



SEX: Male  
AGE: 11

## Toxic & Essential Elements; Hair

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 <sup>th</sup> 95 <sup>th</sup>
Aluminum (Al)	1.6	< 8.0	
Antimony (Sb)	< 0.01	< 0.066	
Arsenic (As)	0.030	< 0.080	
Barium (Ba)	0.10	< 0.75	
Beryllium (Be)	0.47	< 0.020	
Bismuth (Bi)	0.005	< 2.0	
Cadmium (Cd)	< 0.009	< 0.070	
Lead (Pb)	0.45	< 1.0	
Mercury (Hg)	< 0.03	< 0.40	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	< 0.001	< 0.002	
Thorium (Th)	0.001	< 0.002	
Uranium (U)	0.15	< 0.060	
Nickel (Ni)	0.04	< 0.20	
Silver (Ag)	0.22	< 0.14	
Tin (Sn)	0.04	< 0.30	
Titanium (Ti)	0.11	< 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)	110	160- 500			
Magnesium (Mg)	32	12- 50			
Sodium (Na)	60	20- 200			
Potassium (K)	3	12- 140			
Copper (Cu)	43	11- 32			
Zinc (Zn)	200	110- 190			
Manganese (Mn)	0.30	0.08- 0.50			
Chromium (Cr)	0.38	0.40- 0.70			
Vanadium (V)	0.012	0.025- 0.10			
Molybdenum (Mo)	0.038	0.040- 0.090			
Boron (B)	0.24	0.50- 3.5			
Iodine (I)	0.40	0.25- 1.3			
Lithium (Li)	0.008	0.007- 0.020			
Phosphorus (P)	123	150- 220			
Selenium (Se)	0.80	0.70- 1.1			
Strontium (Sr)	0.09	0.21- 2.1			
Sulfur (S)	48200	44000- 51000			
Cobalt (Co)	0.008	0.004- 0.020			
Iron (Fe)	5.7	7.0- 16			
Germanium (Ge)	0.037	0.030- 0.040			
Rubidium (Rb)	0.007	0.008- 0.080			
Zirconium (Zr)	0.20	0.060- 0.70			

SPECIMEN DATA		RATIOS	
<b>COMMENTS:</b>		<b>ELEMENTS</b>	<b>RATIOS</b>
Date Collected: 01/02/2017		Ca/Mg	3.44
Date Received: 01/09/2017		Ca/P	0.894
Date Completed: 01/11/2017		Na/K	20
Methodology: ICP/MS		Zn/Cu	4.65
Sample Size: 0.2 g		Zn/Cd	> 999
Sample Type: Head			
Hair Color: Blond			
Treatment:			
Shampoo: Avalon Organics			
		<b>RANGE</b>	
		4- 30	
		0.8- 8	
		0.5- 10	
		4- 20	
		> 800	

**What are your current symptoms and health history?**

Skeletal spasticity, stiffness, weakness, easily fatigues, does not complain of pain per se but extreme muscle stiffness that causes his legs and arms to just give out. He crumples to the floor. During bowling his arm and hand has behave the same way, he just drops the ball. Symptoms started after DTAP injection in 2011.

Poor recovery after exercise, extremely slow. Energy failure both physically and mentally with coordination type exercises.

Suffered from frequent respiratory infections when younger. Lived off of antibiotics until tonsils removed in 2008 at age 3. Since supplementing with vitamins/minerals and Mannatech Ambrotose infections have reduced.

Eczema- started developing eczema type rash on elbows and behind knees after being injected several times with candida for a wart on the bottom of his foot. His foot bled after the injections. Could the candida be in his blood? Have not been able to link outbreaks to any foods as of yet, but I suspect milk chocolate in too large of quantities.

Insomnia- stays up until 2:00 am and sleeps until 11:00 am or noon- we homeschool thankfully

Nose bleeds- just recently and occasional

2 past concussions age 4-6

Dental plague

**Dental history (wisdom teeth removed? First root canal placed? Braces? First amalgam etc...)**

No cavities. Had braces on for 9 months to fix front teeth. Most likely will need braces in the future for under bite and crowding.

**What dental work do you currently have in place? What part of the dental cleanup have you completed?**

None

**What dentistry did your mother have at any time before or during pregnancy?** Mother had 8 or 10 amalgams removed 3 years prior to getting pregnant. No chelation. Improper removal. Mother has numerous root canals and many composites during pregnancy. No dental work during pregnancy, possibly a cleaning.

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

3 Hep B 2006

5 DTAP – 3 in 2005, 1 in 2006, 1 in 2011

3 HIB – 2 in 2005, 1 in 2006

3 IPV – 2 in 2005, 1 in 2006

1 MMR – 2006

1 Varicella in 2006

4 Pneumococcal

1 Flu 2007

**Other information you feel may be relevant?**

Toxic Urine test – challenged showed very high copper and antimony in July 2016 (I will never do this test again)

Mother took many prescription medications through pregnancy including Oxycontin, muscle relaxers, ibuprofen, and anxiety medication. Mother has been in chronic pain for 21 years.

Home water tests are clean

MTHFR- Homozygous C677T, VDR, MAO and Heterozygous A1298C and numerous other SNP's  
Copper serum 106 normal  
RBC Copper .71 normal  
RBC Zinc 8.9 LOW just outside of range  
RBC Mag normal  
Calcium normal  
Vitamin D 28  
Potassium serum 4.2 normal  
CRP, SED, and CPK normal  
Glutathione serum 564 normal but lower end of the range  
TSH 1.56 normal, Free T3 4.0 normal, Free T4 .9 normal, Thyroid antibodies 1 normal- tested in July 2016  
**Iodine showed low in serum**  
Iron, Ferritin, TIBC Normal  
Negative for H-pylori serum test  
Food Allergy test showed low IGE allergies to beef and lamb but IGG on almost every other food, Gluten free, 90% dairy free, very limited eater.  
Have 2 Organic Acid Tests if anything is helpful on those tests

### **What is your location – Manitou Springs, Colorado**

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

#### **6 Months before:**

1. Mannatech Advanced Ambrotose: 2-4 grams daily - **current**
2. Mannatech Plus - **Current** -Wild Yam Extract 200 mg Standardized to 12.5% Diosgenin 25 mg, L-Glutamic Acid 200 mg, Glycine 200 mg, L-Lysine (as L-Lysine HCl) 200 mg, L-Arginine (as L-Arginine HCl) 95 mg, Beta-Sitosterol (from plant sterols) 25 mg, Ambrotose® complex (patent pending) 2.5 mg, Arabinogalactan (from Larix spp. wood), Aloe Vera (inner leaf gel powder), Ghatti Gum, Gum Tragacanth, Boron 1 mg
3. Vital Nutrients- Vital Brain Powder - Acetyl L-Carnitine HCl 850mg, GlyceroPhosphoCholine GPC 600mg, PhosphatidylSerine PS 150mg **Current**
4. ProArgi twice daily- Vit C 60mg, Vit D3 2500, Vit K 20mcg, Vit B6 2mg, Vit B12 6mcg, Folate 200mcg, Proprietary Blend 6.5 mg: L-Arginine, Pomegranite Fruit, L-Citrulline, D-Ribose, Grape Skin Extract, Red Vine Extract – **Occasionally in the last 3 months**
5. Vit. C 500mg daily **current**
6. Vit. B Complex SRT **current**
7. Magnesium 150-300mg daily SRT and ionic in water SRT **current**
8. Fish Oil – DHA 550mg EPA 800mg other 250mg **current**
9. Cod Liver Oil- Rosita 1 tsp daily **current**
10. Ubiquinol – 100mg **current**
11. Vit E – D-Alpha 45iu, Gamma E Mixed Tocopherols 360mg & Tocotrienols 145mg **current**
12. Intramax Mult Vitamin- **discontinued 3 month ago – Taking All In One by Amy Yasko Holistic Health**
13. Vit D 5000 iu with K2 400mcg – **stopped 3 months ago**
14. Calcium 500mg **stopped 3 months ago**
15. Maxi High by Food Science- L-Glutamine 6g, L-Arginine 1g, L-Ornithine 1g, L-Lysine 1,250mg, Glycine 1g- **stopped 3 months ago**
16. Taurine 500mg **just started**
17. Boron 1.5 mg **just started**
18. Potassium 500 mg over the day **just started**

19. Adrenal Complex by Thorne **just started**