

# HAIR ELEMENTS



**PATIENT: Number 162**  
**SEX: Male**  
**AGE: 4**  
**Location:**

POTENTIALLY TOXIC ELEMENTS				
TOXIC ELEMENTS	RESULT $\mu\text{g/g}$	REFERENCE RANGE	PERCENTILE	
			68 <sup>th</sup>	95 <sup>th</sup>
Aluminum	60	< 8.0	[Bar chart showing result at 68th percentile]	
Antimony	0.11	< 0.066	[Bar chart showing result at 68th percentile]	
Arsenic	0.10	< 0.080	[Bar chart showing result at 68th percentile]	
Beryllium	< 0.01	< 0.020	[Bar chart showing result at 68th percentile]	
Bismuth	0.76	< 2.0	[Bar chart showing result at 68th percentile]	
Cadmium	0.13	< 0.15	[Bar chart showing result at 68th percentile]	
Lead	0.74	< 1.0	[Bar chart showing result at 68th percentile]	
Mercury	0.06	< 0.40	[Bar chart showing result at 68th percentile]	
Platinum	0.006	< 0.005	[Bar chart showing result at 68th percentile]	
Thallium	< 0.001	< 0.010	[Bar chart showing result at 68th percentile]	
Thorium	0.002	< 0.005	[Bar chart showing result at 68th percentile]	
Uranium	0.044	< 0.060	[Bar chart showing result at 68th percentile]	
Nickel	0.21	< 0.40	[Bar chart showing result at 68th percentile]	
Silver	0.86	< 0.20	[Bar chart showing result at 68th percentile]	
Tin	0.71	< 0.30	[Bar chart showing result at 68th percentile]	
Titanium	4.0	< 1.0	[Bar chart showing result at 68th percentile]	
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	237	125- 370	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]
Magnesium	21	12- 30	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]
Sodium	18	12- 90	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]
Potassium	39	12- 40	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]
Copper	150	8.0- 16	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]
Zinc	93	100- 190	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]
Manganese	0.31	0.20- 0.55	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]
Chromium	0.50	0.26- 0.50	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]
Vanadium	0.073	0.030- 0.10	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]
Molybdenum	0.19	0.050- 0.13	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]
Boron	2.9	0.60- 4.0	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]
Iodine	0.83	0.25- 1.3	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]
Lithium	0.015	0.007- 0.023	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]
Phosphorus	238	160- 250	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]
Selenium	1.0	0.95- 1.7	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]
Strontium	1.1	0.16- 1.0	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]
Sulfur	48900	45500- 53000	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]
Barium	0.55	0.16- 0.80	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]
Cobalt	0.011	0.013- 0.035	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]
Iron	19	8.0- 19	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]
Germanium	0.041	0.045- 0.065	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]
Rubidium	0.045	0.016- 0.18	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]
Zirconium	16	0.040- 1.0	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]	[Bar chart]

SPECIMEN DATA				RATIOS		
<b>COMMENTS:</b>				<b>ELEMENTS</b>	<b>RATIOS</b>	<b>EXPECTED RANGE</b>
Date Collected: 4/9/2008	Sample Size: 0.2 g			Ca/Mg	11.3	4- 30
Date Received: 4/12/2008	Sample Type: Head			Ca/P	0.996	0.8- 8
Date Completed: 4/23/2008	Hair Color:			Na/K	0.462	0.5- 10
	Treatment:			Zn/Cu	0.62	4- 20
Methodology: ICP-MS	Shampoo:			Zn/Cd	715	> 800

V06.99

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

He started with a diagnosis of moderate autism. After some biomed and educational interventions (and about 8 months time) he moved to a PDD and now is classified as developmentally delayed through the school district (although I think he still has signs of high functioning autism)

More specifically his weak areas are:

language (has a big vocab. doesn't have 2 way conversations)

social(still parallel plays)

some visual stims

lines things up

**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?**

10 amalgams no work during pregnancy

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

All the required ones up to the MMR then we stopped.

No flu shots, no shots during pregnancy