



PATIENT: Number 637  
 SEX: Female  
 AGE: 20

## Toxic & Essential Elements; Hair

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 <sup>th</sup> 95 <sup>th</sup>
Aluminum (Al)	4.8	< 7.0	
Antimony (Sb)	< 0.01	< 0.050	
Arsenic (As)	0.042	< 0.060	
Barium (Ba)	0.65	< 2.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	0.11	< 2.0	
Cadmium (Cd)	< 0.009	< 0.050	
Lead (Pb)	0.29	< 0.60	
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)	0.035	< 0.060	
Nickel (Ni)	0.08	< 0.30	
Silver (Ag)	0.16	< 0.15	
Tin (Sn)	0.04	< 0.30	
Titanium (Ti)	0.21	< 0.70	
Total Toxic Representation			

ESSENTIAL AND OTHER ELEMENTS					
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 2.5 <sup>th</sup> 16 <sup>th</sup> 50 <sup>th</sup> 84 <sup>th</sup> 97.5 <sup>th</sup>		
Calcium (Ca)	991	300- 1200			
Magnesium (Mg)	180	35- 120			
Sodium (Na)	97	20- 250			
Potassium (K)	49	8- 75			
Copper (Cu)	28	11- 37			
Zinc (Zn)	200	140- 220			
Manganese (Mn)	0.33	0.08- 0.60			
Chromium (Cr)	0.41	0.40- 0.65			
Vanadium (V)	0.10	0.018- 0.065			
Molybdenum (Mo)	0.033	0.020- 0.050			
Boron (B)	0.61	0.25- 1.5			
Iodine (I)	2.7	0.25- 1.8			
Lithium (Li)	< 0.004	0.007- 0.020			
Phosphorus (P)	137	150- 220			
Selenium (Se)	1.7	0.55- 1.1			
Strontium (Sr)	2.6	0.50- 7.6			
Sulfur (S)	47300	44000- 50000			
Cobalt (Co)	0.017	0.005- 0.040			
Iron (Fe)	8.4	7.0- 16			
Germanium (Ge)	0.026	0.030- 0.040			
Rubidium (Rb)	0.043	0.007- 0.096			
Zirconium (Zr)	0.079	0.020- 0.42			

SPECIMEN DATA		RATIOS		
<b>COMMENTS:</b>		ELEMENTS	RATIOS	RANGE
Date Collected: 7/22/2012	Sample Size: 0.196 g	Ca/Mg	5.51	4- 30
Date Received: 7/26/2012	Sample Type: Head	Ca/P	7.23	1- 12
Date Completed: 7/28/2012	Hair Color: Brown	Na/K	1.98	0.5- 10
Methodology: ICP/MS	Treatment:	Zn/Cu	7.14	4- 20
	Shampoo: Panteen	Zn/Cd	> 999	> 800

## Health history for hair test 637

1. she has had a diagnosis of hashimoto's thyroiditis since age 15 (however i suspect it was there long before that date) and she suffers from adrenal fatigue..she has very many white spots on nails but if she takes zinc for more than 3 days her cortisol levels fall a lot, she cannot seem to drop weight regardless of effort and thyroid meds

2. her wisdom teeth were removed in 2010, she had braces which were removed in 2006, she does not currently have any amalgams but did have 2 at a young age in primary teeth..she had many carries in baby teeth for some reason and crowding on top teeth...

3. she has NO fillings of any kind at this time, nor any root canals, but she does have a small permanent retainer on her bottom teeth and she puts on a removable retainer at bedtime most nights

4. mother had only 2 very small cavities in her life both had a amalgam fillings in them at time of pregnancy with this child and those 2 cavities/fillings were around 15 yrs old at that time

5. had all the routine vaccines (sigh :) regret) ...starting at age 3 months to age 5 or so..these included mmr, dpt, polio, hib, hepatitis series and at age 15 booster for dt...last vaccine was in 2006 for dt never had flu shot

6. current supplementation which also was same as supplementation for previous 6 months or longer...

activated b complex...with mthfr folate methylcobalamine p5p etc....added methy b12, selenium, iodoral, vitamin c, whole food multivitamin which include digestive enzymes, krill oil, clo, vitamin d3, iron (on and off as needed), natural form of vitamin e, ubiquinol

medicines...naturethroid and low dose naltrexone

isocort (adrenal cortex) which was discontinued 3 months ago in favor of doing the circadian method to help adrenals function better

7. she is 21 yrs ...5'5" and 141 lbs

8. has many white spots on nails however these seem to have improved since being on ldn, as a young child and adolescent she had foul breath for no reason..this too has improved...as a baby she had many reoccurring ear infections...stupid vaccines...at this time she cannot loose weight in spite of trying to eat right and in spite of being on thyroid meds..she has low cortisol (we are improving those via circadian method) but it used to be high until she had mono in 2010 and then she had low cortisol ..her adrenals seem very touchy...

she never eats fish and in her lifetime has never liked it other than the occassional tuna sandwich

9. she lives in san antonio texas USA for the most part but goes to college in college station texas