



SEX: Male
AGE: 18

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Toxic & Essential Elements; Hair

TOXIC METALS				
		RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 th 95 th
Aluminum	(Al)	3.7	< 7.0	
Antimony	(Sb)	0.047	< 0.066	
Arsenic	(As)	0.041	< 0.080	
Barium	(Ba)	0.10	< 1.0	
Beryllium	(Be)	< 0.01	< 0.020	
Bismuth	(Bi)	0.032	< 2.0	
Cadmium	(Cd)	< 0.009	< 0.065	
Lead	(Pb)	0.12	< 0.80	
Mercury	(Hg)	0.09	< 0.80	
Platinum	(Pt)	< 0.003	< 0.005	
Thallium	(Tl)	< 0.001	< 0.002	
Thorium	(Th)	< 0.001	< 0.002	
Uranium	(U)	0.028	< 0.060	
Nickel	(Ni)	0.04	< 0.20	
Silver	(Ag)	0.03	< 0.08	
Tin	(Sn)	0.02	< 0.30	
Titanium	(Ti)	0.32	< 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)	446	200- 750	
Magnesium	(Mg)	95	25- 75	
Sodium	(Na)	55	20- 180	
Potassium	(K)	8	9- 80	
Copper	(Cu)	30	11- 30	
Zinc	(Zn)	210	130- 200	
Manganese	(Mn)	0.08	0.08- 0.50	
Chromium	(Cr)	0.39	0.40- 0.70	
Vanadium	(V)	0.054	0.018- 0.065	
Molybdenum	(Mo)	0.029	0.025- 0.060	
Boron	(B)	1.5	0.40- 3.0	
Iodine	(I)	0.26	0.25- 1.8	
Lithium	(Li)	0.006	0.007- 0.020	
Phosphorus	(P)	172	150- 220	
Selenium	(Se)	0.85	0.70- 1.2	
Strontium	(Sr)	0.31	0.30- 3.5	
Sulfur	(S)	47100	44000- 50000	
Cobalt	(Co)	0.007	0.004- 0.020	
Iron	(Fe)	9.5	7.0- 16	
Germanium	(Ge)	0.033	0.030- 0.040	
Rubidium	(Rb)	0.025	0.011- 0.12	
Zirconium	(Zr)	0.18	0.020- 0.44	

SPECIMEN DATA		RATIOS	
COMMENTS:		ELEMENTS	RATIOS
Date Collected: 04/28/2014	Sample Size: 0.199 g	Ca/Mg	4.69
Date Received: 05/01/2014	Sample Type: Head	Ca/P	2.59
Date Completed: 05/03/2014	Hair Color: Black	Na/K	6.88
Methodology: ICP/MS	Treatment:	Zn/Cu	7
	Shampoo: Tio Nacho	Zn/Cd	> 999
		RANGE	
			4- 30
			0.8- 8
			0.5- 10
			4- 20
			> 800



0052 Nutrient & Toxic Elements Profile - 6-8 Hr Urine

Methodology: Inductively Coupled Plasma/Mass Spectrometry

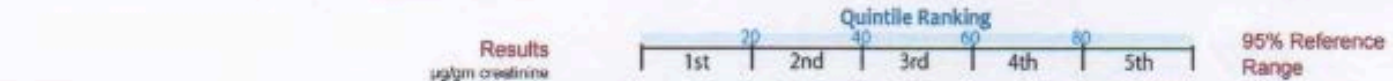
Chelating Agent: None



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Chelating Agent: None



Potentially Toxic Elements

Element	Results (µg/m creatinine)	Quintile Ranking	95% Reference Range
15. Rubidium*	1.16	3rd	<= 3.18
16. Thorium	<DL	5th	<= 0.02
17. Tin	<DL	3rd	<= 6.3
18. Tungsten	0.03	2nd	<= 0.55
19. Uranium	<DL	4th	<= 0.027
20. Zirconium	<DL	5th	<= 0.50

Nutrient Elements

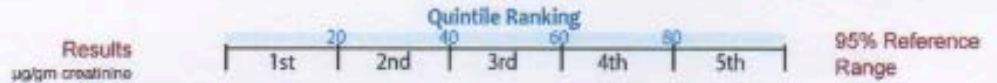
Element	Results	Quintile Ranking	95% Reference Range
21. Calcium*	68	2nd	7-489
22. Chromium	2.16 H	5th	0.05-1.33
23. Cobalt	0.21	2nd	0.08-1.71
24. Copper	7.1	3rd	2.2-23.3
25. Magnesium*	41	2nd	6-252
26. Manganese	0.59	4th	<= 2.39
27. Molybdenum	20 L	1st	8-192
28. Selenium	47	3rd	5-156
29. Zinc	344	3rd	76-1582



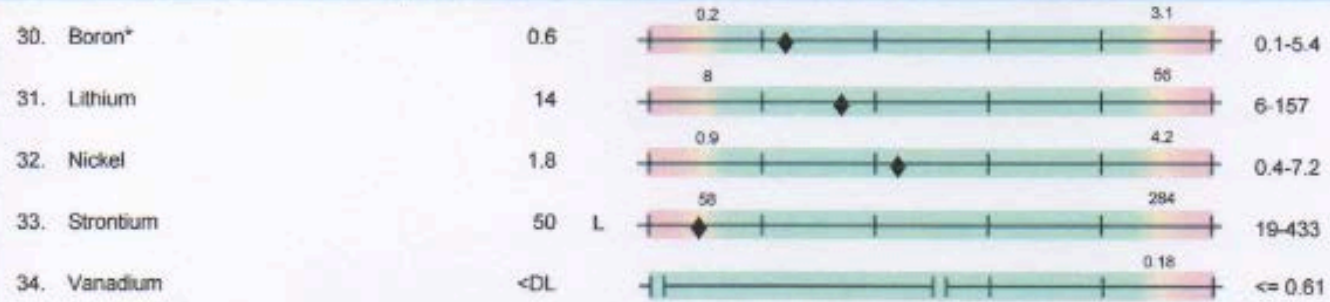
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Elements of Uncertain Human Requirement



Creatinine = 174 mg/dL

<DL = less than detection limit

*Calcium, magnesium, boron and rubidium are reported in µg/mg creatinine.

Finding a measurable amount of potentially toxic elements in the urine does not mean that the level of these elements found causes an adverse health effect.

Reference Range Information:

Elemental reference ranges were developed from a healthy population under non-provoked/non-challenged conditions. Provocation with challenge substances may raise the urine level of some elements.

1. What are your current symptoms and health history?

Brain fog, depression, anxiety, fatigue, sinusitis, stress intolerance. Was healthy before age 10 when brain fog started creeping in.

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

Three amalgams placed in 2002 at age 7. Safely removed in Dec 2013 at 18.

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

No work right now.

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

Several amalgams since her childhood.

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

Usual childhood vaccines, no flu shots.

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

Fish oil, curcumin.

7. What is your age, height and weight?

18 - 5' 8" - 175 lbs

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).

Central California