



PATIENT: Number 635
 SEX: Female
 AGE: 32

Toxic & Essential Elements; Hair

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 th 95 th
Aluminum (Al)	2.3	< 7.0	
Antimony (Sb)	< 0.01	< 0.050	
Arsenic (As)	0.073	< 0.060	
Barium (Ba)	0.32	< 2.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	0.010	< 2.0	
Cadmium (Cd)	0.063	< 0.050	
Lead (Pb)	0.09	< 0.60	
Mercury (Hg)	0.37	< 0.80	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	< 0.001	< 0.002	
Thorium (Th)	< 0.001	< 0.002	
Uranium (U)	0.001	< 0.060	
Nickel (Ni)	0.06	< 0.30	
Silver (Ag)	0.06	< 0.15	
Tin (Sn)	0.41	< 0.30	
Titanium (Ti)	0.18	< 0.70	
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)	290	300- 1200			
Magnesium (Mg)	28	35- 120			
Sodium (Na)	12	20- 250			
Potassium (K)	5	8- 75			
Copper (Cu)	12	11- 37			
Zinc (Zn)	190	140- 220			
Manganese (Mn)	0.09	0.08- 0.60			
Chromium (Cr)	0.47	0.40- 0.65			
Vanadium (V)	0.020	0.018- 0.065			
Molybdenum (Mo)	0.022	0.020- 0.050			
Boron (B)	0.80	0.25- 1.5			
Iodine (I)	0.49	0.25- 1.8			
Lithium (Li)	0.005	0.007- 0.020			
Phosphorus (P)	146	150- 220			
Selenium (Se)	0.66	0.55- 1.1			
Strontium (Sr)	0.73	0.50- 7.6			
Sulfur (S)	47400	44000- 50000			
Cobalt (Co)	0.020	0.005- 0.040			
Iron (Fe)	5.6	7.0- 16			
Germanium (Ge)	0.032	0.030- 0.040			
Rubidium (Rb)	0.003	0.007- 0.096			
Zirconium (Zr)	0.22	0.020- 0.42			

SPECIMEN DATA		RATIOS	
COMMENTS:		ELEMENTS	RATIOS
Date Collected: 3/27/2012		Ca/Mg	10.4
Date Received: 3/31/2012		Ca/P	1.99
Date Completed: 4/3/2012		Na/K	2.4
Methodology: ICP/MS		Zn/Cu	15.8
Sample Size: 0.199 g		Zn/Cd	> 999
Sample Type: Head			
Hair Color: Blond			
Treatment:			
Shampoo: Trader Joes Tea Tree			
		RANGE	
			4- 30
			1- 12
			0.5- 10
			4- 20
			> 800

Health history for hair test 635

- 1) Current symptoms and health history –
 - a) Occasional tinnitus
 - b) Dry skin and scalp – scalp has been continuously dry for over a year despite efforts to rectify it. I have tried many natural remedies. My scalp previously only got dry during the winter months.
 - c) Occasional white spots in my finger nails
 - d) Lifelong tendency of mild to moderate constipation. I have been able to relieve this through some cleansing and fasting previously, altering my diet to include many more fresh fruits and vegetables and making efforts to avoid wheat/gluten. Magnesium and Vitamin C used as well.
 - e) Difficulty in re-establishing menstrual cycle upon coming off the birth control pill in the four years after coming off the birth control pill. I am now fairly regular but have noticed worsening PMS symptoms despite efforts to alleviate them naturally via the same herbal supplements used initially.
 - f) Occasional heart palpitations. Does not occur with any sort of regularity. I have not been able to identify any triggers. I feel like I have to take a deep breath or multiple deep breaths to get back on track.
 - g) The hair on my scalp has gotten darker and much thinner over the last ten years, less hair on legs and armpits.
 - h) Low blood pressure – lowest measured was 80/57
 - i) Hands and feet get cold easily.
 - j) Energy levels seem to be waning
 - k) Lower back muscle soreness ; used to correlate this to flexibility. May be an overuse injury as well do to repetitive work that requires me to bend over a lot.
- 2) Dental History
 - a. Wisdom teeth have been removed,
 - b. No root canals
 - c. Had braces for about 16 months, including a jaw widener for my upper jaw that was in place for three months.
- 3) I currently have two composite fillings that I received in Nov 2011.
- 4) Mother –had amalgams but is not sure when they were put into place. Didn't have any put it while pregnant but may have had some in place between the birth of my sister and myself.
- 5) Vaccinations – DTP (Diphtheria – Tetanus –Pertussis) five shots by age 5, Tetanus booster at 15, MMR (measles, mumps, rubella) age 1 and age 12, Oral Polio vaccine – four doses by age 5, Hep B vaccine – three shots between Oct 2001 and May 2002, Hep A May 2002, Japanese Encephalitis three shots between 2003-2004.
- 6) Supplements – I was taking a multi vitamin from Garden of Life – a Raw women's multi, vitex, licorice root and Progyne. Am now following the AC chelation protocol and taking recommended supplements, plus a few additional such as krill oil, taurine, B2 on top of b-complex, D3

7) Age: 32 Height: 5'4" Weight: 114lbs

8) A set of tests ordered through the Canary Club and processed by ZRT labs revealed low progesterone levels 38 pg/ml with a range of 75-270 pg/ml for premenopausal women at the Luteal phase. High levels of cortisol at noon 4.8ng/ml range 1.2-3.0 ng/ml. Other levels were within range. High TPO levels 290 IU/ml range 0-150 IU/ml. Need to get another antibody tested (TgAB) to further see if Hashimoto's thyroiditis is a possibility. Low vitamin D3 27 ng/ml range 32-100ng/ml. I had 4.5 ng/ml in a range of 2-23 but as per the graph for my age that level is a bit on the low end. T3 levels were also low 2.1 pg/ml with a range of 2.5-6.5 pg/ml.

A blood and urine test ordered through True Health Labs.com and completed by Lab Corp revealed slightly elevated cholesterol 202mg/dL (to be expected with low progesterone, conversion not taking place??) with the elevated level found in the LDL at 114 mg/dL with a range of 0-99 mg/dL. This test also revealed a high RDW (red blood cell width) at 15.8% in a range of 12.3-15.4%. The percentage of neutrophils in the blood was 47% in a range of 40-74%.

I ate a fair amount of freshwater fish (perch, sunfish, bass) growing up as a kid and into adulthood. I did go for a number of years (late childhood into my teens?, not entirely sure of timing) without as I went through a phase where I didn't like fish but then started consuming again.

9)I currently live in Gaithersburg, MD and have lived here for about 7 months. The previous year was spent in Accokeek, MD and the previous 5 years were spent in MN and WI, I have also lived in Eugene and Portland, OR, and New Zealand. I spent my childhood and early adult years in MN and WI.