



PATIENT: Number 526  
 SEX: Female  
 AGE: 44

**Toxic & Essential Elements; Hair**

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 <sup>th</sup> 95 <sup>th</sup>
Aluminum (Al)	3.0	< 7.0	
Antimony (Sb)	< 0.01	< 0.050	
Arsenic (As)	0.076	< 0.060	
Barium (Ba)	0.34	< 2.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	0.072	< 2.0	
Cadmium (Cd)	< 0.009	< 0.050	
Lead (Pb)	0.06	< 0.60	
Mercury (Hg)	0.18	< 0.80	
Platinum (Pt)	0.006	< 0.005	
Thallium (Tl)	< 0.001	< 0.002	
Thorium (Th)	< 0.001	< 0.002	
Uranium (U)	0.008	< 0.060	
Nickel (Ni)	0.05	< 0.30	
Silver (Ag)	0.11	< 0.15	
Tin (Sn)	0.44	< 0.30	
Titanium (Ti)	1.1	< 0.70	
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)	282	300- 1200			
Magnesium (Mg)	21	35- 120			
Sodium (Na)	15	20- 250			
Potassium (K)	3	8- 75			
Copper (Cu)	15	11- 37			
Zinc (Zn)	190	140- 220			
Manganese (Mn)	0.11	0.08- 0.60			
Chromium (Cr)	0.57	0.40- 0.65			
Vanadium (V)	0.084	0.018- 0.065			
Molybdenum (Mo)	0.029	0.020- 0.050			
Boron (B)	0.77	0.25- 1.5			
Iodine (I)	0.59	0.25- 1.8			
Lithium (Li)	0.008	0.007- 0.020			
Phosphorus (P)	197	150- 220			
Selenium (Se)	1.2	0.55- 1.1			
Strontium (Sr)	0.48	0.50- 7.6			
Sulfur (S)	47600	44000- 50000			
Cobalt (Co)	0.003	0.005- 0.040			
Iron (Fe)	6.2	7.0- 16			
Germanium (Ge)	0.033	0.030- 0.040			
Rubidium (Rb)	0.006	0.007- 0.096			
Zirconium (Zr)	0.57	0.020- 0.42			

SPECIMEN DATA		RATIOS	
<b>COMMENTS:</b>		<b>ELEMENTS</b>	<b>RATIOS</b>
Date Collected: 9/21/2011		Ca/Mg	13.4
Date Received: 9/24/2011		Ca/P	1.43
Date Completed: 9/28/2011		Na/K	5
Methodology: ICP/MS		Zn/Cu	12.7
Sample Size: 0.2 g	Sample Type: Head	Zn/Cd	> 999
Hair Color: Blond	Treatment: Dye		
Shampoo: Sebastian			
		<b>RANGE</b>	
			4- 30
			1- 12
			0.5- 10
			4- 20
			> 800