

# Toxic & Essential Elements; Hair

TOXIC METALS				
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE	
			68 <sup>th</sup>	95 <sup>th</sup>
Aluminum (Al)	2.0	< 7.0		
Antimony (Sb)	0.032	< 0.066		
Arsenic (As)	0.089	< 0.080		
Barium (Ba)	0.33	< 1.0		
Beryllium (Be)	< 0.01	< 0.020		
Bismuth (Bi)	0.086	< 2.0		
Cadmium (Cd)	0.015	< 0.065		
Lead (Pb)	0.88	< 0.80		
Mercury (Hg)	0.91	< 0.80		
Platinum (Pt)	< 0.003	< 0.005		
Thallium (Tl)	< 0.001	< 0.002		
Thorium (Th)	< 0.001	< 0.002		
Uranium (U)	0.026	< 0.060		
Nickel (Ni)	0.09	< 0.20		
Silver (Ag)	0.11	< 0.08		
Tin (Sn)	0.48	< 0.30		
Titanium (Ti)	0.19	< 0.60		
Total Toxic Representation				

ESSENTIAL AND OTHER ELEMENTS							
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE				
			2.5 <sup>th</sup>	16 <sup>th</sup>	50 <sup>th</sup>	84 <sup>th</sup>	97.5 <sup>th</sup>
Calcium (Ca)	119	200- 750					
Magnesium (Mg)	9	25- 75					
Sodium (Na)	19	20- 180					
Potassium (K)	21	9- 80					
Copper (Cu)	21	11- 30					
Zinc (Zn)	140	130- 200					
Manganese (Mn)	0.08	0.08- 0.50					
Chromium (Cr)	0.42	0.40- 0.70					
Vanadium (V)	0.034	0.018- 0.065					
Molybdenum (Mo)	0.077	0.025- 0.060					
Boron (B)	0.96	0.40- 3.0					
Iodine (I)	5.6	0.25- 1.8					
Lithium (Li)	< 0.004	0.007- 0.020					
Phosphorus (P)	143	150- 220					
Selenium (Se)	1.2	0.70- 1.2					
Strontium (Sr)	0.27	0.30- 3.5					
Sulfur (S)	49300	44000- 50000					
Cobalt (Co)	0.005	0.004- 0.020					
Iron (Fe)	6.4	7.0- 16					
Germanium (Ge)	0.031	0.030- 0.040					
Rubidium (Rb)	0.033	0.011- 0.12					
Zirconium (Zr)	0.10	0.020- 0.44					

SPECIMEN DATA		RATIOS		
<b>COMMENTS:</b>		ELEMENTS	RATIOS	RANGE
Date Collected: 05/24/2013	Sample Size: 0.199 g	Ca/Mg	13.2	4- 30
Date Received: 06/01/2013	Sample Type: Head	Ca/P	0.832	0.8- 8
Date Completed: 06/04/2013	Hair Color:	Na/K	0.905	0.5- 10
Methodology: ICP/MS	Treatment:	Zn/Cu	6.67	4- 20
	Shampoo: Nivea	Zn/Cd	> 999	> 800

## **Health history for hair test 787**

### **What are your current symptoms and health history?**

Amalgams removed in October 2012. 8 months ago. On ~ round 25. 12 with DMSA alone, then with ALA. Currently at 100 mg of ALA.

Fatigue, muscle spasms/contractions, mental symptoms, brainfog, emotional instability, horrible memory, digestive difficulties, liver, adrenal symptoms.

### **What dentistry did your mother have at any time before or during pregnancy?**

She had amalgam fillings

### **What vaccinations have you had and when (including flu and especially travel shots)?**

None.

### **What is your age, height and weight?**

31, 5.9, 190 pounds.

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

Princeton, NJ.