



HAIR TEST: 1154
 SEX: Female
 AGE: 61

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)	0.015	< 0.060	
Barium (Ba)	1.8	< 2.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	0.006	< 2.0	
Cadmium (Cd)	< 0.009	< 0.050	
Lead (Pb)	0.11	< 0.60	
Mercury (Hg)	0.07	< 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)	0.75	< 0.30	
Silver (Ag)	0.42	< 0.15	
Tin (Sn)	0.02	< 0.30	
Titanium (Ti)	0.21	< 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)	1230	300- 1200	
Magnesium (Mg)	110	35- 120	
Sodium (Na)	10	20- 250	
Potassium (K)	< 3	8- 75	
Copper (Cu)	12	11- 37	
Zinc (Zn)	190	140- 220	
Manganese (Mn)	0.10	0.08- 0.60	
Chromium (Cr)	0.29	0.40- 0.65	
Vanadium (V)	0.010	0.018- 0.065	
Molybdenum (Mo)	0.022	0.020- 0.050	
Boron (B)	0.22	0.25- 1.5	
Iodine (I)	1.2	0.25- 1.8	
Lithium (Li)	< 0.004	0.007- 0.020	
Phosphorus (P)	114	150- 220	
Selenium (Se)	0.60	0.55- 1.1	
Strontium (Sr)	4.5	0.50- 7.6	
Sulfur (S)	45800	44000- 50000	
Cobalt (Co)	0.30	0.005- 0.040	
Iron (Fe)	7.4	7.0- 16	
Germanium (Ge)	0.031	0.030- 0.040	
Rubidium (Rb)	< 0.003	0.007- 0.096	
Zirconium (Zr)	0.18	0.020- 0.42	

SPECIMEN DATA		RATIOS	
COMMENTS:		ELEMENTS	RATIOS
Date Collected: 12/13/2015		Ca/Mg	11.2
Date Received: 12/21/2015		Ca/P	10.8
Date Completed: 12/23/2015		Na/K	3.33
Methodology: ICP/MS		Zn/Cu	15.8
Sample Size: 0.196 g	Sample Type: Head	Zn/Cd	> 999
Hair Color: Blond	Treatment: Bleach		
Shampoo: Pantene			
		RANGE	
		4- 30	
		1- 12	
		0.5- 10	
		4- 20	
		> 800	

Health history for hair test 1154

1) Current symptoms:

- fatigue
- insomnia
- muscle weakness (particularly on left side)
- occasional slow movement
- lack of manual dexterity in left hand for some tasks - typing, fine motor skills
- joint pain, particularly in left hip and left and right shoulders
- stooped posture
- ache in middle of back
- occasional funny feeling in head, like something's been draped over me where I feel very tired and just want to close my eyes and sleep (maybe this is the brain fog everyone talks about?)
- occasional drooling
- occasional difficulty enunciating words
- accumulation of food between gums and cheeks
- occasional mask-like facial expressions
- limp on left side, only when very tired
- very rarely have tremors in muscles of left arm and left leg

Health history:

3 children, natural childbirth, born in 1983, 1986, and 1992
diagnosed with thyroid cancer in 1999, had thyroid removed followed by radioactive iodine therapy, have been on synthroid since that time

hysterectomy in 2007 due to fibroids

2010 - started noticing small symptoms, twitching of little finger and ring finger of my left hand, also had an occasional limp on the left side; progressed to coldness and swelling of left hand, stiffness in shoulder joints and left hip, inability to do more and more with left hand, lack of muscle strength, then aches in back which made it hard to stand up straight, etc.

October, 2012 - after seeing many healthcare professionals, from my primary care physician to a hand specialist, 2 chiropractors, an acupuncturist, PT's, trigger point therapist, an orthopedist, 2 neurologists, I was diagnosed with young-onset Parkinson's Disease by Dr. Burton Scott at Duke's Movement Disorder Clinic

January, 2015 - saw Dr. Franczak for the first time for a consultation; I had watched the documentary "Under Our Skin" and it raised questions in my mind about what was really causing my PD symptoms; Dr. Franczak recommended being tested for Lyme and I agreed; blood sample was sent to Igenex

March, 2015 - diagnosed with chronic Lyme Disease; Dr. Franczak said they were the most definitive positive results she'd ever seen; results were also positive by CDC standards

While I've listed many current symptoms above, my PD meds can take care of many of them while my meds are "on". I can function pretty normally in the "on" phase; many of my initial symptoms are not as severe as they were at the beginning. Since starting on my Lyme treatment last April, when my meds are "on", my PD symptoms seem to have improved even more.

2) Dental History -

My wisdom teeth were all impacted. I had them removed while on Christmas break from college. I believe I was 18 or 19 years old.

I haven't had any other extractions, and I've never had a root canal. I have 3 crowns.

I wore braces while in elementary school for a very short time. I was probably 7 or 8. When my permanent teeth came in, my top front teeth were behind my bottom teeth, so the braces were used to push my top teeth forward.

First amalgam - I remember having to have fillings in my teeth at a young age, probably elementary school. I continued to get cavities from time to time for years. I had/have many "silver" fillings. I found in my file a note that while living in Singapore in 1996 I had fillings put on the outside of 3 teeth (due to a wearing down of the teeth). I have little recollection of this, so I really can't give any details on the type of filling, etc.

3) I'm not sure exactly about what you're asking here. Dental work I currently have in place? The only thing I have are the three crowns I mentioned above. I just had one of my crowns redone last month. When removing the old crown, the "plug" fell out of the tooth, and the dentist had to refill it. I don't know what kind of filling was used but could certainly find out. I haven't done any dental cleanup. (I'm not really sure what this means.)

4) I don't really know much about dental work that my mother's had. She is still living but has advanced Alzheimer's, so there would be no way to get that information. I know that she had a good number of fillings put in her teeth over the years, but whether she had any of that done before I was born or while she was pregnant with me - I have no idea.

5) Vaccinations - I remember taking the oral polio vaccine as a child, but otherwise I don't know what vaccinations I had as an infant/child. I don't think that I had an MMR vaccine because I actually contracted the measles, mumps and German measles (twice). I also had the chickenpox as a child, but there was no vaccination for that, I don't believe. I would think that I was given tetanus shots while growing up.

I worked in a contract lab for nine years between 1980-1989 in Raleigh, NC. I think I received a cholera shot in 1981 or 1982 because we were doing some cholera testing in our microbiology lab.

I was given a tetanus shot in 1990 while living in Lyon, France.

Between November, 1993 and May, 1994, I received the 3 injections for the hepatitis B vaccination while living in Singapore.

I had yearly flu shots from 1997 through 2014. Shots in 1997 and 1998 were given in Tokyo, Japan, the others in Raleigh, NC.

6) Current medications / supplements:

Synthroid, 75 mcg, 1/day

Azilect, 1 mg, 1/day

Amantadine HCl, 100 mg, 1/day

Ropinirole HCl, 0.25 mg, 8/day

Carbidopa-Levodopa, 25-100 mg, 4.5 tablets/day

Melatonin, 3 mg, 1/day

Probiotic, Prescript Assist Pro, Researched Nutritionals.com, 2/day

Rifampin, 150 mg, 2/day*

Azithromycin, 250 mg, 2/day

Tinidazole, 250 mg, 1/day on 2 consecutive days per week

Vitamin D 3, 5000 IU, 1/day

Vitamin B 12, 1000 mcg, 1/day

* started taking rifampin in September, 2015; prior to this, I was taking cefdinir (300 mg, 2/day) with the azithromycin and tinidazole

7) Age - 61, Height - 5' 6", Weight - 120-125 lbs.

8) I lived overseas for 12 years, from 1989-2001:

Lyon, France - Aug, 1989 - Aug, 1993

Singapore - Aug, 1993 - Aug, 1997

Tokyo, Japan - Aug, 1997 - Aug, 1999

Lyon, France - Aug, 1999 - Aug, 2001

9) I currently live in Raleigh,