



SEX: Male
AGE: 58

Toxic & Essential Elements; Hair

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 th 95 th
Aluminum (Al)	2.3	< 7.0	
Antimony (Sb)	< 0.01	< 0.066	
Arsenic (As)	0.017	< 0.080	
Barium (Ba)	0.12	< 1.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	0.043	< 2.0	
Cadmium (Cd)	< 0.009	< 0.065	
Lead (Pb)	0.10	< 0.80	
Mercury (Hg)	0.63	< 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)	0.35	< 0.20	
Silver (Ag)	0.01	< 0.08	
Tin (Sn)	0.04	< 0.30	
Titanium (Ti)	0.45	< 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)	304	200- 750			
Magnesium (Mg)	40	25- 75			
Sodium (Na)	13	20- 180			
Potassium (K)	12	9- 80			
Copper (Cu)	9.8	11- 30			
Zinc (Zn)	170	130- 200			
Manganese (Mn)	0.08	0.08- 0.50			
Chromium (Cr)	0.43	0.40- 0.70			
Vanadium (V)	0.022	0.018- 0.065			
Molybdenum (Mo)	0.020	0.025- 0.060			
Boron (B)	2.7	0.40- 3.0			
Iodine (I)	1.1	0.25- 1.8			
Lithium (Li)	< 0.004	0.007- 0.020			
Phosphorus (P)	196	150- 220			
Selenium (Se)	0.87	0.70- 1.2			
Strontium (Sr)	0.27	0.30- 3.5			
Sulfur (S)	45800	44000- 50000			
Cobalt (Co)	0.003	0.004- 0.020			
Iron (Fe)	6.9	7.0- 16			
Germanium (Ge)	0.035	0.030- 0.040			
Rubidium (Rb)	0.019	0.011- 0.12			
Zirconium (Zr)	0.19	0.020- 0.44			

SPECIMEN DATA		RATIOS		
COMMENTS:		ELEMENTS	RATIOS	RANGE
Date Collected: 06/03/2015	Sample Size: 0.203 g	Ca/Mg	7.6	4- 30
Date Received: 06/06/2015	Sample Type: Head	Ca/P	1.55	0.8- 8
Date Completed: 06/12/2015	Hair Color: Black	Na/K	1.08	0.5- 10
Methodology: ICP/MS	Treatment:	Zn/Cu	17.3	4- 20
	Shampoo:	Zn/Cd	> 999	> 800

Health history for hair test 1117

1. **What are your current symptoms and health history?** Chronic daily persistent pressurized frontal headache, tinnitus, neck pain, tracheal irritation, transient fatigue and flulike symptoms, cold intolerance, exercise intolerance, anxiety.
2. **Dental history (Wisdom teeth removed and when? Any other extractions. First root canal placed? Braces?** First amalgam etc.) wisdom teeth removed at age 18. At least two additional extractions. Prior root canal. No history of braces. Multiple amalgams placed the earliest of which at age 9 or 10.
3. **What dental work do you currently have in place? What part of the dental clean-up have you completed?** Complete amalgam removal completed May 27, 2015. No known residual amalgam or obvious amalgam staining.
4. **What dentistry did your mother have at any time before or during pregnancy?** Unsure but likely had several amalgams.
5. **What vaccinations have you had and when (including flu and especially travel shots)?** For childhood vaccinations. Several flu shots.
6. **Supplements and medications (including dosages) taken at time of hair test, or for the 3-6 months before the sample was taken?** Vit C 4g/ day, vit E 1g/day, Selenomethianine 200mcg, Magnesium 1g/day, zinc 50 mg per day, ubiquinol 400 mg per day, milk thistle 500 mg per day, vitamin a 10,000 international units per day, adrenal cortical extract, DHEA 50 mg twice a day, tribulus, B complex four times per day, chromium picolinate 200 µg with meals, omega-3 fatty acid's, borage oil 1 to 4 g per day.
7. **What is your age, height and weight?** 58 yrs, 5'9", 160lbs
8. **Other information you feel may be relevant?** For several years, I took large doses of ALA indiscriminately before I'm out of removal and prior to becoming ill.
9. **What is your location – city & country (so that we can learn where certain toxins are more prevalent).** Cary, North Carolina