

# HAIR ELEMENTS



**PATIENT: Number 181**  
**SEX: Male**  
**AGE: 5**

POTENTIALLY TOXIC ELEMENTS				
TOXIC ELEMENTS	RESULT $\mu\text{g/g}$	REFERENCE RANGE	PERCENTILE	
			68 <sup>th</sup>	95 <sup>th</sup>
Aluminum	15	< 8.0		
Antimony	0.048	< 0.066		
Arsenic	0.090	< 0.080		
Beryllium	< 0.01	< 0.020		
Bismuth	0.10	< 2.0		
Cadmium	0.085	< 0.15		
Lead	1.1	< 1.0		
Mercury	0.23	< 0.40		
Platinum	< 0.003	< 0.005		
Thallium	< 0.001	< 0.010		
Thorium	< 0.001	< 0.005		
Uranium	0.005	< 0.060		
Nickel	0.24	< 0.40		
Silver	0.07	< 0.20		
Tin	0.57	< 0.30		
Titanium	0.81	< 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	222	125- 370					
Magnesium	6	12- 30					
Sodium	250	12- 90					
Potassium	410	12- 40					
Copper	9.8	8.0- 16					
Zinc	140	100- 190					
Manganese	0.14	0.20- 0.55					
Chromium	0.38	0.26- 0.50					
Vanadium	0.040	0.030- 0.10					
Molybdenum	0.041	0.050- 0.13					
Boron	5.9	0.60- 4.0					
Iodine	0.38	0.25- 1.3					
Lithium	0.010	0.007- 0.023					
Phosphorus	204	160- 250					
Selenium	0.75	0.95- 1.7					
Strontium	0.37	0.16- 1.0					
Sulfur	48300	45500- 53000					
Barium	0.28	0.16- 0.80					
Cobalt	0.017	0.013- 0.035					
Iron	17	8.0- 19					
Germanium	0.028	0.045- 0.065					
Rubidium	0.43	0.016- 0.18					
Zirconium	0.14	0.040- 1.0					

SPECIMEN DATA				RATIOS		
<b>COMMENTS:</b>				<b>ELEMENTS</b>	<b>RATIOS</b>	<b>EXPECTED RANGE</b>
Date Collected: 2/15/2008	Sample Size: 0.2 g			Ca/Mg	37	4- 30
Date Received: 2/21/2008	Sample Type: Head			Ca/P	1.09	0.8- 8
Date Completed: 2/27/2008	Hair Color: Blond			Na/K	0.61	0.5- 10
	Treatment:			Zn/Cu	14.3	4- 20
Methodology: ICP-MS	Shampoo:			Zn/Cd	> 999	> 800

V06.99

# HAIR ELEMENTS



**PATIENT: Number 181a**  
**SEX: Male**  
**AGE: 5**

POTENTIALLY TOXIC ELEMENTS				
TOXIC ELEMENTS	RESULT $\mu\text{g/g}$	REFERENCE RANGE	PERCENTILE	
			68 <sup>th</sup>	95 <sup>th</sup>
Aluminum	9.5	< 8.0		
Antimony	0.11	< 0.066		
Arsenic	0.16	< 0.080		
Beryllium	< 0.01	< 0.020		
Bismuth	12	< 2.0		
Cadmium	0.087	< 0.15		
Lead	0.87	< 1.0		
Mercury	0.24	< 0.40		
Platinum	< 0.003	< 0.005		
Thallium	< 0.001	< 0.010		
Thorium	< 0.001	< 0.005		
Uranium	0.001	< 0.060		
Nickel	0.28	< 0.40		
Silver	0.07	< 0.20		
Tin	1.5	< 0.30		
Titanium	1.1	< 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	149	125- 370					
Magnesium	13	12- 30					
Sodium	75	12- 90					
Potassium	130	12- 40					
Copper	9.7	8.0- 16					
Zinc	100	100- 190					
Manganese	0.12	0.20- 0.55					
Chromium	0.70	0.26- 0.50					
Vanadium	0.10	0.030- 0.10					
Molybdenum	0.10	0.050- 0.13					
Boron	7.5	0.60- 4.0					
Iodine	0.59	0.25- 1.3					
Lithium	0.009	0.007- 0.023					
Phosphorus	179	160- 250					
Selenium	0.89	0.95- 1.7					
Strontium	0.13	0.16- 1.0					
Sulfur	51300	45500- 53000					
Barium	0.18	0.16- 0.80					
Cobalt	0.012	0.013- 0.035					
Iron	13	8.0- 19					
Germanium	0.038	0.045- 0.065					
Rubidium	0.15	0.016- 0.18					
Zirconium	0.11	0.040- 1.0					

SPECIMEN DATA				RATIOS		
<b>COMMENTS:</b>				<b>ELEMENTS</b>	<b>RATIOS</b>	<b>EXPECTED RANGE</b>
Date Collected: 7/2/2008	Sample Size: 0.2 g			Ca/Mg	11.5	4- 30
Date Received: 7/11/2008	Sample Type: Head			Ca/P	0.832	0.8- 8
Date Completed: 7/12/2008	Hair Color: Brown			Na/K	0.577	0.5- 10
	Treatment:			Zn/Cu	10.3	4- 20
Methodology: ICP-MS	Shampoo:			Zn/Cd	> 999	> 800

V06.99

## History

- 1) **What are your current symptoms and health history?** Late on-set ASD (He was fine until around 3 and a half years old).
- 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?** Many amalgam fillings
- 5) **What vaccinations have you had and when (including flu and especially travel shots)?** Childhood Hib Vaccines and quite a lot of anti-biotics for chest and Ear infections
- 6) **Supplements and medications (including dosages) taken at time of hair test, or for the 3-6 months before the sample was taken.** None
- 7) **Other information you feel may be relevant?** Can't think of any.
- 8) **What is your location - city & country (so that we can learn where certain toxins are more prevalent).** Gold coast Queensland, Australia 5 years previously England.

**Second Hair Test** – 5 months after start of supplements to check what difference the supplements were making and to fine tune them. These were the supplements taken during that time:

Supplements	dosage per day
Chromium	50mcg
Co-enzyme Q10	25mg
L-Taurine	325mg
Inositol	1 gram
Magnesium apartate	115mg
Molybedenium	100mcg
Selenium	50mcg
Zinc	20mg
Mb12 sublingual	2 sprays
Folinic acid	400mcg
Vitamin B complex	App 330mg
Vitamin C	4 grams
Milk Thistle	50 mg (100mg on chelating days)
Flaxseed oil	2 caps
Cod Liver oil	1 cap

These are divided and given 3-4 times per day