

HAIR TEST: 1204 SEX: Female AGE: 5

Toxic & Essential Elements; Hair

TOXIC METALS						
		RESULT μg/g	REFERENCE INTERVAL	PERCENTILE 68 th 95 th		
Aluminum	(AI)	3.1	< 8.0			
Antimony	(Sb)	0.017	< 0.066			
Arsenic	(As)	0.028	< 0.080			
Barium	(Ba)	1.6	< 0.75			
Beryllium	(Be)	< 0.01	< 0.020			
Bismuth	(Bi)	0.020	< 2.0	•		
Cadmium	(Cd)	< 0.009	< 0.070			
Lead	(Pb)	0.16	< 1.0			
Mercury	(Hg)	0.42	< 0.40			
Platinum	(Pt)	< 0.003	< 0.005			
Thallium	(TI)	< 0.001	< 0.002			
Thorium	(Th)	< 0.001	< 0.002			
Uranium	(U)	0.033	< 0.060			
Nickel	(Ni)	1.4	< 0.30			
Silver	(Ag)	0.04	< 0.20			
Tin	(Sn)	0.04	< 0.30			
Titanium	(Ti)	0.40	< 0.90			
Total Toxic Representation						

ESSENTIAL AND OTHER ELEMENTS									
		RESULT	REFERENCE	PERCENTILE					
		μg/g	INTERVAL	2.5 th 16 th 50 th 84 th 97.5 th					
Calcium	(Ca)	576	140- 500						
Magnesium	(Mg)	53	15- 45						
Sodium	(Na)	8	18- 180						
Potassium	(K)	4	10- 150						
Copper	(Cu)	25	11- 24						
Zinc	(Zn)	240	100- 190						
Manganese	(Mn)	0.34	0.10- 0.50						
Chromium	(Cr)	0.35	0.43- 0.70						
Vanadium	(V)	0.025	0.030- 0.10						
Molybdenum	(Mo)	0.053	0.050- 0.13						
Boron	(B)	0.30	0.40- 3.5						
lodine	(I)	1.1	0.25- 1.3						
Lithium	(Li)	< 0.004	0.007- 0.020						
Phosphorus	(P)	121	150- 220						
Selenium	(Se)	0.61	0.70- 1.1						
Strontium	(Sr)	1.9	0.19- 2.0						
Sulfur	(S)	50200	45500- 53000						
Cobalt	(Co)	0.069	0.005- 0.030						
Iron	(Fe)	9.8	7.0- 16	•					
Germanium	(Ge)	0.032	0.030- 0.040						
Rubidium	(Rb)	0.005	0.012- 0.16						
Zirconium	(Zr)	0.77	0.030- 1.0						

SPECIMEN DATA			RATIOS		
COMMENTS:		ELEMENTS	RATIOS	RANGE	
		Ca/Mg	10.9	4- 30	
Date Collected: 05/08/2016	Sample Size: 0.197 g	Ca/P	4.76	1- 12	
Date Received: 06/10/2016	Sample Type: Head	Na/K	2	0.5- 10	
Date Completed: 06/11/2016	Hair Color: Blond	Zn/Cu	9.6	4- 20	
Methodology: ICP/MS	Treatment:	Zn/Cd	> 999	> 800	
	Shampoo Natures Gate				

1. What are your current symptoms and health history?

5yr old with food (egg,peanuts) and environmental sensitivities (gluten, dairy, soy, yeast, apples, dog, grass, pollen, etc.). She had many ear infections and sinus infections as an infant. She was always sick with something. At around two years old, she had tubes put in her ears and her adnoids removed. She also has what the pulmnologist calls "cough asthma" where instead of the normal wheezing during an attack, she will cough. This is usually triggered by her allergy to grass, pollen, etc. She is treated with albuterol and a nebulizer as needed. Up until a few months ago, she was on Flovent daily (for the past few years). She takes Claritan daily (again for the past few years). Benadryl and Verimist are also used as needed. We do everything we can to avoid using Prednisone because Alexa becomes very agitated (similar to the gas used by the dentist). We recently have been able to stop the daily Flovent. She carries an EpiPen with her at all times, but so far we have not had to use it.

About 3 months ago, she had surgery and general anesthesia to fix an umbilical hernia.

- 2. Dental history (Wisdom teeth removed and when? Any other extractions. First root canal placed? Braces? First amalgam etc...)
- I (her mother had a tooth filled while pregnant with daughter). Recently, she had three teeth pulled because her permanent teeth were not pushing out her baby teeth. The dentist said this was very common. He used nitrous gas, and Alexa seemed to have a bad response to it. She became very agitated.
- 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?

I had a cavity filled while pregnant with Alexa. This was 2010 and they did not use amalgams.

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

Alexa has had all vaccines recommended for a child born in 2010. She received special flu shots when she was young because of her severe egg allergy. She probably got one the first three years of her life. She hasn't received the flu shot since I stopped a few years ago. She has not had any travel vaccines.

- 6. Supplements and medications (including dosages) taken at time of hair test, or for the 3-6 months before the sample was taken?
- 7. What is your age, height and weight?

1. What are your current symptoms and health history?

5 (almost 6), unsure of her height but normal for her age, roughly 40 pounds. She has her six year check up in a few weeks so if you need a more accurate height and weight I can have it for you then.

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, NC 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.