

HAIR ELEMENTS



LAB#:
PATIENT: Number 332
LOCATION: New England, USA
SEX: Male
AGE: 15

POTENTIALLY TOXIC ELEMENTS				
TOXIC ELEMENTS	RESULT $\mu\text{g/g}$	REFERENCE RANGE	PERCENTILE	
			68 th	95 th
Aluminum	30	< 8.0	[Bar chart showing result at 68th percentile]	
Antimony	0.046	< 0.066	[Bar chart showing result at 68th percentile]	
Arsenic	0.069	< 0.080	[Bar chart showing result at 68th percentile]	
Barium	4.4	< 0.75	[Bar chart showing result at 68th percentile]	
Beryllium	0.067	< 0.020	[Bar chart showing result at 68th percentile]	
Bismuth	0.020	< 2.0	[Bar chart showing result at 68th percentile]	
Cadmium	0.090	< 0.060	[Bar chart showing result at 68th percentile]	
Lead	9.7	< 1.0	[Bar chart showing result at 68th percentile]	
Mercury	0.29	< 0.40	[Bar chart showing result at 68th percentile]	
Platinum	< 0.003	< 0.005	[Bar chart showing result at 68th percentile]	
Thallium	< 0.001	< 0.002	[Bar chart showing result at 68th percentile]	
Thorium	0.002	< 0.002	[Bar chart showing result at 68th percentile]	
Uranium	0.085	< 0.060	[Bar chart showing result at 68th percentile]	
Nickel	0.48	< 0.20	[Bar chart showing result at 68th percentile]	
Silver	0.29	< 0.10	[Bar chart showing result at 68th percentile]	
Tin	0.39	< 0.30	[Bar chart showing result at 68th percentile]	
Titanium	0.77	< 0.60	[Bar chart showing result at 68th percentile]	
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	584	200- 700	[Bar chart showing result between 16th and 84th percentiles]				
Magnesium	98	18- 70	[Bar chart showing result between 16th and 84th percentiles]				
Sodium	18	20- 200	[Bar chart showing result between 16th and 84th percentiles]				
Potassium	6	9- 80	[Bar chart showing result between 16th and 84th percentiles]				
Copper	840	11- 32	[Bar chart showing result between 16th and 84th percentiles]				
Zinc	140	150- 230	[Bar chart showing result between 16th and 84th percentiles]				
Manganese	1.9	0.08- 0.50	[Bar chart showing result between 16th and 84th percentiles]				
Chromium	0.32	0.40- 0.70	[Bar chart showing result between 16th and 84th percentiles]				
Vanadium	0.066	0.020- 0.075	[Bar chart showing result between 16th and 84th percentiles]				
Molybdenum	0.041	0.030- 0.060	[Bar chart showing result between 16th and 84th percentiles]				
Boron	0.71	0.34- 3.0	[Bar chart showing result between 16th and 84th percentiles]				
Iodine	6.1	0.25- 1.3	[Bar chart showing result between 16th and 84th percentiles]				
Lithium	0.015	0.007- 0.020	[Bar chart showing result between 16th and 84th percentiles]				
Phosphorus	179	150- 220	[Bar chart showing result between 16th and 84th percentiles]				
Selenium	0.80	0.70- 1.2	[Bar chart showing result between 16th and 84th percentiles]				
Strontium	2.4	0.30- 3.2	[Bar chart showing result between 16th and 84th percentiles]				
Sulfur	43900	44000- 50000	[Bar chart showing result between 16th and 84th percentiles]				
Cobalt	0.067	0.004- 0.020	[Bar chart showing result between 16th and 84th percentiles]				
Iron	40	7.0- 16	[Bar chart showing result between 16th and 84th percentiles]				
Germanium	0.035	0.030- 0.040	[Bar chart showing result between 16th and 84th percentiles]				
Rubidium	0.024	0.009- 0.090	[Bar chart showing result between 16th and 84th percentiles]				
Zirconium	0.078	0.047- 0.70	[Bar chart showing result between 16th and 84th percentiles]				

SPECIMEN DATA				RATIOS		
COMMENTS: Results checked				ELEMENTS	RATIOS	EXPECTED RANGE
Date Collected: 10/30/2009	Sample Size: 0.196 g					
Date Received: 12/15/2009	Sample Type: Head			Ca/Mg	5.96	4- 30
Date Completed: 12/21/2009	Hair Color:			Ca/P	3.26	0.8- 8
Client Reference:	Treatment:			Na/K	3	0.5- 10
Methodology: ICP-MS	Shampoo: Rainforest			Zn/Cu	0.167	4- 20
				Zn/Cd	> 999	> 800

V010.08



PATIENT: Number 332 B
 SEX: Male
 AGE: 18

Toxic & Essential Elements; Hair

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 th 95 th
Aluminum (Al)	11	< 7.0	
Antimony (Sb)	0.038	< 0.066	
Arsenic (As)	0.041	< 0.080	
Barium (Ba)	0.12	< 1.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	0.014	< 2.0	
Cadmium (Cd)	0.017	< 0.065	
Lead (Pb)	0.66	< 0.80	
Mercury (Hg)	0.42	< 0.80	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	< 0.001	< 0.002	
Thorium (Th)	< 0.001	< 0.002	
Uranium (U)	0.007	< 0.060	
Nickel (Ni)	0.06	< 0.20	
Silver (Ag)	0.07	< 0.08	
Tin (Sn)	0.19	< 0.30	
Titanium (Ti)	0.29	< 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)	211	200- 750			
Magnesium (Mg)	9	25- 75			
Sodium (Na)	2	20- 180			
Potassium (K)	< 3	9- 80			
Copper (Cu)	78	11- 30			
Zinc (Zn)	190	130- 200			
Manganese (Mn)	0.07	0.08- 0.50			
Chromium (Cr)	0.35	0.40- 0.70			
Vanadium (V)	0.021	0.018- 0.065			
Molybdenum (Mo)	0.11	0.025- 0.060			
Boron (B)	0.66	0.40- 3.0			
Iodine (I)	0.60	0.25- 1.8			
Lithium (Li)	< 0.004	0.007- 0.020			
Phosphorus (P)	174	150- 220			
Selenium (Se)	1.5	0.70- 1.2			
Strontium (Sr)	0.39	0.30- 3.5			
Sulfur (S)	47100	44000- 50000			
Cobalt (Co)	0.008	0.004- 0.020			
Iron (Fe)	6.7	7.0- 16			
Germanium (Ge)	0.031	0.030- 0.040			
Rubidium (Rb)	0.004	0.011- 0.12			
Zirconium (Zr)	0.020	0.020- 0.44			

SPECIMEN DATA		RATIOS	
COMMENTS:		ELEMENTS	RATIOS
Date Collected: 12/06/2012	Sample Size: 0.2 g	Ca/Mg	23.4
Date Received: 12/11/2012	Sample Type: Head	Ca/P	1.21
Date Completed: 12/12/2012	Hair Color: Brown	Na/K	0.667
Methodology: ICP/MS	Treatment:	Zn/Cu	2.44
	Shampoo: 365 Fragrance Free	Zn/Cd	> 999
		RANGE	
			4- 30
			0.8- 8
			0.5- 10
			4- 20
			> 800

Health history for hair test 332

- 1.) 15 year old male with symptoms of adrenal fatigue and cortisol imbalance; cold hands and cold feet; purple coloring of hands when cold; depression; anxiety; decreased cognitive function; learning issues involving graphomotor function: handwriting, spelling, sequential ordering, and phonological processing; joint pain and swelling (symmetrical and especially prevalent in knees).
 - 2.) No cavities, no fillings; wore braces for two years (upper and lower); no root canal or wisdom teeth removal.
 - 3.) N/A
 - 4.) Mother had full mouth of amalgam--approximately 12--breastfed.
 - 5.) Full US vaccination schedule until 1 yr. 6 month (from 1994-1996)
Hepatitis B
DPT/DT/DTaP
Polio
H. Influenza type b
MMR
 - 6.) Multiple vitamins and mineral supplement, extra B's and EFA's
 - 7.) Age 15; 5'8"; 130 lbs
 - 8.) Though gifted intellectually, experienced reading delays. Can read now, but have tremendous difficulty with writing, spelling, and remembering basic math facts. As a child reacted adversely to food colorings (headaches and explosive behavioral changes); now sometimes sensitive to fumes and fragrances (headaches).
- Adrenal and thyroid function seemed to decline at onset of puberty and tanked this past year. Always a very active kid, very athletic, exceptionally smart but with dyslexic and dysgraphic issues. Now experiencing depression and anxiety issues and very decreased stamina. Fatigue, muscle and joint issues are preventing athletic participation.
- 9.) New England, USA

Follow-up health history for hair test 332

1. What are your current symptoms and health history?

18 year old male with symptoms of fatigue; depression; anxiety; fear; panic; lack of motivation; difficulties sleeping

2. Dental history (Wisdom teeth removed and when? Any other extractions. First root canal placed? Braces? First amalgam etc...)

two composite fillings Aug, 2012.

3. What dental work do you currently have in place? What part of the dental clean-up have you completed?

none

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

Mother with approx. 12 amalgam fillings - breast fed as an infant

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

Full US vaccination schedule until 1 yr. 6 month (from 1994-1996)

Hepatitis B

DPT/DT/DT aP

Polio

H. Influenza type b MMR

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

Ca citrate 2000g

Mg citrate 1800g

Vit C 2000g

B50 twice/day

milk thistle extract

Vit E

Vit D

Fermented Cod Liver oil

Krill Oil

7. What is your age, height and weight?

18 yrs, 150 lbs 5'10"

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).

Greene, Maine