

HAIR ELEMENTS



PATIENT: Number 425
SEX: Male
AGE: 33
LOCATION: Southern Connecticut, USA

POTENTIALLY TOXIC ELEMENTS

TOXIC ELEMENTS	RESULT $\mu\text{g/g}$	REFERENCE RANGE	PERCENTILE	
			68 th	95 th
Aluminum	3.1	< 7.0		
Antimony	0.013	< 0.066		
Arsenic	0.048	< 0.080		
Barium	0.57	< 1.0		
Beryllium	< 0.01	< 0.020		
Bismuth	0.006	< 2.0		
Cadmium	0.058	< 0.065		
Lead	0.27	< 0.80		
Mercury	2.0	< 0.80		
Platinum	< 0.003	< 0.005		
Thallium	0.002	< 0.002		
Thorium	< 0.001	< 0.002		
Uranium	0.080	< 0.060		
Nickel	0.08	< 0.20		
Silver	0.23	< 0.08		
Tin	0.06	< 0.30		
Titanium	0.50	< 0.60		
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	796	200- 750					
Magnesium	53	25- 75					
Sodium	12	20- 180					
Potassium	3	9- 80					
Copper	360	11- 30					
Zinc	200	130- 200					
Manganese	0.11	0.08- 0.50					
Chromium	0.40	0.40- 0.70					
Vanadium	0.017	0.018- 0.065					
Molybdenum	0.042	0.025- 0.060					
Boron	2.5	0.40- 3.0					
Iodine	0.98	0.25- 1.8					
Lithium	< 0.004	0.007- 0.020					
Phosphorus	205	150- 220					
Selenium	51	0.70- 1.2					
Strontium	1.2	0.30- 3.5					
Sulfur	47500	44000- 50000					
Cobalt	0.006	0.004- 0.020					
Iron	14	7.0- 16					
Germanium	0.030	0.030- 0.040					
Rubidium	0.004	0.011- 0.12					
Zirconium	1.2	0.020- 0.44					

SPECIMEN DATA

COMMENTS:
 Date Collected: 10/18/2010 Sample Size: 0.198 g
 Date Received: 10/22/2010 Sample Type: Head
 Date Completed: 10/23/2010 Hair Color: Brown
 Client Reference: 1248492 Treatment:
 Methodology: ICP-MS Shampoo: Neutrogena T Gel

RATIOS

ELEMENTS	RATIOS	EXPECTED RANGE
Ca/Mg	15	4- 30
Ca/P	3.88	0.8- 8
Na/K	4	0.5- 10
Zn/Cu	0.556	4- 20
Zn/Cd	> 999	> 800

Health history for hair test 425

1. My symptoms are chronic muscle pain/tension/soreness from the shoulders up (trapezius, neck, face, scalp etc), depression, irritability, difficulty thinking, and insomnia. I've had these for over 8 years and they never change and have ruined my life. No pills or treatments have helped, except a few jaw/TMJ treatments lowered the facial tension a bit for 15 minutes a few times, but these small successes were not repeatable. Before this I was a healthy guy, always exercised and ate well.

2. Never had a cavity so never had any fillings. I'm 33 now, had braces at age 17 for one year, wisdom teeth removed at 18. Still had some baby teeth in early high school so those were extracted (age 16 or so). Been wearing a dental appliance (NTI, no metal in it) nightly since symptoms started in 2002 as it got rid the headaches that were one of my early symptoms.

3. No dental work currently in place. Never had any fillings.

4. Mother had amalgam fillings her whole life, including while pregnant with me.

5. Had all the normal childhood vaccinations (born in 1977). My symptoms all started in August 2002, a few months before that (May) I had several shots before going to Turkey for work: Hep A and B, and TD/DT (can't recall which, are they the same?). Never had a flu shot. Got yellow fever shot in February 2009 before going to Peru.

6. Started on Dr. Slagle's The Way Up From Down vitamin/supplement program about a month before this sample was taken. The program includes daily doses of 2000mg vitamin C, 100mg B6 (P-5-P), B complex 50-100, multivitamin, 3000mg L-tyrosine, 2000mg DLPA + 500mg L-glutamine, 3000mg L-tryptophan. Before that, I don't believe I took anything in the previous 3-6 months... maybe just some fish oil 5 months ago.

7. I'm 33, 5'9", weigh 125 lbs

8. I use a generic (CareOne) Selsen Blue shampoo, so I guess we should discount the high selenium. However, I also happen to have a blood (RBC) test from a few years ago that showed very high selenium (98th%), which I kind of doubt could be due to shampoo. So if I actually have high selenium even without the shampoo then I meet rule 3. Not sure if that is really valid logic. Also, I know the copper reading is very high. I don't use pools or hot tubs. I've tried testing my water with a cheap home test kit from Home Depot and it did NOT show high copper, though I also tested pH and got readings as low as 6.6. My yearly municipal water report shows copper within normal amounts. I occasionally use Neutrogena Tgel shampoo which contains coal tar, but I can't find evidence either way if this contains copper. I also want to say a bit about how my symptoms started. They came on suddenly as a result of my first scuba dives in 2002. I surfaced from a dive and felt like I got hit by a ton of bricks and haven't been the same since (the Bends have been ruled out). For years the only believable diagnosis I got was some sort of over-use jaw trauma (clenching on the regulator caused all my facial muscles to go crazy), and indeed the only treatments that helped at all were jaw/TMJ related (wearing special appliances). But the improvements were small and only lasted 15 minutes at the most, so it doesn't seem like that is my real problem.

Also, in early 2003, while searching for a diagnosis, I went to a Lyme specialist who told me I had Lyme (though the tests actually said equivocal). He treated me with lots of antibiotics as well as supplements... including ALA (though I don't know what

dosage). My notes from then show I missed several days of work because I was feeling worse... at the time I believed it was because of the antibiotics, but maybe it was the ALA? Though I also wrote that I had a week or so where I was feeling a bit better, though it didn't last. I stopped his treatment after two months because I didn't feel it was helping and my other doctors told me all the antibiotics were harmful.

9. I live in southern Connecticut. My symptoms started after a scuba dive in northern Florida. Shortly before this I had been on a two week trip to central Turkey.