

HAIR ELEMENTS



PATIENT: Number 280
SEX: Male
AGE: 10
LOCATION: Oslo, Norway

POTENTIALLY TOXIC ELEMENTS

TOXIC ELEMENTS	RESULT $\mu\text{g/g}$	REFERENCE RANGE	PERCENTILE	
			68 th	95 th
Aluminum	20	< 8.0		
Antimony	0.029	< 0.066		
Arsenic	0.068	< 0.080		
Beryllium	< 0.01	< 0.020		
Bismuth	0.038	< 2.0		
Cadmium	0.056	< 0.15		
Lead	0.46	< 1.0		
Mercury	0.43	< 0.40		
Platinum	< 0.003	< 0.005		
Thallium	0.001	< 0.010		
Thorium	< 0.001	< 0.005		
Uranium	0.009	< 0.060		
Nickel	0.08	< 0.40		
Silver	0.26	< 0.13		
Tin	0.11	< 0.30		
Titanium	0.80	< 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	406	160- 500					
Magnesium	20	12- 50					
Sodium	96	12- 90					
Potassium	99	10- 40					
Copper	16	9.0- 30					
Zinc	160	110- 190					
Manganese	0.20	0.18- 0.60					
Chromium	0.41	0.23- 0.50					
Vanadium	0.041	0.025- 0.10					
Molybdenum	0.038	0.040- 0.089					
Boron	0.31	0.50- 3.5					
Iodine	0.37	0.25- 1.3					
Lithium	0.008	0.007- 0.023					
Phosphorus	203	160- 250					
Selenium	0.64	0.95- 1.7					
Strontium	0.41	0.21- 2.1					
Sulfur	49300	45500- 53000					
Barium	0.40	0.19- 1.6					
Cobalt	0.006	0.013- 0.035					
Iron	13	6.0- 17					
Germanium	0.030	0.045- 0.065					
Rubidium	0.16	0.008- 0.080					
Zirconium	0.17	0.060- 0.70					

SPECIMEN DATA

COMMENTS:

Date Collected: 5/24/2008 Sample Size: 0.2 g
 Date Received: 6/10/2008 Sample Type: Head
 Date Completed: 6/11/2008 Hair Color: Black
 Treatment:
 Methodology: ICP-MS Shampoo: L'oreal

V06.99

RATIOS

ELEMENTS	RATIOS	EXPECTED RANGE
Ca/Mg	20.3	4- 30
Ca/P	2	0.8- 8
Na/K	0.97	0.5- 10
Zn/Cu	10	4- 20
Zn/Cd	> 999	> 800



SEX: Male
AGE: 16

Toxic & Essential Elements; Hair

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 th 95 th
Aluminum (Al)	2.7	< 8.0	
Antimony (Sb)	0.016	< 0.066	
Arsenic (As)	0.082	< 0.080	
Barium (Ba)	0.13	< 0.75	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	0.042	< 2.0	
Cadmium (Cd)	0.009	< 0.060	
Lead (Pb)	0.12	< 1.0	
Mercury (Hg)	0.46	< 0.40	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	0.001	< 0.002	
Thorium (Th)	< 0.001	< 0.002	
Uranium (U)	0.002	< 0.060	
Nickel (Ni)	0.06	< 0.20	
Silver (Ag)	0.02	< 0.10	
Tin (Sn)	0.06	< 0.30	
Titanium (Ti)	0.60	< 0.60	
Total Toxic Representation			

ESSENTIAL AND OTHER ELEMENTS					
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 2.5 th 16 th 50 th 84 th 97.5 th		
Calcium (Ca)	456	200- 700			
Magnesium (Mg)	35	18- 70			
Sodium (Na)	50	20- 200			
Potassium (K)	43	9- 80			
Copper (Cu)	9.0	11- 32			
Zinc (Zn)	190	150- 230			
Manganese (Mn)	0.07	0.08- 0.50			
Chromium (Cr)	0.47	0.40- 0.70			
Vanadium (V)	0.047	0.020- 0.075			
Molybdenum (Mo)	0.028	0.030- 0.060			
Boron (B)	0.56	0.34- 3.0			
Iodine (I)	0.37	0.25- 1.3			
Lithium (Li)	0.004	0.007- 0.020			
Phosphorus (P)	201	150- 220			
Selenium (Se)	0.92	0.70- 1.2			
Strontium (Sr)	0.25	0.30- 3.2			
Sulfur (S)	44100	44000- 50000			
Cobalt (Co)	0.003	0.004- 0.020			
Iron (Fe)	9.4	7.0- 16			
Germanium (Ge)	0.030	0.030- 0.040			
Rubidium (Rb)	0.058	0.009- 0.090			
Zirconium (Zr)	0.030	0.047- 0.70			

SPECIMEN DATA		RATIOS	
COMMENTS:		ELEMENTS	RATIOS
Date Collected: 09/02/2014		Ca/Mg	13
Date Received: 09/09/2014		Ca/P	2.27
Date Completed: 09/10/2014		Na/K	1.16
Methodology: ICP/MS		Zn/Cu	21.1
Sample Size: 0.2 g	Sample Type: Head	Zn/Cd	> 999
Hair Color: Black	Treatment:		
Shampoo: Schwarzkopf Gliss			
		RANGE	
		4- 30	
		0.8- 8	
		0.5- 10	
		4- 20	
		> 800	

Health history for hair test 280 (brother of 281)

1) What are your current symptoms and health history?

Second child. Normal. Diagnosed with eczema at age 3 gradually subside. Have hay fever (pollen allergy, taking zyrtec mixture), allergic to dogs and cats. Seafood sensitive particularly shrimp.

Current symptoms. Unexplained headache since last year. Bad tempered. Feels cold easily. Jerky movement with his feet after falling asleep, happened four times last year. Have mee spots on nails like his mother. Always hungry after meals. Have stomach gas. Happy kid makes friend easily.

2) Dental history (wisdom teeth removed? First root canal placed? Braces? First amalgam etc...)

No dental work.

3) What dental work do you currently have in place? What part of the dental cleanup have you completed?

No dental work.

4) What dentistry did your mother have at any time before or during pregnancy?

Mother had 7 amalgams prior to pregnancy. Mother had also amalgam underneath a bridge that was placed in 1994.

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

All the required childhood vaccinations.

6) Supplements and medications (including dosages) taken at time of hair test, or for the 3-6 months before the sample was taken.

Vitamin C 100 mg and 1 capsule fish oil.

7) What is your age, height and weight?

11 years old, 146 cm, 42 kilos.

8) Other information you feel may be relevant?

9) What is your location - city & country (so that we can learn where certain toxins are more prevalent).

Oslo, Norway