



PATIENT: Number 863  
 SEX: Male  
 AGE: 3

**Toxic & Essential Elements; Hair**

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 <sup>th</sup> 95 <sup>th</sup>
Aluminum (Al)	3.1	< 8.0	
Antimony (Sb)	0.047	< 0.066	
Arsenic (As)	0.30	< 0.080	
Barium (Ba)	0.55	< 0.50	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	0.024	< 2.0	
Cadmium (Cd)	0.025	< 0.070	
Lead (Pb)	0.43	< 1.0	
Mercury (Hg)	0.23	< 0.40	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	< 0.001	< 0.002	
Thorium (Th)	< 0.001	< 0.002	
Uranium (U)	0.048	< 0.060	
Nickel (Ni)	0.04	< 0.20	
Silver (Ag)	0.04	< 0.20	
Tin (Sn)	0.12	< 0.30	
Titanium (Ti)	0.42	< 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)	323	125- 370	
Magnesium (Mg)	20	12- 30	
Sodium (Na)	96	20- 200	
Potassium (K)	210	12- 200	
Copper (Cu)	9.0	11- 18	
Zinc (Zn)	140	100- 190	
Manganese (Mn)	0.29	0.10- 0.50	
Chromium (Cr)	0.60	0.43- 0.80	
Vanadium (V)	0.097	0.030- 0.10	
Molybdenum (Mo)	0.14	0.050- 0.13	
Boron (B)	10	0.70- 5.0	
Iodine (I)	0.71	0.25- 1.3	
Lithium (Li)	0.007	0.007- 0.020	
Phosphorus (P)	123	150- 220	
Selenium (Se)	0.69	0.70- 1.1	
Strontium (Sr)	0.62	0.16- 1.0	
Sulfur (S)	47000	45500- 53000	
Cobalt (Co)	0.004	0.004- 0.020	
Iron (Fe)	9.1	7.0- 16	
Germanium (Ge)	0.022	0.030- 0.040	
Rubidium (Rb)	0.46	0.016- 0.18	
Zirconium (Zr)	0.33	0.040- 1.0	

SPECIMEN DATA		RATIOS		
<b>COMMENTS:</b>		ELEMENTS	RATIOS	RANGE
Date Collected: 09/28/2013	Sample Size: 0.202 g	Ca/Mg	16.2	4- 30
Date Received: 10/04/2013	Sample Type: Head	Ca/P	2.63	0.8- 8
Date Completed: 10/06/2013	Hair Color: Black	Na/K	0.457	0.5- 10
Methodology: ICP/MS	Treatment:	Zn/Cu	15.6	4- 20
	Shampoo: Jj 3 Weeks Before	Zn/Cd	> 999	> 800

## **Health history for hair test 863**

1. Autism spectrum disorder. Cognition, speech and interaction deficits.
2. No dental work done
3. No dental work done
4. No dental work for mother
5. DTP, DTaP, Polio, MMR, Hib, Hepatitis B, Varicella, Pneumococcal Conjugate, Rotavirus, Hepatitis A, Seasonal Influenza.
6. What medications (not supplements) are being taken? (Please list with dose and times given):
  - Drug: Folinic acid- Roxane Labs                      Dose: 20 mg/day (10 mg- am+10 mg- pm)
  - Drug: Carnitor/Levocarnitine-Rising Pharm Dose: 100mg/ml (2.5 ml twice a day)
  - Drug: Namenda – Forest Pharmace Dose: 10mg/5 ml (1.25 ml twice a day)What supplements are being taken? (Please list with dose and times given):
  - Supplement: Magnesium Glycinate – Kirkman Dose: 300 mg/day (200 mg- am+100 mg- pm)
  - Supplement: Liquid Iron– Kirkman Dose: 18 mg/day (am)
  - Supplement: Nordic naturals- Cod liver oil Dose: 10 ml/day (am)
  - Supplement: Vitamin D3— Kirkman Dose: 2000IU- 1 cap /day (am)
  - Supplement: Coenzyme Q10— Kirkman Dose: 100 mg/day (am)
  - Supplement: Super Pro bio 75— Kirkman Dose: 1 capsule (Bedtime)
  - Supplement: Hydroxy B12 shots- 25 mg/ml – 0.5 ml shots Hopewell Pharmacy -Dose: alternate days- three times a week
  - Supplement: Taurine— Kirkman Dose: 500 mg twice a day
  - Supplement: Pycnogenol-Source Naturals Dose: 50 mg/day
  - Supplement: Enzyme complete with dpp4 — Kirkman Dose: - 1 capsule before every meal
  - Supplement: Vit E— NOW Dose: 400 IU
  - Supplement: Zn — Kirkman Dose: 20 mg
  - Supplement: GABA— Kirkman Dose: 500 mg- three times a day
  - Supplement: Vit C— Kirkman Dose: 500 mg
  - Supplement: Yucca—NOW Dose: 500 mg
  - Supplement: L theanine—NOW Dose: 200 mg
7. Age: 3.5 years, Wt-30 lbs, ht- 96 cm
9. California, USA