

# HAIR ELEMENTS



**PATIENT: Number 146**  
**SEX: Male**  
**AGE: 2**

POTENTIALLY TOXIC ELEMENTS				
TOXIC ELEMENTS	RESULT $\mu\text{g/g}$	REFERENCE RANGE	PERCENTILE	
			68 <sup>th</sup>	95 <sup>th</sup>
Aluminum	4.8	< 8.0		
Antimony	0.041	< 0.066		
Arsenic	0.073	< 0.080		
Beryllium	< 0.01	< 0.020		
Bismuth	2.4	< 2.0		
Cadmium	0.018	< 0.15		
Lead	0.21	< 1.0		
Mercury	0.04	< 0.40		
Platinum	< 0.003	< 0.005		
Thallium	< 0.001	< 0.010		
Thorium	< 0.001	< 0.005		
Uranium	0.001	< 0.060		
Nickel	0.02	< 0.40		
Silver	0.03	< 0.20		
Tin	0.22	< 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	162	125- 370					
Magnesium	14	12- 30					
Sodium	13	12- 90					
Potassium	10	12- 40					
Copper	9.0	8.0- 16					
Zinc	170	100- 190					
Manganese	0.06	0.20- 0.55					
Chromium	0.45	0.26- 0.50					
Vanadium	0.057	0.030- 0.10					
Molybdenum	0.047	0.050- 0.13					
Boron	0.44	0.60- 4.0					
Iodine	2.7	0.25- 1.3					
Lithium	0.008	0.007- 0.023					
Phosphorus	168	160- 250					
Selenium	1.1	0.95- 1.7					
Strontium	0.20	0.16- 1.0					
Sulfur	45700	45500- 53000					
Barium	0.13	0.16- 0.80					
Cobalt	0.004	0.013- 0.035					
Iron	13	8.0- 19					
Germanium	0.023	0.045- 0.065					
Rubidium	0.008	0.016- 0.18					
Zirconium	0.28	0.040- 1.0					

SPECIMEN DATA			RATIOS		
<b>COMMENTS:</b>			<b>ELEMENTS</b>	<b>RATIOS</b>	<b>EXPECTED RANGE</b>
Date Collected:	Sample Size:	0.198 g	Ca/Mg	11.6	4- 30
Date Received: 1/15/2008	Sample Type:	Head	Ca/P	0.964	0.8- 8
Date Completed: 1/17/2008	Hair Color:		Na/K	1.3	0.5- 10
	Treatment:		Zn/Cu	18.9	4- 20
Methodology: ICP-MS	Shampoo:		Zn/Cd	> 999	> 800
V06.99					

These are the results of the Doctor's Data hair analysis we did on our son, Michael.

He will be 3 years old in March.

He currently takes a liquid children's multivitamin, and has a very poor, limited diet, consisting of only pasta, breads, and some chicken.

He drinks milk and fruit juices.

He seems to always want cookies, cake, and other non-nutritious foods.

He's had some shots, but not the MMR, and we have previously had higher than normal levels of lead in our household water (before we moved). We used a Brita to remove lead, but later found out that it might not have been an effective filter.

Thank you.