



SEX: Male
DOB: 04/03/1993

AGE: 26

Toxic & Essential Elements; Hair

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 th 95 th
Aluminum (Al)	5.1	< 7.0	
Antimony (Sb)	0.019	< 0.066	
Arsenic (As)	0.12	< 0.080	
Barium (Ba)	0.24	< 1.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	0.025	< 2.0	
Cadmium (Cd)	< 0.009	< 0.065	
Lead (Pb)	0.32	< 0.80	
Mercury (Hg)	0.06	< 0.80	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	0.001	< 0.002	
Thorium (Th)	0.001	< 0.002	
Uranium (U)	0.019	< 0.060	
Nickel (Ni)	0.05	< 0.20	
Silver (Ag)	0.01	< 0.08	
Tin (Sn)	0.11	< 0.30	
Titanium (Ti)	0.21	< 0.60	
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)	259	200- 750			
Magnesium (Mg)	21	25- 75			
Sodium (Na)	220	20- 180			
Potassium (K)	120	9- 80			
Copper (Cu)	7.0	11- 30			
Zinc (Zn)	120	130- 200			
Manganese (Mn)	0.13	0.08- 0.50			
Chromium (Cr)	0.32	0.40- 0.70			
Vanadium (V)	0.009	0.018- 0.065			
Molybdenum (Mo)	0.042	0.025- 0.060			
Boron (B)	5.5	0.40- 3.0			
Iodine (I)	0.47	0.25- 1.8			
Lithium (Li)	< 0.004	0.007- 0.020			
Phosphorus (P)	169	150- 220			
Selenium (Se)	0.80	0.70- 1.2			
Strontium (Sr)	0.66	0.30- 3.5			
Sulfur (S)	41800	44000- 50000			
Cobalt (Co)	0.002	0.004- 0.020			
Iron (Fe)	4.9	7.0- 16			
Germanium (Ge)	0.032	0.030- 0.040			
Rubidium (Rb)	0.087	0.011- 0.12			
Zirconium (Zr)	0.036	0.020- 0.44			

SPECIMEN DATA		RATIOS	
COMMENTS:		ELEMENTS	RATIOS
Date Collected: 10/08/2019		Ca/Mg	12.3
Date Received: 10/15/2019		Ca/P	1.53
Date Reported: 10/17/2019		Na/K	1.83
Methodology: ICP/MS		Zn/Cu	17.1
Sample Size: 0.2 g	Sample Type: Head	Zn/Cd	> 999
Hair Color: Red	Treatment:		
Shampoo: Equate			
		RANGE	
		4- 30	
		0.8- 8	
		0.5- 10	
		4- 20	
		> 800	

1. **Current symptoms:** Weakness, fatigue, lack of focus/concentration, dizziness, poor memory, unable to maintain a stable body temperature.
2. **Dental history:** Never had any amalgam fillings. Had braces 12 years ago.
3. **Dental work currently in place:** Metal plate behind front teeth.
4. **Mother's dental work:** Many silver fillings during pregnancy.
5. **Vaccinations:** Flu shot 2019, Tetanus 2017, all normal ones during childhood
6. **Medications/dosages taken during hair test:** Diphenhydramine 25-50 mg 1x a day, Ibuprophen 800mg 4x a day, acetaminophen 500 mg 2x a day, maproxen 220 mg 2x a day, meclizine 25mg 1x a day
7. **Age and weight:** 26, 260 pounds
8. **Other usual information:** mental and physical exertion worsen all my symptoms
9. **Location:** Grew up in Donora, PA, USA. Currently living in Charleroi, PA, USA