

Toxic & Essential Elements; Hair

TOXIC METALS

		RESULT µg/g	REFERENCE INTERVAL	PERCENTILE	
				68 th	95 th
Aluminum (Al)		1.5	< 7.0		
Antimony (Sb)		0.018	< 0.050		
Arsenic (As)		0.025	< 0.060		
Barium (Ba)		3.9	< 2.0		
Beryllium (Be)		< 0.01	< 0.020		
Bismuth (Bi)		0.005	< 2.0		
Cadmium (Cd)		< 0.009	< 0.050		
Lead (Pb)		0.45	< 0.60		
Mercury (Hg)		0.20	< 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)		0.05	< 0.30		
Silver (Ag)		0.01	< 0.15		
Tin (Sn)		0.08	< 0.30		
Titanium (Ti)		0.27	< 0.70		
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)		1550	300- 1200					
Magnesium (Mg)		170	35- 120					
Sodium (Na)		13	20- 250					
Potassium (K)		6	8- 75					
Copper (Cu)		65	11- 37					
Zinc (Zn)		380	140- 220					
Manganese (Mn)		0.09	0.08- 0.60					
Chromium (Cr)		0.41	0.40- 0.65					
Vanadium (V)		0.013	0.018- 0.065					
Molybdenum (Mo)		0.040	0.020- 0.050					
Boron (B)		1.7	0.25- 1.5					
Iodine (I)		0.25	0.25- 1.8					
Lithium (Li)		0.018	0.007- 0.020					
Phosphorus (P)		153	150- 220					
Selenium (Se)		0.82	0.55- 1.1					
Strontium (Sr)		1.5	0.50- 7.6					
Sulfur (S)		51500	44000- 50000					
Cobalt (Co)		0.005	0.005- 0.040					
Iron (Fe)		7.4	7.0- 16					
Germanium (Ge)		0.034	0.030- 0.040					
Rubidium (Rb)		0.006	0.007- 0.096					
Zirconium (Zr)		0.11	0.020- 0.42					

SPECIMEN DATA

COMMENTS:	RATIOS		
	ELEMENTS	RATIOS	RANGE
Date Collected: 07/19/2013	Ca/Mg	9.12	4- 30
Date Received: 07/22/2013	Ca/P	10.1	1- 12
Date Completed: 07/24/2013	Na/K	2.17	0.5- 10
Methodology: ICP/MS	Zn/Cu	5.85	4- 20
	Zn/Cd	> 999	> 800

Sample Size: 0.197 g
Sample Type: Head
Hair Color: Brown
Treatment:
Shampoo: Jason

Health history for hair test 821

1.What are your current symptoms and health history? Debilitating fatigue when exposed to chemicals/fragrances, severe MCS, Brain fog when exposed to chemicals/fragrances, candida/gut pains upon eating (recently subsiding with candida diet), low basal body temperature, severe liver pain during month of July 2013

2.Dental history (Wisdom teeth removed and when? Any other extractions. First root canal placed? Braces? First amalgam etc...) Early teens: 4 teeth pulled, braces, 2 amalgams filled Mid 20s: 2 amalgams filled Fall 2009: 4 amalgams removed

3.What dental work do you currently have in place? What part of the dental clean-up have you completed? cavities/filled with porcelain composite

4.What dentistry did your mother have at any time before or during pregnancy? Unknown, but has lots of cavities and amalgams

5.What vaccinations have you had and when (including flu and especially travel shots)? Normal vaccinations as required when infant Traveled to Egypt/1995; had all required vaccinations at that time (includes malaria and others) No vaccinations after 1996 (I believe)

6.Supplements and medications (including dosages) taken at time of hair test, or for the 3-6 months before the sample was taken? ALA, vitamin C, B complex, selenium, fish oil, zinc, molybdenum, malic acid, CoQ10, Biotin, Pantothenic Acid, probiotic, antifungal herbs, HCL Betaine, Vitamin D, calcium, potassium iodide, milk thistle, charcoal, Super Primrose Oil, Colostrum, NAC, (recently stopped NAC and milk thistle due to sulfur/thiol reactions)

7.What is your age, height and weight? 40, 5"4", 125

8.Other information you feel may be relevant? Active swimmer from 1990 – 2012 (3-4 times weekly) Recently cut out high sulfur/thiol foods in diet due to severe thiol reactions

9.What is your location – city & country (so that we can learn where certain toxins are more prevalent). Kansas City, U.S.A.