



PATIENT: Number 634
 SEX: Female
 AGE: 4

Toxic & Essential Elements; Hair

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 th 95 th
Aluminum (Al)	4.6	< 8.0	
Antimony (Sb)	0.022	< 0.066	
Arsenic (As)	0.13	< 0.080	
Barium (Ba)	0.21	< 0.75	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	0.15	< 2.0	
Cadmium (Cd)	< 0.009	< 0.070	
Lead (Pb)	0.64	< 1.0	
Mercury (Hg)	1.0	< 0.40	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	0.001	< 0.002	
Thorium (Th)	< 0.001	< 0.002	
Uranium (U)	0.071	< 0.060	
Nickel (Ni)	0.13	< 0.30	
Silver (Ag)	0.04	< 0.20	
Tin (Sn)	0.10	< 0.30	
Titanium (Ti)	0.41	< 0.90	
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)	221	140- 500	
Magnesium (Mg)	14	15- 45	
Sodium (Na)	46	18- 180	
Potassium (K)	100	10- 150	
Copper (Cu)	8.9	11- 24	
Zinc (Zn)	66	100- 190	
Manganese (Mn)	0.21	0.10- 0.50	
Chromium (Cr)	0.56	0.43- 0.70	
Vanadium (V)	0.089	0.030- 0.10	
Molybdenum (Mo)	0.12	0.050- 0.13	
Boron (B)	2.5	0.40- 3.5	
Iodine (I)	4.8	0.25- 1.3	
Lithium (Li)	< 0.004	0.007- 0.020	
Phosphorus (P)	156	150- 220	
Selenium (Se)	0.81	0.70- 1.1	
Strontium (Sr)	0.27	0.19- 2.0	
Sulfur (S)	45500	45500- 53000	
Cobalt (Co)	0.005	0.005- 0.030	
Iron (Fe)	6.6	7.0- 16	
Germanium (Ge)	0.030	0.030- 0.040	
Rubidium (Rb)	0.11	0.012- 0.16	
Zirconium (Zr)	0.019	0.030- 1.0	

SPECIMEN DATA		RATIOS	
COMMENTS:		ELEMENTS	RATIOS
Date Collected: 6/22/2012	Sample Size: 0.198 g	Ca/Mg	15.8
Date Received: 6/27/2012	Sample Type: Head	Ca/P	1.42
Date Completed: 6/29/2012	Hair Color: Black	Na/K	0.46
Methodology: ICP/MS	Treatment:	Zn/Cu	7.42
	Shampoo: Baby Bee	Zn/Cd	> 999
		RANGE	
			4- 30
			1- 12
			0.5- 10
			4- 20
			> 800

Health history for hair test 634

1. She is a high function autistic girl. with problems at social motivation, compulsive behavior, bad temper, attention. She is also very weak, gets sick very often.
2. I(mother) had dental amalgam before pregnancy.
3. She had hepatitis B on the day she was born and then 2 more shots after that.
4. 4.5years old girl, 40lbs
5. supplements:
 - Cal 300mg/day
 - Mag 120mg/day
 - Zin 20mg/day
 - Selenium 50mg/day
 - Vc 500mg/day
 - Ve 200mg/day
 - fish oil 1.5 tea spoon
 - probotic
 - milk thistle