

Toxic & Essential Elements; Hair

TOXIC METALS					
		RESULT µg/g	REFERENCE INTERVAL	PERCENTILE	
				68 th	95 th
Aluminum (Al)		3.5	< 12		
Antimony (Sb)		< 0.01	< 0.060		
Arsenic (As)		0.012	< 0.090		
Barium (Ba)		8.4	< 2.0		
Beryllium (Be)		< 0.01	< 0.020		
Bismuth (Bi)		0.054	< 2.0		
Cadmium (Cd)		0.030	< 0.050		
Lead (Pb)		0.22	< 1.0		
Mercury (Hg)		0.05	< 0.80		
Platinum (Pt)		< 0.003	< 0.005		
Thallium (Tl)		< 0.001	< 0.002		
Thorium (Th)		< 0.001	< 0.002		
Uranium (U)		0.037	< 0.060		
Nickel (Ni)		0.10	< 0.40		
Silver (Ag)		0.02	< 0.10		
Tin (Sn)		0.08	< 0.30		
Titanium (Ti)		0.79	< 1.3		
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)		2050	475- 1500					
Magnesium (Mg)		400	45- 180					
Sodium (Na)		420	80- 450					
Potassium (K)		19	28- 160					
Copper (Cu)		10	11- 30					
Zinc (Zn)		780	130- 200					
Manganese (Mn)		0.51	0.15- 0.65					
Chromium (Cr)		0.35	0.40- 0.65					
Vanadium (V)		0.37	0.018- 0.065					
Molybdenum (Mo)		0.042	0.040- 0.10					
Boron (B)		0.97	0.40- 4.0					
Iodine (I)		2.5	0.25- 1.8					
Lithium (Li)		0.055	0.008- 0.030					
Phosphorus (P)		325	250- 500					
Selenium (Se)		1.0	0.80- 1.3					
Strontium (Sr)		30	1.0- 8.0					
Sulfur (S)		45600	42000- 48000					
Cobalt (Co)		0.019	0.006- 0.035					
Iron (Fe)		8.3	7.0- 16					
Germanium (Ge)		0.024	0.030- 0.040					
Rubidium (Rb)		0.020	0.030- 0.25					
Zirconium (Zr)		0.076	0.040- 1.0					

SPECIMEN DATA		RATIOS		
COMMENTS:		ELEMENTS	RATIOS	RANGE
Date Collected: 07/22/2013	Sample Size: 0.196 g	Ca/Mg	5.13	4- 30
Date Received: 07/26/2013	Sample Type: Pubic	Ca/P	6.31	1- 12
Date Completed: 07/28/2013	Hair Color: Brown	Na/K	22.1	0.5- 10
Methodology: ICP/MS	Treatment:	Zn/Cu	78	4- 20
	Shampoo: Ivory Soap	Zn/Cd	> 999	> 800

Health history for hair test 819

1. Heart was beating extremely fast, but has now settled down for the most part, insomnia, constipation, sleepy sometimes.
2. Wisdom teeth removed around 1980. No root canals. One large amalgam in back tooth for 25 years or so. Used ALA ten years ago for a couple of months or so not knowing it was a chelator of mercury.
3. Had amalgam removed and replaced with composite on April 9, 2013, no other dental work.
4. Not sure about mother's dental work. I know she has some amalgam and has or has had gold in the past.
5. Born in 1964 and have had all required immunizations including rubella. Have never had a flu shot.
6. Taking B complex, vitamins C and E, magnesium, zinc, and ubiquinol occasionally.
7. 48 years old, 5'7", 130 to 135 pounds.
8. Amalgam became loose and was leaking for several months before it actually started falling out. I was sick with flu-like symptoms before I discovered what was causing my illness.
9. Lubbock, Texas