HAIR ELEMENTS



PATIENT: Number 147 SEX: Male AGE: 33 LOCATION: Richmond, VA, USA

LOCATION: Richmond, VA, USA													
POTENTIALLY TOXIC ELEMENTS													
TOXIC	RESULT	REFERENCE	PERCENTILE										
ELEMENTS	μg/g	RANGE		68	th	95 th							
Aluminum	3.2	< 7.0											
Antimony	< 0.01	< 0.066											
Arsenic	0.026	< 0.080	—										
Beryllium	< 0.01	< 0.020											
Bismuth	0.046	< 2.0	•										
Cadmium	0.033	< 0.15	-										
Lead	0.14	< 2.0	-										
Mercury	1.1	< 1.1											
Platinum	< 0.003	< 0.005											
Thallium	< 0.001	< 0.010											
Thorium	< 0.001	< 0.005											
Uranium	0.005	< 0.060	-										
Nickel	0.10	< 0.40											
Silver	0.01	< 0.12	•										
Tin	0.05	< 0.30	-										
Titanium	0.42	< 1.0											
Total Toxic Repre	esentation												
		ESSENTIAL	AND OTHER	ELEMENT	S								
	RESULT	REFERENCE			PERCENTI								
ELEMENTS	μg/g	RANGE	2.5 th	16 th	50 th	8	4 th 97.5 th						
Calcium	682	200- 750											
Magnesium	24	25- 75											
Sodium	7	12- 90	-										
Potassium	5	9- 40											
Copper	18	10- 28											
Zinc	230	130- 200											
Manganese	0.07	0.15- 0.65											
Chromium	0.30	0.20- 0.40			•								
Vanadium	0.016	0.018- 0.065		— ——									
Molybdenum	0.039	0.025- 0.064			-								
Boron	< 0.07	0.40- 3.0											
Iodine	1.0	0.25- 1.3											
Lithium	< 0.004	0.007- 0.023											
Phosphorus	160	160- 250			———————————————————————————————————————								
Selenium	0.74	0.95- 1.7											
Strontium	0.92	0.30- 3.5			-								
Sulfur	49700	44500- 52000											
Barium	0.79	0.16- 1.6				Ð							
Cobalt	0.005	0.013- 0.035											
Iron	8.9	5.4- 13											
Germanium	0.024	0.045- 0.065											
Rubidium	0.003	0.011- 0.12											
Zirconium	0.084	0.020- 0.44			•								
	S	PECIMEN DATA				RATIOS							
COMMENTS:							EXPECTED						
Date Collected:		Sample Size:	0.196 g		ELEMENTS	RATIOS	RANGE						
Date Received:	1/28/2008	Sample Type:	Head		Ca/Mg	28.4	4- 30						
Date Completed:		Hair Color:			Ca/P	4.26	0.8- 8						
	, _ • • • •	Treatment:			Na/K	1.4	0.5- 10						
Methodology:	ICP-MS	Shampoo:			Zn/Cu	12.8	4- 20						
		poor		V06.99	Zn/Cd	> 999	> 800						

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	RESULT	REFERENCE	PERCENTILE 68 th 95 th										
ELEMENTS	μg/g	RANGE		68		95 th							
Aluminum	4.3	< 7.0 < 0.066											
Antimony	0.013												
Arsenic	0.026	< 0.080			-								
Beryllium	< 0.01	< 0.020			-								
Bismuth	0.022	< 2.0 < 0.15	•		-								
Cadmium	0.021												
Lead	0.10	< 2.0 < 1.1	•		-		••••••						
Mercury	0.15	< 0.005	-		-		••••••						
Platinum	< 0.003	< 0.003											
Thallium	< 0.001	< 0.010					••••••						
Thorium	< 0.001	< 0.005					••••••						
Uranium	0.002	< 0.40	•		-		••••••						
Nickel	0.12	< 0.12											
Silver	0.02						••••••						
Tin	0.06				-		••••••						
Titanium	0.30	< 1.0		<mark>.</mark>									
Total Toxic Representa	ation				-	_							
		-	AND OT	HER ELEMENT									
	RESULT	REFERENCE			PERCENTI								
ELEMENTS	μg/g	RANGE	2.5 th	16 th	50 th	84	4 th 97.5 th						
Calcium	837	200- 750											
Magnesium	35	25- 75											
Sodium	7	12- 90											
Potassium	3	9- 40											
Copper	20	10- 28											
Zinc	210	130- 200			_								
Manganese	0.07	0.15- 0.65											
Chromium	0.38	0.20- 0.40											
Vanadium	0.032	0.018- 0.065			•								
Molybdenum	0.040	0.025- 0.064			-								
Boron	0.52	0.40- 3.0											
Iodine	2.3	0.25- 1.3											
Lithium	< 0.004	0.007- 0.023											
Phosphorus	167	160- 250											
Selenium	1.0	0.95- 1.7		_									
Strontium	1.4	0.30- 3.5			-								
Sulfur	49700	44500- 52000			_								
Barium	1.1	0.16- 1.6											
Cobalt	0.006	0.013- 0.035											
Iron	6.4	5.4- 13		(
Germanium	0.028	0.045- 0.065	-										
Rubidium	0.004	0.011- 0.12	-										
Zirconium	0.12	0.020- 0.44											
	SI	PECIMEN DATA				RATIOS							
COMMENTS:							EXPECTED						
Date Collected:		Sample Size:	0.201	. a	ELEMENTS	RATIOS	RANGE						
	28/2008	Sample Size: Sample Type:	Head		Ca/Mg	23.9	4- 30						
Date Completed: 7/2		Hair Color:	neau		Ca/P	5.01	0.8- 8						
Duc Completed. 77.	51/2000	Treatment:			Na/K	2.33	0.5-10						
Methodology: ICI	P-MS	Shampoo:			Zn/Cu	10.5	4- 20						
inculoiogy. ICI	. 115	snampoo.		V06.99	Zn/Cd	> 999	> 800						
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Health history for hair test 147

1) Current symptoms and medical history

- Brain fog / mental fatigue
- Unexplained chest tightness / respiratory discomfort / congestion
- Difficulty mentally waking up in the morning
- Unrefreshing sleep
- Post-exertional malaise / paradoxical stress response

All symptoms became problematic about 9 years ago (1999), though several were present in mild forms prior to 1999.

2) Current dental work in place and dental history

History includes at least 4 amalgam fillings (may have been more in my wisdom teeth, which were removed in 2005). Had all four amalgams replaced w/ resin composite fillings at the same time in Oct 2007. Wasn't aware of the safety precautions, hence only some were used during amalgam removal. Symptoms didn't get better or worse after amalgam removal.

3) Supplements; medications and chelating schedule at the time of hair test

- CoQ10; Magnesium; Vit D; Omega 3s; Vit B complex; Milk thistle; Calcium; NAC; L-glutamine; others.

4) Recently added supplements and medications after the hair test and date added;

- TBD

5) Other relevant information.

- Chelated in Oct/Nov '07 for four rounds using a hybrid approach: high doses of DMSA (250mg) + CHELEX (4 pills), spread fairly evenly throughout the day and night. Didn't have too much trouble on round, but had substantial redistribution effects two days afterwards, including flare-up of symptoms plus nausea and upset stomach.

- Began chelating according to Cutler protocol w/ DMSA only, initially, in Jan '08, a few weeks prior to taking the hair sample.

Follow-up hair test

Results are not too much different, though mineral transport appears slightly less deranged. This is good, but I think it may be solely due to supplementation + random variation.

Brief history recap:

- Symptoms for 10+ years (brain fog, exercise intolerance, chest tightness, etc)
- Amalgams removed in Oct 2007
- Started low-dose, high frequency chelation in Jan 2008
- Chelating with DMSA and ALA, in doses ranging from 12.5mg to 50mg during different rounds
- First hair test was in Jan 2008, second July 2008

Symptoms between Jan 2008 and July 2008

- Some changes in symptoms during this time:

- chest tightness has seemed diminished for periods of time;

- but lately (June-Aug 2008), most symptoms have gotten worse, especially cognitive symptoms (and some of these are new): extreme mental 'dullness', brain fog, anti-social, depression. I believe this is because I am in the mercury dumping phase, which has been really rough.

- Am now trying DMPS (12.5mg every 8 hours), and it seems to be helping a bit, or perhaps I'm coming to the end of the dumping phase. Too early to tell as of Aug 17, 2008.

List of supplements: Vitamin C - 3-10g Vitamin D - 1000-2000 IU Vitamin E - 600-1200 IU Selenium - 150mcg Zinc - 100mg Milk thistle - 450mg B50complex - 3x Calcium - 1500mg Magnesium - 750mg DHEA - 200mg (morning) Adrenal Cortex Extract (ACE) - 750mg Omega 3 gelcaps - a lot Flax seed oil - 4 spoonfuls Borage oil - 2.6g L-tyrosine - 1g (morning) Lecithin - 5g DMAE - 200mg (morning) Taurine - 1g (morning) Fiber tablets (oat bran, physillium, apple pectin, etc) SuperDigestAway (Enzymes, Betaine HCL) - 1 per meal

Was also taking Boron for a while prior to this test. Interesting, because boron is the one mineral that shows the greatest change from the 1/08 test to the 7/08 test.