



HAIR TEST: 1198
SEX: Female
AGE: 35

Toxic & Essential Elements; Hair

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 th 95 th
Aluminum (Al)	1.8	< 7.0	
Antimony (Sb)	< 0.01	< 0.050	
Arsenic (As)	0.027	< 0.060	
Barium (Ba)	0.12	< 2.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	< 0.002	< 2.0	
Cadmium (Cd)	< 0.009	< 0.050	
Lead (Pb)	0.04	< 0.60	
Mercury (Hg)	0.44	< 0.80	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	< 0.001	< 0.002	
Thorium (Th)	< 0.001	< 0.002	
Uranium (U)	0.002	< 0.060	
Nickel (Ni)	0.08	< 0.30	
Silver (Ag)	0.02	< 0.15	
Tin (Sn)	0.03	< 0.30	
Titanium (Ti)	0.45	< 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)	226	300- 1200			
Magnesium (Mg)	24	35- 120			
Sodium (Na)	17	20- 250			
Potassium (K)	12	8- 75			
Copper (Cu)	11	11- 37			
Zinc (Zn)	210	140- 220			
Manganese (Mn)	0.08	0.08- 0.60			
Chromium (Cr)	0.31	0.40- 0.65			
Vanadium (V)	0.016	0.018- 0.065			
Molybdenum (Mo)	0.021	0.020- 0.050			
Boron (B)	0.68	0.25- 1.5			
Iodine (I)	0.33	0.25- 1.8			
Lithium (Li)	< 0.004	0.007- 0.020			
Phosphorus (P)	187	150- 220			
Selenium (Se)	1.3	0.55- 1.1			
Strontium (Sr)	0.31	0.50- 7.6			
Sulfur (S)	51500	44000- 50000			
Cobalt (Co)	0.005	0.005- 0.040			
Iron (Fe)	6.5	7.0- 16			
Germanium (Ge)	0.035	0.030- 0.040			
Rubidium (Rb)	0.012	0.007- 0.096			
Zirconium (Zr)	0.42	0.020- 0.42			

SPECIMEN DATA		RATIOS	
COMMENTS:		ELEMENTS	RATIOS
Date Collected: 05/15/2016		Ca/Mg	9.42
Date Received: 05/19/2016		Ca/P	1.21
Date Completed: 05/20/2016		Na/K	1.42
Methodology: ICP/MS		Zn/Cu	19.1
Sample Size: 0.195 g	Sample Type: Head	Zn/Cd	> 999
Hair Color: Brown	Treatment:		
Shampoo: Barex			
		RANGE	
		4- 30	
		1- 12	
		0.5- 10	
		4- 20	
		> 800	

Hair Test 1198

1. What are your current symptoms and health history?

I am 35 years old. I was very healthy until about 6 years ago, and then it was like my body fell apart. We lived in the woods and ran trails at Falls Lake. Ticks were a common thing that we just didn't worry about. It started with pain, fatigue, brain fog, and extreme light sensitivity. Docs found a labral tear in my hip, which was repaired by arthroscopy. I later developed an ilioinguinal hernia, which was an open repair with mesh. I have tested positive for Lyme and been through the rounds of antibiotics and supplements a few years ago. I have a small tumor on my pituitary gland that is believed to be a prolactinoma. I also have hypothyroidism, low cortisol, and adrenal fatigue. I continue to have hip and nerve, possibly femoral nerve, pain. I also have been diagnosed with Erythromelalgia, which causes a hot, painful rash on my feet (and sometimes hands and face). Fatigue is my most challenging problem currently. It can be brought on by light or heat sensitivity (such as the sun or a shower) or by the slightest amount of physical activity.

2. Dental history (Wisdom teeth removed and when? Any other extractions. First root canal placed? Braces? First amalgam etc...)

I always had regular cleanings and check ups. I didn't get cavities until I was in college. After that, I would estimate I had a cavity or two once every few years. My mother said they put some type of coating (maybe a type of plastic?) on my teeth as a child to prevent cavities. She said this was during the 80s and they were doing to it all the kids. My wisdom teeth were removed around 1998. I had braces during my early teen years. I have not had a root canal or any other extractions. My dentist says I do not have any amalgams and to my knowledge, I never have.

3. What dental work do you currently have in place? What part of the dental clean-up have you completed?

See above

4. What dentistry did your mother have at any time before or during pregnancy?

My mom did have amalgams, but she did not have any dental work done during her pregnancy. She said she got a cavity while pregnant with me, and she had to "fight" with the dentist to allow her to wait to fill it until after she gave birth.

5. What vaccinations have you had and when (including flu and especially travel shots)?

I had all vaccinations recommended for children born in 1980. I had the flu shot most years until a few years ago. My neurologist made a connection between when I got a flu shot one year and when the Erythromelalgia began. He can't be sure the flu shot was the cause, but just in case, I haven't had a flu shot since. I am going to say this was 2013. I don't remember ever receiving any shots for travel.

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

Armour thyroid (60 and 90ng), Cabergoline (.5 mg / week), oxycodone (5mg as needed), Butrans patch (10mcg/ hour), my doctor has tried Ritalin, Adderral, and Vyvanse to help my concentration all with no success or bad side effects (so I am not currently taking any of those but have rotated through them during the past 6 months), Cortef (6 months ago it was 5mg per day and now I am supposed to take just during sick days), Imitrex (as needed for migraines, approx 1 or 2/ month), Selenium (200 Mcg per day), Folate (1000 Mcg per day), Calcium and Magnesium combo (75 of each), Vitamin D3 (1000 in 2/day), Vitamin C (varies), Alpha Lipoic Acid (doc recommended 300mg once/day, which I did for a few weeks several months ago)

7. What is your age, height and weight?

35, 5'5, 140

8. Other information you feel may be relevant?

The home we have been in for the past two years was a "new construction". We built it with Homes by Dickerson using low VOC everything and low toxin everything. The idea was to build a "healthy home", but I really struggled when we moved into this home. It felt like my fatigue increased substantially. Not long after moving in, I started to put on weight very quickly (about 40 pounds in just a few months). My neurologist did the MRI and found the pituitary tumor, which was affecting my endocrine system. I now see an endocrinologist, but it is still a struggle. I have lost 30 pounds of the weight I gained.

Anyway, getting back to the house....about a year ago, we had the home tested for toxins and formaldehyde came up very, very high. No one could figure out why because we were told any formaldehyde from the building process should have dissipated (and our furniture has been with us for a long time). Some rooms were so high, we were told not to let our daughter go into them. To get the levels down, all we had to do was spend several weeks opening the windows and running the fan on our HVAC. The house is built energy efficient and very tight, so I don't know if that is why we had the formaldehyde problem.

There was also a strange, chemical-like smell coming from our sealed crawl space, so the builder put in a radon mitigating system to try to get rid of the smell (even though our radon levels were ok). I realize all of this could be a coincidence, but I started feeling better a few weeks after the radon system was installed and we started lowering the formaldehyde levels. I have gradually gotten better over the last 6 months-1 year (albeit with a few set backs). I was an attorney and very active before. I am still unable to work, but I am hopeful I will continue with my forward progress.

9. What is your location – city & country (so that we can learn where certain toxins are more prevalent).

We have been in Wake Forest, Wake County for the last 10 years. Regarding toxins, we currently live on a golf course. We have lived here just over two years. See above regarding the home where we currently live.

Our last home, while we were living there, the EPA determined the water was toxic because of a chemical used to wash circuit boards from an old business off Stoney Hill. There are tons of articles online about it. It was a huge deal when it came out a few years ago. We were very lucky that we had city water and did not drink well

water, but we did have a well on our property which was used for irrigation. We moved, but the last I heard, they had determined the air was ok for breathing.

I have lived in NC my whole life.