

HAIR ELEMENTS



PATIENT: Number 276
SEX: Male
AGE: 1
LOCATION: Grand Rapids, Michigan, USA

POTENTIALLY TOXIC ELEMENTS

TOXIC ELEMENTS	RESULT $\mu\text{g/g}$	REFERENCE RANGE	PERCENTILE	
			68 th	95 th
Aluminum	9.6	< 8.0		
Antimony	0.089	< 0.066		
Arsenic	0.097	< 0.080		
Barium	0.34	< 0.50		
Beryllium	< 0.01	< 0.020		
Bismuth	0.094	< 2.0		
Cadmium	0.12	< 0.070		
Lead	0.68	< 1.0		
Mercury	< 0.03	< 0.40		
Platinum	< 0.003	< 0.005		
Thallium	< 0.001	< 0.002		
Thorium	0.001	< 0.002		
Uranium	0.005	< 0.060		
Nickel	0.13	< 0.20		
Silver	0.15	< 0.20		
Tin	1.2	< 0.30		
Titanium	1.2	< 1.0		
Total Toxic Representation				

ESSENTIAL AND OTHER ELEMENTS

ELEMENTS	RESULT $\mu\text{g/g}$	REFERENCE RANGE	PERCENTILE				
			2.5 th	16 th	50 th	84 th	97.5 th
Calcium	400	125- 370					
Magnesium	57	12- 30					
Sodium	160	20- 200					
Potassium	190	12- 200					
Copper	8.9	11- 18					
Zinc	140	100- 190					
Manganese	0.38	0.10- 0.50					
Chromium	0.47	0.43- 0.80					
Vanadium	0.039	0.030- 0.10					
Molybdenum	0.063	0.050- 0.13					
Boron	1.0	0.70- 5.0					
Iodine	3.5	0.25- 1.3					
Lithium	0.013	0.007- 0.020					
Phosphorus	183	150- 220					
Selenium	0.91	0.70- 1.1					
Strontium	0.29	0.16- 1.0					
Sulfur	51200	45500- 53000					
Cobalt	0.009	0.004- 0.020					
Iron	13	7.0- 16					
Germanium	0.030	0.030- 0.040					
Rubidium	0.14	0.016- 0.18					
Zirconium	2.6	0.040- 1.0					

SPECIMEN DATA

COMMENTS:
 Date Collected: 3/7/2009 Sample Size: 0.2 g
 Date Received: 3/12/2009 Sample Type: Head
 Date Completed: 3/13/2009 Hair Color: Brown
 Client Reference: Treatment:
 Methodology: ICP-MS Shampoo: Johnsons Baby

RATIOS

ELEMENTS	RATIOS	EXPECTED RANGE
Ca/Mg	7.02	4- 30
Ca/P	2.19	0.8- 8
Na/K	0.842	0.5- 10
Zn/Cu	15.7	4- 20
Zn/Cd	> 999	> 800

Health history for hair test 276

Male, age 15 months at time of hair test /Grandson of hair tests 203 and 266, brother of 232, 233

Current symptoms – no speech yet, babbles, walks well, had difficulty swallowing chunks of food in transitioning from smooth baby food to more advanced baby food, is mostly finished with baby food as of 16 ½ months, tends to stuff his mouth with food, wants to eat whenever anyone else is eating, does not sleep through the night usually, possible antibiotic resistance, extreme shyness – puts arm(s) up over eyes when he sees new people (and sometimes grandparents, as well), dry skin, had a facial rash for months, much constipation, yeast at times in groin area, many colds and ear infections, recently had double ear infection and sinus infection that one antibiotic couldn't help, doesn't always respond when his name is called.

Dental history – teeth are not all coming in in correct sequence.

Current dental work – none

Mom's dental history – 1 amalgam in baby tooth, none now. Routine dental cleaning during pregnancy.

Vaccinations – Has had all recommended vaccinations, including Hepatitis B.

Supplements/medications – liquid vitamins, was on antibiotics, Tylenol at times during 6 months prior to hair test.

Age - 15 months, normal height and weight.

Other information – Doctor thinks ear infections are contributing to his not speaking. He was breast fed for 8 months.

Grand Rapids, Michigan, USA