



SEX: Male  
AGE: 4

**Toxic & Essential Elements; Hair**

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 <sup>th</sup> 95 <sup>th</sup>
Aluminum (Al)	3.5	< 8.0	
Antimony (Sb)	0.019	< 0.066	
Arsenic (As)	0.10	< 0.080	
Barium (Ba)	0.06	< 0.50	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	0.12	< 2.0	
Cadmium (Cd)	< 0.009	< 0.070	
Lead (Pb)	0.11	< 1.0	
Mercury (Hg)	1.7	< 0.40	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	< 0.001	< 0.002	
Thorium (Th)	< 0.001	< 0.002	
Uranium (U)	0.002	< 0.060	
Nickel (Ni)	0.03	< 0.20	
Silver (Ag)	0.04	< 0.20	
Tin (Sn)	0.08	< 0.30	
Titanium (Ti)	0.79	< 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)	471	125- 370	
Magnesium (Mg)	42	12- 30	
Sodium (Na)	25	20- 200	
Potassium (K)	16	12- 200	
Copper (Cu)	11	11- 18	
Zinc (Zn)	200	100- 190	
Manganese (Mn)	0.09	0.10- 0.50	
Chromium (Cr)	0.38	0.43- 0.80	
Vanadium (V)	0.036	0.030- 0.10	
Molybdenum (Mo)	0.042	0.050- 0.13	
Boron (B)	1.9	0.70- 5.0	
Iodine (I)	0.43	0.25- 1.3	
Lithium (Li)	< 0.004	0.007- 0.020	
Phosphorus (P)	243	150- 220	
Selenium (Se)	0.90	0.70- 1.1	
Strontium (Sr)	0.45	0.16- 1.0	
Sulfur (S)	50300	45500- 53000	
Cobalt (Co)	0.005	0.004- 0.020	
Iron (Fe)	5.3	7.0- 16	
Germanium (Ge)	0.028	0.030- 0.040	
Rubidium (Rb)	0.041	0.016- 0.18	
Zirconium (Zr)	0.87	0.040- 1.0	

SPECIMEN DATA		RATIOS		
<b>COMMENTS:</b>		ELEMENTS	RATIOS	RANGE
Date Collected:	Sample Size:	Ca/Mg	11.2	4- 30
Date Received:	Sample Type: <b>Head</b>	Ca/P	1.94	0.8- 8
Date Completed:	Hair Color: <b>Black</b>	Na/K	1.56	0.5- 10
Methodology: <b>ICP/MS</b>	Treatment:	Zn/Cu	18.2	4- 20
	Shampoo:	Zn/Cd	> 999	> 800

## Health history for hair test 883

### 1) What are your current symptoms and health history?

DS - 4 YO with Autism Spectrum Disorder, developmental delays since infancy

### 2) Dental history (wisdom teeth removed? First root canal placed? Braces?

#### First amalgam

None

### 3) What dental work do you currently have in place? What part of the dental cleanup have you completed?

None

### 4) What dentistry did your mother have at any time before or during pregnancy?

Annual cleanup, no X ray, no fluoride

### 5) What vaccinations have you had and when (including flu and especially travel shots)?

DTAP - 09/09, 11/09, 01/10, 01/11

FLU - 1/10, 02/10, 10/10, 10/12

H1B - 09/09, 11/09, 01/10, 10/10

HEPA - 07/11

HEP B - 07/09, 08/09, 04/10

POLIO - 09/09, 11/09, 01/10

MMR - 07/10

PREVNAR - 09/09, 11/09, 01/11

PREVNAR 13 - 10/10

ROTAVIRUS - 09/09, 11/09, 01/10

VARICELLA - 07/10

### 6) Supplements and medications (including dosages) taken at time of hair test, or for the 3-6 months before the sample was taken.

Speak 2 caps/day

Trienza 1 cap/meal

Country life vitc 500 mg 1 cap/day

Biotin 5 mg 1 cap/day

Probiogold 20 bil cfu 2 caps/day

Nystatin 1 ts/day

### 7) Other information you feel may be relevant? Skin eczema, hyperactivity, language processing/speech/cognitive delays

### 8) What is your location - city & country (so that we can learn where certain toxins are more prevalent).

Trenton, NJ