

Toxic & Essential Elements; Hair

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 <sup>th</sup> 95 <sup>th</sup>
Aluminum (Al)	19	< 8.0	
Antimony (Sb)	0.045	< 0.066	
Arsenic (As)	0.082	< 0.080	
Barium (Ba)	0.90	< 0.50	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	0.45	< 2.0	
Cadmium (Cd)	0.22	< 0.070	
Lead (Pb)	8.5	< 1.0	
Mercury (Hg)	0.89	< 0.40	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	0.003	< 0.002	
Thorium (Th)	0.007	< 0.002	
Uranium (U)	0.003	< 0.060	
Nickel (Ni)	0.30	< 0.20	
Silver (Ag)	0.74	< 0.20	
Tin (Sn)	1.2	< 0.30	
Titanium (Ti)	0.65	< 1.0	
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)	428	125- 370	
Magnesium (Mg)	14	12- 30	
Sodium (Na)	140	20- 200	
Potassium (K)	110	12- 200	
Copper (Cu)	13	11- 18	
Zinc (Zn)	100	100- 190	
Manganese (Mn)	0.61	0.10- 0.50	
Chromium (Cr)	0.50	0.43- 0.80	
Vanadium (V)	0.092	0.030- 0.10	
Molybdenum (Mo)	0.063	0.050- 0.13	
Boron (B)	1.6	0.70- 5.0	
Iodine (I)	0.95	0.25- 1.3	
Lithium (Li)	0.004	0.007- 0.020	
Phosphorus (P)	133	150- 220	
Selenium (Se)	0.67	0.70- 1.1	
Strontium (Sr)	0.66	0.16- 1.0	
Sulfur (S)	47300	45500- 53000	
Cobalt (Co)	0.030	0.004- 0.020	
Iron (Fe)	12	7.0- 16	
Germanium (Ge)	0.029	0.030- 0.040	
Rubidium (Rb)	0.32	0.016- 0.18	
Zirconium (Zr)	0.059	0.040- 1.0	

SPECIMEN DATA		RATIOS	
<b>COMMENTS:</b>		ELEMENTS	RATIOS
Date Collected: 05/20/2013	Sample Size: 0.2 g	Ca/Mg	30.6
Date Received: 05/24/2013	Sample Type: Head	Ca/P	3.22
Date Completed: 05/27/2013	Hair Color: Black	Na/K	1.27
Methodology: ICP/MS	Treatment:	Zn/Cu	7.69
	Shampoo: Baby	Zn/Cd	455
		RANGE	
			4- 30
			0.8- 8
			0.5- 10
			4- 20
			> 800

CR# 1 10  
CR# 2 11  
CR# 3 1

Na < 0.03-0.035  
add digestive enzyme  
K/Ca = 110/428 = <  
Na/Mg = 140/14 = 10

### **Health history for hair test 918**

1. What are your current symptoms and health history? ==>Autism (PDD-NOS)
2. Dental history (Wisdom teeth removed and when? Any other extractions. First root canal placed? Braces? First amalgam etc...)==> No
3. What dental work do you currently have in place? What part of the dental clean-up have you completed?==> No
4. What dentistry did your mother have at any time before or during pregnancy? ==> No dentistry work, no amalgam
5. What vaccinations have you had and when (including flu and especially travel shots)?==> almost all (including flu vaccine) except MMR
6. Supplements and medications (including dosages) taken at time of hair test, or for the 3-6 months before the sample was taken?==> Not yet on supplement or medication
7. What is your age, height and weight? ==> My DS is 3 year 7 month old, height 97 cm, 32 lbs
8. Other information you feel may be relevant? Start chelation on September 2013
9. What is your location – city & country (so that we can learn where certain toxins are more prevalent).==> Minas, Indonesia