

# HAIR ELEMENTS



**PATIENT: Number 457**  
**SEX: Male**  
**AGE: 3**  
**LOCATION: Portland, OR, USA**

POTENTIALLY TOXIC ELEMENTS				
TOXIC ELEMENTS	RESULT $\mu\text{g/g}$	REFERENCE RANGE	PERCENTILE	
			68 <sup>th</sup>	95 <sup>th</sup>
Aluminum	5.8	< 8.0		
Antimony	0.077	< 0.066		
Arsenic	0.21	< 0.080		
Barium	0.12	< 0.50		
Beryllium	< 0.01	< 0.020		
Bismuth	0.062	< 2.0		
Cadmium	0.031	< 0.070		
Lead	0.92	< 1.0		
Mercury	0.25	< 0.40		
Platinum	< 0.003	< 0.005		
Thallium	< 0.001	< 0.002		
Thorium	< 0.001	< 0.002		
Uranium	0.001	< 0.060		
Nickel	0.12	< 0.20		
Silver	0.10	< 0.20		
Tin	0.21	< 0.30		
Titanium	0.66	< 1.0		
Total Toxic Representation				

ESSENTIAL AND OTHER ELEMENTS							
ELEMENTS	RESULT $\mu\text{g/g}$	REFERENCE RANGE	PERCENTILE				
			2.5 <sup>th</sup>	16 <sup>th</sup>	50 <sup>th</sup>	84 <sup>th</sup>	97.5 <sup>th</sup>
Calcium	83	125- 370					
Magnesium	21	12- 30					
Sodium	42	20- 200					
Potassium	39	12- 200					
Copper	9.5	11- 18					
Zinc	75	100- 190					
Manganese	0.17	0.10- 0.50					
Chromium	0.65	0.43- 0.80					
Vanadium	0.11	0.030- 0.10					
Molybdenum	0.087	0.050- 0.13					
Boron	2.3	0.70- 5.0					
Iodine	2.3	0.25- 1.3					
Lithium	0.007	0.007- 0.020					
Phosphorus	143	150- 220					
Selenium	1.1	0.70- 1.1					
Strontium	0.05	0.16- 1.0					
Sulfur	45500	45500- 53000					
Cobalt	0.007	0.004- 0.020					
Iron	12	7.0- 16					
Germanium	0.029	0.030- 0.040					
Rubidium	0.068	0.016- 0.18					
Zirconium	0.60	0.040- 1.0					

SPECIMEN DATA		RATIOS		
<b>COMMENTS:</b>		ELEMENTS	RATIOS	EXPECTED RANGE
Date Collected: 3/6/2011	Sample Size: 0.196 g			
Date Received: 3/10/2011	Sample Type: Head	Ca/Mg	3.95	4- 30
Date Completed: 3/14/2011	Hair Color:	Ca/P	0.58	0.8- 8
Client Reference: 1269292	Treatment:	Na/K	1.08	0.5- 10
Methodology: ICP-MS	Shampoo:	Zn/Cu	7.89	4- 20
V010.08		Zn/Cd	> 999	> 800

### **Health history for hair test 457**

This hair test is for a 3 year old boy with mild ASD

**1) What are your current symptoms and health history?** High functioning ASD. Minor sensory issues, perseveration, expressive language delay, and social delay.

**2) Dental history (wisdom teeth removed? First root canal placed? Braces? First amalgam etc...)** 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?** None. Mom had no amalgams or dental work during pregnancy

**5) What vaccinations have you had and when (including flu and especially travel shots)?** No vaccinations

**6) Supplements and medications (including dosages) taken at time of hair test, or for the 3-6 months before the sample was taken.** Calcium 500mg, Mag 200mg, probiotics, multivitamin, cod liver oil, vit C

**7) Other information you feel may be relevant?** Had minor lead exposure at 6 months (almost borderline blood lead levels), but showed clean tests by 1 year of age. Exposed to 1 shot of terbutaline during pregnancy.

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