



PATIENT: Number 553
 SEX: Male
 AGE: 4

Toxic & Essential Elements; Hair

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 th 95 th
Aluminum (Al)	14	< 8.0	
Antimony (Sb)	0.18	< 0.066	
Arsenic (As)	0.083	< 0.080	
Barium (Ba)	0.40	< 0.50	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	0.024	< 2.0	
Cadmium (Cd)	0.033	< 0.070	
Lead (Pb)	3.6	< 1.0	
Mercury (Hg)	0.72	< 0.40	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	< 0.001	< 0.002	
Thorium (Th)	0.001	< 0.002	
Uranium (U)	0.027	< 0.060	
Nickel (Ni)	0.38	< 0.20	
Silver (Ag)	0.31	< 0.20	
Tin (Sn)	0.41	< 0.30	
Titanium (Ti)	0.57	< 1.0	
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)	234	125- 370			
Magnesium (Mg)	25	12- 30			
Sodium (Na)	140	20- 200			
Potassium (K)	380	12- 200			
Copper (Cu)	9.0	11- 18			
Zinc (Zn)	65	100- 190			
Manganese (Mn)	0.16	0.10- 0.50			
Chromium (Cr)	0.40	0.43- 0.80			
Vanadium (V)	0.036	0.030- 0.10			
Molybdenum (Mo)	0.087	0.050- 0.13			
Boron (B)	1.1	0.70- 5.0			
Iodine (I)	0.76	0.25- 1.3			
Lithium (Li)	0.004	0.007- 0.020			
Phosphorus (P)	151	150- 220			
Selenium (Se)	1.5	0.70- 1.1			
Strontium (Sr)	1.2	0.16- 1.0			
Sulfur (S)	48100	45500- 53000			
Cobalt (Co)	0.007	0.004- 0.020			
Iron (Fe)	11	7.0- 16			
Germanium (Ge)	0.026	0.030- 0.040			
Rubidium (Rb)	0.44	0.016- 0.18			
Zirconium (Zr)	0.68	0.040- 1.0			

SPECIMEN DATA		RATIOS	
COMMENTS:		ELEMENTS	RATIOS
Date Collected: 10/10/2011	Sample Size: 0.196 g	Ca/Mg	9.36
Date Received: 10/26/2011	Sample Type: Head	Ca/P	1.55
Date Completed: 10/27/2011	Hair Color: Brown	Na/K	0.368
Methodology: ICP/MS	Treatment:	Zn/Cu	7.22
	Shampoo: Suave Kids	Zn/Cd	> 999
		RANGE	
			4- 30
			0.8- 8
			0.5- 10
			4- 20
			> 800

Health history for hair test 553

1. Normal. Possible slight hyperactive tendency. Above average verbal skills.
2. No dental work at all.
3. None needed.
4. No dental work at time of pregnancy.
5. Polio vaccine. No other vaccines.
6. Childrens multi-vitamin only.
7. 3, 42" or so, 35lbs.
- 8.
9. Kin Town, Okinawa, Japan