



### 0020 Element Analysis - Hair

Methodology: Inductively Coupled Plasma/Mass Spectrometry

Results mcg/gm      Quintile Ranking      95% Reference Range

1st    2nd    3rd    4th    5th

#### Highly Toxic Heavy Metals

Element	Results mcg/gm	Quintile Ranking	95% Reference Range
1. Aluminum	1.7	13.9	<= 29.6
2. Arsenic	<DL*	0.15	<= 0.15
3. Beryllium	<DL*	0.010	< DL
4. Cadmium	<DL*	0.131	<= 0.389
5. Lead	0.09	2.01	<= 7.61
6. Mercury	0.82	0.92	<= 2.42
7. Thallium	<DL*	0.0004	<= 0.0009

#### Potentially Toxic Elements

Element	Results mcg/gm	Quintile Ranking	95% Reference Range
8. Antimony	0.009	0.060	<= 0.206
9. Barium	0.1	2.0	<= 6.2
10. Bismuth	<DL*	0.13	<= 0.42
11. Tin	0.03	0.73	<= 2.44
12. Titanium	0.57	1.33	<= 3.31
13. Tungsten	<DL*	0.005	<= 0.014
14. Uranium	0.332 <b>H</b>	0.042	<= 0.147

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### Nutrient Elements

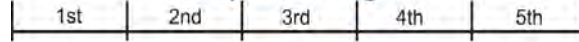
Element	Results (mcg/gm)	Quintile Ranking	95% Reference Range
15. Calcium	299	166 - 2757	111-5270
16. Chromium	0.02 L	0.03 - 0.26	DL - 0.69
17. Cobalt	0.002 L	0.004 - 0.080	0.002-0.159
18. Copper	31	10 - 93	8-189
19. Iron	5 L	7 - 22	6-28
20. Magnesium	26	15 - 240	9-434
21. Manganese	0.09	0.07 - 0.92	0.05-1.64
22. Molybdenum	0.026	0.017 - 0.084	0.008-0.113
23. Phosphorus	125	96 - 150	80-210
24. Potassium	69	243	<= 470
25. Selenium	0.87	0.52 - 1.24	0.19-1.70
26. Sodium	205	17 - 371	9-612
27. Vanadium	0.056	0.022 - 0.186	DL - 0.355
28. Zinc	164	67 - 203	43-318

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Range

### Elements of Unknown Human Requirement

Element	Results (mcg/gm)	Quintile Ranking	95% Reference Range
29. Boron	5.0	Between 4th and 5th (diamond marker)	0.4-23.7
30. Lithium	0.007	Between 1st and 2nd (diamond marker)	0.004-0.113
31. Nickel	0.08	Between 1st and 2nd (diamond marker)	0.03-7.42
32. Strontium	0.3	Between 1st and 2nd (diamond marker)	0.2-17.5
33. Zirconium	0.98	Between 4th and 5th (diamond marker)	<= 1.69

Hair Dry Weight = 0.408 gm

\*<DL = less than detection limit

\*\*>LIN = greater than linearity (highest reportable value)

## **Health history for hair test 678**

### 1. What are your current symptoms and health history?

42 years old now. Severe brain fog, fatigue, muscle weakness, post exercise muscle fatigue, light sensitivity, anxiety, nervousness, restless leg (sometimes), slightly blurry vision. Cognitive impairment started around 10 and slowly got worse, to the extent that around 16 (and since then) I could never finish reading a book. Feeling of walking in a haze and almost living moments disjoint (or shifted) from my body. Lately, my muscles vibrate (like little gears) as I stretch. Some acid reflux. Had endoscopy and colonoscopy 3 years ago which no worthwhile reports back to me. Grew up in Turkey – been on the East Coast since 1988. Growing up in Turkey it is possible that I was exposed to bad water, pesticides, mercury and heavy metals other than fillings and perhaps (and this is really stretching it but theoretically possible and relevant to high uranium in hair) acid rain from Chernobyl.

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

Had 10-12 amalgam fillings between the ages 8-25. The fillings were removed incorrectly (no precautions) at 25. Two crowns, two root canals. Wisdom teeth removed 25-26ish. One extracted wisdom tooth had a painful infection. I know one crown has no amalgam filling in it and I am fairly sure the other doesn't have it either, but not 100 per cent sure...

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

See 2. All non amalgam fillings. Not sure about 1 crown...

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

Do not know and she is no longer alive. It is possible that she had a few or even many amalgam fillings at the time of my birth.

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

I got all the vaccinations to travel to India. I have all the childhood vaccinations. I have had flu-shots 3-4 times. I had a meningitis vaccine in the military.

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

Coe Q10, some acetyl-l-carnitine, some NADH, some GABA, B 60, generic multi-vitamin, extra B12, vitamin D (chronically low), some digestive enzymes, some probiotics, olive leaf extract, oregano oil.

### 7. What is your age, height and weight?

5' 10'', 172 lbs

### 8. Other information you feel may be relevant?

I have been showing prediabetic on and off (it's one unit higher than the acceptable range and my PCP insists it's not a problem because it shows only every once in a while). Metamatrix CDSA shows H. Pylori but no other noteworthy bad bacteria, however my good bacteria is low. It also shows Endolimax nana parasite, Saccharomyces sp. Yeast/fungi, Low Total SCFA, fat malabsorption due to LCFAs. I also show

high Anti-gliadin sIgA 6.5 H. Protea Biopharma urine test shows significantly Th2 shifted immune system. I have sinus issues and enlarged glands in my throat which throb every once in a while (more lately). I have high Triglycerides, high normal homocysteine and high cholesterol with acceptable good bad ratio.

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

Harvard, MA