

# HAIR ELEMENTS



**PATIENT: Number 451**  
**SEX: Male**  
**AGE: 5**  
**LOCATION: San Diego, CA, USA**

## POTENTIALLY TOXIC ELEMENTS

TOXIC ELEMENTS	RESULT $\mu\text{g/g}$	REFERENCE RANGE	PERCENTILE	
			68 <sup>th</sup>	95 <sup>th</sup>
Aluminum	1.8	< 8.0		
Antimony	0.043	< 0.066		
Arsenic	0.093	< 0.080		
Barium	0.23	< 0.50		
Beryllium	< 0.01	< 0.020		
Bismuth	0.013	< 2.0		
Cadmium	0.030	< 0.070		
Lead	0.46	< 1.0		
Mercury	0.39	< 0.40		
Platinum	< 0.003	< 0.005		
Thallium	< 0.001	< 0.002		
Thorium	< 0.001	< 0.002		
Uranium	0.18	< 0.060		
Nickel	0.08	< 0.20		
Silver	0.09	< 0.20		
Tin	0.17	< 0.30		
Titanium	0.58	< 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	181	125- 370					
Magnesium	55	12- 30					
Sodium	51	20- 200					
Potassium	34	12- 200					
Copper	15	11- 18					
Zinc	140	100- 190					
Manganese	0.10	0.10- 0.50					
Chromium	0.57	0.43- 0.80					
Vanadium	0.079	0.030- 0.10					
Molybdenum	0.088	0.050- 0.13					
Boron	5.2	0.70- 5.0					
Iodine	1.3	0.25- 1.3					
Lithium	0.005	0.007- 0.020					
Phosphorus	181	150- 220					
Selenium	1.4	0.70- 1.1					
Strontium	0.70	0.16- 1.0					
Sulfur	46800	45500- 53000					
Cobalt	0.005	0.004- 0.020					
Iron	5.9	7.0- 16					
Germanium	0.033	0.030- 0.040					
Rubidium	0.037	0.016- 0.18					
Zirconium	0.055	0.040- 1.0					

### SPECIMEN DATA

**COMMENTS:**  
 Date Collected: 2/14/2011      Sample Size: 0.197 g  
 Date Received: 2/28/2011      Sample Type: Head  
 Date Completed: 3/4/2011      Hair Color: Brown  
 Client Reference: 1267649      Treatment:  
 Methodology: ICP-MS      Shampoo: Ca Baby

V010.08

### RATIOS

ELEMENTS	RATIOS	EXPECTED RANGE
Ca/Mg	3.29	4- 30
Ca/P	1	0.8- 8
Na/K	1.5	0.5- 10
Zn/Cu	9.33	4- 20
Zn/Cd	> 999	> 800

## Health history for hair test 451

1. Emergency C-section, about 2 weeks late of delivery date, born 10 lbs, 7 ozs, refused Hep B vac at birth; UTI at 2 months old, went to the emergency room w/high fever, spinal tap administered to help with that diagnosis; had trouble breastfeeding, Ped said "has uncoordinated suckle", eventually given soy-based formula at around 6 months old; betwn the age of 1 - 4.5 years old had regular ear infections, seasonal colds/flu, bouts of eczema; neurologist said he was "okay" when seen for hand stimming at 1 year old; delayed walking until 16 months old; vaccine scheduling was delayed, but (unfortunately) all current now, last vaccine (MMR) received at 2.5 years old, started displaying OCD symptoms, but not diagnosed; diagnosed with mild Asperger's Syndrome, possibly PDD-NOS in 2009; currently, does verbal and physical stimming; slender, not an adventurous eater; toe walks in circles; lines up toys and small items; highly allergic to dust mites and pet dander, is verbal and makes eye contact; last Ped's physical said overall "healthy"; in mom's opinion possibly has leaky gut; not currently GFCF, but very low sugar intake, avoids soy; was given mB12 injections by DAN for 1 month, once a week, stopped due to aggressive behavior and/or hyperness.
2. Lots of dental work in December 2010 under general anesthesia: given anti-nausea after procedures; had an abscess; no amalgam, but has steel caps on 4 primary teeth; 3 extractions, all primary teeth; has a rare condition of not having any permanent molars descending to replace the primary Second Molar; had composite fillings for 5 teeth including the capped.
3. Four steel caps, no amalgam, don't use fluoride products, 5 composite fillings.
4. Mother had 5-6 existing amalgam fillings before pregnancy, one composite cap with no amalgam underneath; 3 wisdom teeth extracted prior to pregnancy; no braces; no dental procedures during pregnancy.
5. No flu shots; all U.S. scheduled vaccines are up-to-date; no more vaccines since 2008.
6. MegaFood Essentials "Kids & Us Foodbased Mini's multi-vit (3 mini tablets/per day); ChildLife vitamin D3 drops (500 IU/per day); Kirkman Yeast-Aid (1 capsule per day); Pure Advantage mb-12 spray (500 mcg/per day); NSI Milk Thistle drops (166 mg/per day); activated charcoal (1 cap/3x's per day); elderberry syrup diluted in water during cold w/sore throat; Quercetin for allergy symptoms on occasion (60 mg/per day); Metagenics Ultracare for Kids, multi-supp powder (1 scoop/per day in a fruit smoothie occasionally); Epsom salts bath (3x's a week); Periowash Children's oral care (2 gargles/per day).
7. 5 years old, 43.5 inches, 41 lbs.
8. Mother has high Uranium too. First cousins both toe walk, some hyperness; second cousin diagnosed with Asperger's and dyspraxia, with allergies, respiratory sensitivities and asthma.
9. San Diego, CA, suburbs 5 miles north of Miramar Air Force Base.