



SEX: Female
AGE: 59

279 Walkers Mills Rd
Bethel, ME 04217 U.S.A.

Toxic & Essential Elements; Hair

TOXIC METALS					
		RESULT µg/g	REFERENCE INTERVAL	PERCENTILE	
				68 th	95 th
Aluminum	(Al)	3.2	< 7.0		
Antimony	(Sb)	< 0.01	< 0.050		
Arsenic	(As)	0.016	< 0.060		
Barium	(Ba)	4.0	< 2.0		
Beryllium	(Be)	< 0.01	< 0.020		
Bismuth	(Bi)	< 0.002	< 2.0		
Cadmium	(Cd)	< 0.009	< 0.050		
Lead	(Pb)	0.39	< 0.60		
Mercury	(Hg)	0.16	< 0.80		
Platinum	(Pt)	< 0.003	< 0.005		
Thallium	(Tl)	< 0.001	< 0.002		
Thorium	(Th)	0.001	< 0.002		
Uranium	(U)	0.030	< 0.060		
Nickel	(Ni)	0.23	< 0.30		
Silver	(Ag)	0.06	< 0.15		
Tin	(Sn)	0.05	< 0.30		
Titanium	(Ti)	0.42	< 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)	1540	300– 1200					
Magnesium	(Mg)	280	35– 120					
Sodium	(Na)	44	20– 250					
Potassium	(K)	8	8– 75					
Copper	(Cu)	50	11– 37					
Zinc	(Zn)	160	140– 220					
Manganese	(Mn)	0.18	0.08– 0.60					
Chromium	(Cr)	0.39	0.40– 0.65					
Vanadium	(V)	0.028	0.018– 0.065					
Molybdenum	(Mo)	0.016	0.020– 0.050					
Boron	(B)	0.33	0.25– 1.5					
Iodine	(I)	0.66	0.25– 1.8					
Lithium	(Li)	0.005	0.007– 0.020					
Phosphorus	(P)	143	150– 220					
Selenium	(Se)	0.72	0.55– 1.1					
Strontium	(Sr)	6.8	0.50– 7.6					
Sulfur	(S)	45900	44000– 50000					
Cobalt	(Co)	0.29	0.005– 0.040					
Iron	(Fe)	8.8	7.0– 16					
Germanium	(Ge)	0.033	0.030– 0.040					
Rubidium	(Rb)	0.010	0.007– 0.096					
Zirconium	(Zr)	0.013	0.020– 0.42					

SPECIMEN DATA		RATIOS		
COMMENTS:		ELEMENTS	RATIOS	RANGE
Date Collected: 06/08/2017	Sample Size: 0.204 g	Ca/Mg	5.5	4– 30
Date Received: 06/12/2017	Sample Type: Head	Ca/P	10.8	1– 12
Date Completed: 06/15/2017	Hair Color: Brown	Na/K	5.5	0.5– 10
Methodology: ICP/MS	Treatment:	Zn/Cu	3.2	4– 20
	Shampoo: Argan Oil	Zn/Cd	> 999	> 800

1. Symptoms: insomnia, nerve pain, memory, brain fog, insomnia, constipation, hot flashes and food allergies.
2. Dental History: 6 amalgam unsafely removed 25 years ago. Wisdom teeth removed 35 years ago.
3. Those amalgams replaced with the existing gold crowns. More recent work is composite. One titanium implant in last 5-10 years.
4. Mother had numerous amalgams – like 10-15 amalgams
5. Customary vaccinations for a child in the late 50's and early 60's. Travel vaccines 10 years ago.
6. Supplements in last 6 months include Magnesium, Vitamin C, B-complex. Plus significant and constant self-care – herbs, ketogenic diet, weekly saunas, etc.
7. Female, 59 years old, 5'9", 145 lbs.
8. Diagnosed with Lyme's and Hashimoto's
9. Durango, CO for last 25 years. Previously Lenox, MA for 20 years. Previous to that Alfred, NY 15 years.