



AGE: 3

**Toxic & Essential Elements; Hair**

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 <sup>th</sup> 95 <sup>th</sup>
Aluminum (Al)	7.3	< 8.0	
Antimony (Sb)	0.23	< 0.066	
Arsenic (As)	0.12	< 0.080	
Barium (Ba)	0.35	< 0.50	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	0.081	< 2.0	
Cadmium (Cd)	< 0.009	< 0.070	
Lead (Pb)	0.14	< 1.0	
Mercury (Hg)	0.08	< 0.40	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	< 0.001	< 0.002	
Thorium (Th)	< 0.001	< 0.002	
Uranium (U)	0.024	< 0.060	
Nickel (Ni)	0.13	< 0.20	
Silver (Ag)	0.09	< 0.20	
Tin (Sn)	0.25	< 0.30	
Titanium (Ti)	0.32	< 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)	215	125- 370			
Magnesium (Mg)	23	12- 30			
Sodium (Na)	28	20- 200			
Potassium (K)	39	12- 200			
Copper (Cu)	11	11- 18			
Zinc (Zn)	95	100- 190			
Manganese (Mn)	0.21	0.10- 0.50			
Chromium (Cr)	0.64	0.43- 0.80			
Vanadium (V)	0.12	0.030- 0.10			
Molybdenum (Mo)	0.11	0.050- 0.13			
Boron (B)	9.2	0.70- 5.0			
Iodine (I)	1.9	0.25- 1.3			
Lithium (Li)	0.005	0.007- 0.020			
Phosphorus (P)	154	150- 220			
Selenium (Se)	0.81	0.70- 1.1			
Strontium (Sr)	0.39	0.16- 1.0			
Sulfur (S)	50600	45500- 53000			
Cobalt (Co)	0.009	0.004- 0.020			
Iron (Fe)	11	7.0- 16			
Germanium (Ge)	0.031	0.030- 0.040			
Rubidium (Rb)	0.093	0.016- 0.18			
Zirconium (Zr)	0.79	0.040- 1.0			

SPECIMEN DATA		RATIOS	
<b>COMMENTS:</b>		ELEMENTS	RATIOS
Date Collected: 12/17/2013	Sample Size: 0.133 g	Ca/Mg	9.35
Date Received: 12/23/2013	Sample Type: Head	Ca/P	1.4
Date Completed: 12/30/2013	Hair Color: Brown	Na/K	0.718
Methodology: ICP/MS	Treatment:	Zn/Cu	8.64
	Shampoo: Baby Ganics	Zn/Cd	> 999
		RANGE	
			4- 30
			0.8- 8
			0.5- 10
			4- 20
			> 800

## Health history for hair test 971

Hair Tests Results are attached for my 3 year old son. They were obtained in December 2013 from DDI.

1. **What are your current symptoms and health history?** He currently has an ASD diagnosis. He has anxiety, covers ears, sleep disturbances but getting much better, constipation but getting much better, vocal and verbal stemming, fixated on letters and numbers, lack of imaginary play.
2. **Dental history (Wisdom teeth removed and when? Any other extractions. First root canal placed? Braces? First amalgam etc...)** N/a for him, but I have had wisdom teeth removed and have amalgam fillings
3. **What dental work do you currently have in place? What part of the dental clean-up have you completed?** I have done no dental clean up
4. **What dentistry did your mother have at any time before or during pregnancy?** unknown
5. **What vaccinations have you had and when (including flu and especially travel shots)?** He had all required vaccines until 2 years of age.
6. **Supplements and medications (including dosages) taken at time of hair test, or for the 3-6 months before the sample was taken?** At the time of the hair test we had not begun supplementation
7. **What is your age, height and weight?** He is 3 years old and about 30+ lbs
8. **Other information you feel may be relevant?** My husband is active duty Air Force and my son's autistic symptoms became to present themselves after a serious illness (croup + maybe other things?), vaccines, etc while we were stationed in Turkey. Never saw autistic symptoms prior ....
9. **What is your location – city & country (so that we can learn where certain toxins are more prevalent)** We were living in Adana, Turkey on Incirlik Air Base from 11 months - 27 months. We now live in Vacaville, CA (this is also where we lived prior to moving to Turkey).