



PATIENT: Number 522

*Toxic & Essential Elements; Hair*

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 <sup>th</sup> 95 <sup>th</sup>
Aluminum (Al)	25	< 7.0	
Antimony (Sb)	0.064	< 0.050	
Arsenic (As)	0.13	< 0.060	
Barium (Ba)	0.43	< 2.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	0.060	< 2.0	
Cadmium (Cd)	0.048	< 0.050	
Lead (Pb)	2.6	< 0.60	
Mercury (Hg)	0.22	< 0.80	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	< 0.001	< 0.002	
Thorium (Th)	0.001	< 0.002	
Uranium (U)	0.064	< 0.060	
Nickel (Ni)	0.13	< 0.30	
Silver (Ag)	0.16	< 0.15	
Tin (Sn)	0.24	< 0.30	
Titanium (Ti)	0.31	< 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)	328	300- 1200					
Magnesium (Mg)	16	35- 120					
Sodium (Na)	58	20- 250					
Potassium (K)	29	8- 75					
Copper (Cu)	72	11- 37					
Zinc (Zn)	100	140- 220					
Manganese (Mn)	0.40	0.08- 0.60					
Chromium (Cr)	0.80	0.40- 0.65					
Vanadium (V)	0.15	0.018- 0.065					
Molybdenum (Mo)	0.079	0.020- 0.050					
Boron (B)	1.7	0.25- 1.5					
Iodine (I)	0.77	0.25- 1.8					
Lithium (Li)	< 0.004	0.007- 0.020					
Phosphorus (P)	148	150- 220					
Selenium (Se)	1.1	0.55- 1.1					
Strontium (Sr)	0.66	0.50- 7.6					
Sulfur (S)	45800	44000- 50000					
Cobalt (Co)	0.008	0.005- 0.040					
Iron (Fe)	10	7.0- 16					
Germanium (Ge)	0.029	0.030- 0.040					
Rubidium (Rb)	0.024	0.007- 0.096					
Zirconium (Zr)	1.8	0.020- 0.42					

SPECIMEN DATA		RATIOS		
<b>COMMENTS:</b>		<b>ELEMENTS</b>	<b>RATIOS</b>	<b>RANGE</b>
Date Collected:	Sample Size: 0.181 g	Ca/Mg	20.5	4- 30
Date Received: 9/17/2011	Sample Type: Head	Ca/P	2.22	1- 12
Date Completed: 9/22/2011	Hair Color:	Na/K	2	0.5- 10
Methodology: ICP/MS	Treatment:	Zn/Cu	1.39	4- 20
	Shampoo:	Zn/Cd	> 999	> 800

### **Health history for hair test 522**

This hair test is for my 25 y.o. son. He has ongoing depression, severe sway back, crohn's, flat feet, some anxiety, zero motivation. Many many symptoms - depression, anxiety, insomnia, back/body pain, difficulty walking, digestive/food issues. Has recently become a vegetarian and feels amazingly better, has very low energy, self-diagnoses with Asperger's. He currently takes anti-depressants and no other drugs or supplements. He had all the required childhood vaccines, including hep A & B, and most flu shots - unfortunately. I do not know about travel shots, or which drug he is on. I suspect he had fillings, but am not sure.

I have mercury issues, which were there when I was pregnant with him, and not dental work done during pregnancy.

He was born missing one tooth and cracked another next to it, which led to much dentistry to rebuild everything - including false teeth, full braces, several versions of an implant and finally surgery to implant one on a titanium post.

Rachel