



<5 F H9 GH. % ' %

SEX: Male

AGE: 55

Toxic & Essential Elements; Hair

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 th 95 th
Aluminum (Al)	2.4	< 7.0	
Antimony (Sb)	0.013	< 0.066	
Arsenic (As)	0.036	< 0.080	
Barium (Ba)	0.24	< 1.0	
Beryllium (Be)	0.25	< 0.020	
Bismuth (Bi)	0.007	< 2.0	
Cadmium (Cd)	0.018	< 0.065	
Lead (Pb)	0.22	< 0.80	
Mercury (Hg)	0.03	< 0.80	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	< 0.001	< 0.002	
Thorium (Th)	0.002	< 0.002	
Uranium (U)	0.051	< 0.060	
Nickel (Ni)	0.12	< 0.20	
Silver (Ag)	0.06	< 0.08	
Tin (Sn)	0.09	< 0.30	
Titanium (Ti)	0.24	< 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)	154	200- 750			
Magnesium (Mg)	32	25- 75			
Sodium (Na)	68	20- 180			
Potassium (K)	10	9- 80			
Copper (Cu)	11	11- 30			
Zinc (Zn)	180	130- 200			
Manganese (Mn)	0.29	0.08- 0.50			
Chromium (Cr)	0.40	0.40- 0.70			
Vanadium (V)	0.015	0.018- 0.065			
Molybdenum (Mo)	0.041	0.025- 0.060			
Boron (B)	0.43	0.40- 3.0			
Iodine (I)	0.41	0.25- 1.8			
Lithium (Li)	0.007	0.007- 0.020			
Phosphorus (P)	154	150- 220			
Selenium (Se)	1.5	0.70- 1.2			
Strontium (Sr)	0.13	0.30- 3.5			
Sulfur (S)	46600	44000- 50000			
Cobalt (Co)	0.005	0.004- 0.020			
Iron (Fe)	7.5	7.0- 16			
Germanium (Ge)	0.036	0.030- 0.040			
Rubidium (Rb)	0.014	0.011- 0.12			
Zirconium (Zr)	0.18	0.020- 0.44			

SPECIMEN DATA		RATIOS	
COMMENTS:		ELEMENTS	RATIOS
Date Collected: 01/02/2017		Ca/Mg	4.81
Date Received: 01/09/2017		Ca/P	1
Date Completed: 01/11/2017		Na/K	6.8
Methodology: ICP/MS		Zn/Cu	16.4
Sample Size: 0.204 g	Sample Type: Head	Zn/Cd	> 999
Hair Color: Brown	Treatment:		
Shampoo: Aveda			
		RANGE	
		4- 30	
		0.8- 8	
		0.5- 10	
		4- 20	
		> 800	

56yrs old, 6'3 185lbs Manitou Springs Colorado

What are your current symptoms and health history? Very healthy and active. Only complaint is terrible toe nail fungus.

Dental history – Wisdom teeth removed as teenage. No braces, root canals, or extractions. First cavity at age 54 filled with composite filling. I have a total of 4 cavities on two molars filled with composites.

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

What vaccinations have you had and when (including flu and especially travel shots)?
As a child I had -Smallpox, Diphtheria*, Tetanus*, Pertussis*, Polio (OPV), Measles, Mumps, Rubella, * Given in combination as DTP
As an adult I have had several flu shots, 3 more Hep B, and 2 MMR for medical school

Other information you feel may be relevant?

Supplements and medications (including dosages) taken at time of hair test, or for the 3-6 months before the sample was taken? No medications

- 1 Purple Defense Resveratrol-Mercola
- 1 Mannatech PLUS
- 1 Magnesium – JigSaw 150mg
- 1 Mannatech Ambrotose glyconutrients
- 2 Ultra High EPA/DHA Fish Oil 500mg each DHA
- 3 Cod Liver Oil capsules- Rosita - **just started**
- 1 Krill Oil 1000mg
- 2 Flax/Borage 500mg
- 1 Vit. D 2,000iu's Vital Nutrients- **just stopped**
- Vitamin K2 1000 mcg Thorne Liquid
- 1 CQ 10 Ubiquinol 200 NOW
- 1 Phyto Curcumin w/Enzymes Curcumin 1050mg, bromelain 100mg, Serratiopeptidase 12,000 units
- 1 Selenium –L-Selenomethionine -Source Naturals 200mcg
- Vit. C 250mg daily
- Vit. B Complex SRT –**just started**
- Vit E – D-Alpha 45iu, Gamma E Mixed Tocopherols 360mg & Tocotrienols 145mg current-**just started**
- Boron 3 mg **just started**
- Potassium 1000 mg over the day **just started**