Multiple amalgam fillings that she had since she was a kid.

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

- Since 1990, multiple trips overseas requiring tetanus, hepatitis, etc. shots. Last trip was to Haiti in 2011.

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

- Various vitamins, including B, C, D, E, Selenium, Lithium, Q10, Magnesium, Glutamine, Lysine, Fish Oil, Zinc, Folic Acid.
- About 15 rounds of Cutler protocol using DMSA and ALA since December 2011.

7. What is your age, height and weight?

- 44 years old. 6 feet tall. 165 pounds.

8. Other information you feel may be relevant?

- Try to exercise as much as possible. Used to run 3 to 4 times a week (4 miles or more at a time). Lift weights 2 to 3 times per week. In the past 4 months, there has been a noticeable drop in energy and endurance. Only run about once or twice a month and struggle to lift 2 or 3 times per week.
- Appear to feel generally better in the summer over the winter. Spend more time in the sun. Supplement more vitamin D in winter.
- Feel better for a few hours after exercising
- Brain fog frequent, short term memory poor. Have not worked full time for 2 years.
- Generally eat very well (vegetables, salads, brown rice, quinoa, red potatoes, etc.) and don't eat out or have sugar/processed foods. When I do go off this healthy diet, I usually pay for it with increased fatigue and brain issues.

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

- Central New Jersey