

## Toxic &amp; Essential Elements; Hair

## TOXIC METALS

		RESULT µg/g	REFERENCE INTERVAL	PERCENTILE	
				66 <sup>th</sup>	95 <sup>th</sup>
Aluminum	(Al)	2.1	< 12		
Antimony	(Sb)	0.017	< 0.060		
Arsenic	(As)	0.086	< 0.090		
Barium	(Ba)	1.9	< 2.0		
Beryllium	(Be)	< 0.01	< 0.020		
Bismuth	(Bi)	0.018	< 2.0		
Cadmium	(Cd)	0.011	< 0.050		
Lead	(Pb)	0.13	< 1.0		
Mercury	(Hg)	0.47	< 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)	0.13	< 0.40		
Silver	(Ag)	0.01	< 0.10		
Tin	(Sn)	0.09	< 0.30		
Titanium	(Ti)	1.1	< 1.3		
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)	1750	475- 1500					
Magnesium	(Mg)	98	45- 180					
Sodium	(Na)	420	80- 450					
Potassium	(K)	190	28- 160					
Copper	(Cu)	8.7	11- 30					
Zinc	(Zn)	160	130- 200					
Manganese	(Mn)	0.92	0.15- 0.65					
Chromium	(Cr)	0.35	0.40- 0.65					
Vanadium	(V)	0.025	0.018- 0.065					
Molybdenum	(Mo)	0.054	0.040- 0.10					
Boron	(B)	10	0.40- 4.0					
Iodine	(I)	6.4	0.25- 1.8					
Lithium	(Li)	0.014	0.008- 0.030					
Phosphorus	(P)	670	250- 500					
Selenium	(Se)	1.1	0.80- 1.3					
Strontium	(Sr)	5.1	1.0- 8.0					
Sulfur	(S)	48700	42000- 48000					
Cobalt	(Co)	0.007	0.006- 0.035					
Iron	(Fe)	7.9	7.0- 16					
Germanium	(Ge)	0.028	0.030- 0.040					
Rubidium	(Rb)	0.18	0.030- 0.25					
Zirconium	(Zr)	0.14	0.040- 1.0					

## SPECIMEN DATA

## COMMENTS:

Date Collected: 10/6/2012  
Date Received: 10/9/2012  
Date Completed: 10/11/2012  
Methodology: ICP/MS

Sample Size: 0.205 g  
Sample Type: Public  
Hair Color: Black  
Treatment:  
Shampoo: Ivory Body Wash

## RATIOS

ELEMENTS	RATIOS	RANGE
Ca/Mg	17.9	4- 30
Ca/P	2.61	1- 12
Na/K	2.21	0.5- 10
Zn/Cu	18.4	4- 20
Zn/Cd	> 999	> 800

## **Health history for hair test 676**

### **1) What are your current symptoms and health history?**

I had a tonsils and adenoidectomy when I was approx 5 yo. Asthma and seasonal allergies as an adult mid 20's-30's. Obesity crept in late 20's. Joint pain, late 20's. Hand and feet always cold. Worked as a nurse for 13 years, developed allergy to latex. 2 miscarriages ( 1990's and 2007 ), 1 D&C in 2007, 2 C-sections 1) 2008 son was breech 2) 2010 attempted VBAC but OBGYN wanted to go home so I ended up with a c-section even though things were progressing. Eczema around my ring finger for a few years, eczema around my eyes stated earlier this year. My mom had colon cancer at age 50.

Current symptoms: Mood swings, happy, sad, depressed, angry. Memory loss, photosensitivity, can't concentrate, can't multitask, face flushing, loosing my hair, thrombosis, fatigue, arm weakness, excessive urination, my last blood sugar was 100 so on the upper limit, leaky gut, chemical sensitivity, eye pain. Easily stressed, fatigue. I feel like I can't express my thoughts with words well. I feel shy, embarrassed, scared easily now. I struggle with making decisions. I have no sex drive. I'm sure I am forgetting some other stuff right here.... IgG test showed reaction to dairy, eggs, salmon, bananas, yeast. I've lost 45lbs since November last year.

### **2) Dental history (wisdom teeth removed? First root canal placed?**

**Braces? First amalgam etc...)** I had a mouth full of silver fillings when I was young, I don't recall the details. I had 2 wisdom teeth removed when I was 13-14 yo and a third one in 2006 I think. I have 3 root canals, one prior to 2006 and one between 2006 and 2008 and the last one I was 7 months pregnant so.... August 2008. I have 3 crowns. My most recent amalgam was placed about a year ago. I had 3 amalgam removed mid September 2012 and 4 more October 3rd 2012.

**3) What dental work do you currently have in place? What part of the dental cleanup have you completed?** I think I answered this above, several composite fillings, 3 root canals with crowns. 7 Amalgams removed recently.

**4) What dentistry did your mother have at any time before or during pregnancy?** I have no idea. All I know is that she is missing several teeth.

**5) What vaccinations have you had and when (including flu and especially travel shots)?** I had all the vaccines required, one flu shot while pregnant in 2008. ( I think it maybe the only one I've ever received but not sure ) I've never received travel shots.

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

I have a mirena IUD, made of plastic and I believe there is barium on the inside of it so that it can be detected on X-rays. This is my only medication. I have been taking magnesium 200mg with meals and bedtime for a few weeks now, Vitamin c 1000 mg with meals and at bedtime. Milk thistle 200



mg with meals. I take calcium but not regularly. Fermented cod liver oil 1 ml a day.

**7) Other information you feel may be relevant?** I think that I have trouble with oxalates and nightsades. I have a 3.10 yo son who was diagnosed with speech delay and developmental delay ( I think he is ASD, he tested moderate to severe on the childbrain scale when he was 18 months, now that we eat an organic very clean diet and have removed all the sensitivities from his diet, added kombucha and fish oil he is much improved and he tests "mild" on the same scale now. I also have a 2.8 yo son who is NT, he has sensitivities to eggs, dairy and rice. My oldest urine porphyrin test showed high lead. He meets a counting rule for the hair test by DD. High in lead and mercury according to this one. He was fully vaccinated until he was 18 months. My youngest doesn't meet the counting rules, his test looks very similar to his brother's test though... We stopped vaccinating this one at 6 months old.

**8) What is your location - city & country** Newport News, VA, USA

My age 37, height 5'7 ( I used to be 5'9), weight 205 lbs