



SEX: Male
AGE: 50

Toxic & Essential Elements; Hair

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 th 95 th
Aluminum (Al)	1.0	< 7.0	
Antimony (Sb)	0.029	< 0.066	
Arsenic (As)	0.072	< 0.080	
Barium (Ba)	0.40	< 1.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	0.006	< 2.0	
Cadmium (Cd)	< 0.009	< 0.065	
Lead (Pb)	0.19	< 0.80	
Mercury (Hg)	0.41	< 0.80	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	< 0.001	< 0.002	
Thorium (Th)	< 0.001	< 0.002	
Uranium (U)	0.002	< 0.060	
Nickel (Ni)	0.08	< 0.20	
Silver (Ag)	0.01	< 0.08	
Tin (Sn)	0.02	< 0.30	
Titanium (Ti)	0.58	< 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)	278	200- 750			
Magnesium (Mg)	21	25- 75			
Sodium (Na)	10	20- 180			
Potassium (K)	4	9- 80			
Copper (Cu)	15	11- 30			
Zinc (Zn)	220	130- 200			
Manganese (Mn)	0.10	0.08- 0.50			
Chromium (Cr)	0.67	0.40- 0.70			
Vanadium (V)	0.065	0.018- 0.065			
Molybdenum (Mo)	0.021	0.025- 0.060			
Boron (B)	0.22	0.40- 3.0			
Iodine (I)	0.28	0.25- 1.8			
Lithium (Li)	< 0.004	0.007- 0.020			
Phosphorus (P)	235	150- 220			
Selenium (Se)	0.96	0.70- 1.2			
Strontium (Sr)	0.16	0.30- 3.5			
Sulfur (S)	51000	44000- 50000			
Cobalt (Co)	0.005	0.004- 0.020			
Iron (Fe)	8.7	7.0- 16			
Germanium (Ge)	0.035	0.030- 0.040			
Rubidium (Rb)	< 0.003	0.011- 0.12			
Zirconium (Zr)	0.031	0.020- 0.44			

SPECIMEN DATA		RATIOS	
COMMENTS:		ELEMENTS	RATIOS
Date Collected: 03/14/2014	Sample Size: 0.201 g	Ca/Mg	13.2
Date Received: 04/04/2014	Sample Type: Head	Ca/P	1.18
Date Completed: 04/08/2014	Hair Color: Brown	Na/K	2.5
Methodology: ICP/MS	Treatment:	Zn/Cu	14.7
	Shampoo: Andalou Naturals	Zn/Cd	> 999
		RANGE	
			4- 30
			0.8- 8
			0.5- 10
			4- 20
			> 800

Health history for hair test 948

Relatively fit and healthy. Works full time without difficulty. Current symptoms: heartburn (about 15 yrs), bad dry eye in one eye (3 yrs), ADD (about 15 yrs), fluid retention in calves (1 yr), depression, apathy & difficulty concentrating (all have had before, but have worsened in past year), lack of empathy (whole life).

2. No wisdom teeth removed. 8 amalgam fillings since childhood
3. No dental clean-up has been started.
4. Mother has many amalgams. Unknown if she had any dental work done during pregnancy.
5. Normal childhood vaccines. In 2005, tetanus, typhoid, Hep A1, Hep B1, Hep B2. In 2007, Hep A2, Hep B3
6. Not taking supplements or medications at time of hair test.
7. 50 yrs old; 5'10"; 161 lbs
9. Maryland