



PATIENT: Number 938  
 SEX: Female  
 AGE: 81

**Toxic & Essential Elements; Hair**

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 <sup>th</sup> 95 <sup>th</sup>
Aluminum (Al)	2.2	< 7.0	
Antimony (Sb)	0.011	< 0.050	
Arsenic (As)	0.018	< 0.060	
Barium (Ba)	0.22	< 2.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	0.009	< 2.0	
Cadmium (Cd)	< 0.009	< 0.050	
Lead (Pb)	0.17	< 0.60	
Mercury (Hg)	0.82	< 0.80	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	< 0.001	< 0.002	
Thorium (Th)	< 0.001	< 0.002	
Uranium (U)	0.026	< 0.060	
Nickel (Ni)	0.15	< 0.30	
Silver (Ag)	0.23	< 0.15	
Tin (Sn)	0.03	< 0.30	
Titanium (Ti)	0.35	< 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)	336	300- 1200	
Magnesium (Mg)	76	35- 120	
Sodium (Na)	25	20- 250	
Potassium (K)	3	8- 75	
Copper (Cu)	72	11- 37	
Zinc (Zn)	320	140- 220	
Manganese (Mn)	0.13	0.08- 0.60	
Chromium (Cr)	0.32	0.40- 0.65	
Vanadium (V)	0.014	0.018- 0.065	
Molybdenum (Mo)	0.011	0.020- 0.050	
Boron (B)	0.19	0.25- 1.5	
Iodine (I)	0.82	0.25- 1.8	
Lithium (Li)	< 0.004	0.007- 0.020	
Phosphorus (P)	136	150- 220	
Selenium (Se)	0.61	0.55- 1.1	
Strontium (Sr)	1.4	0.50- 7.6	
Sulfur (S)	46600	44000- 50000	
Cobalt (Co)	0.010	0.005- 0.040	
Iron (Fe)	3.3	7.0- 16	
Germanium (Ge)	0.024	0.030- 0.040	
Rubidium (Rb)	0.006	0.007- 0.096	
Zirconium (Zr)	0.028	0.020- 0.42	

SPECIMEN DATA		RATIOS	
<b>COMMENTS:</b>		ELEMENTS	RATIOS
Date Collected: 12/22/2013	Sample Size: 0.198 g	Ca/Mg	4.42
Date Received: 12/27/2013	Sample Type: Head	Ca/P	2.47
Date Completed: 01/02/2014	Hair Color: Gray	Na/K	8.33
Methodology: ICP/MS	Treatment:	Zn/Cu	4.44
	Shampoo: Pantene	Zn/Cd	> 999
		RANGE	
			4- 30
			1- 12
			0.5- 10
			4- 20
			> 800

**Health Information 938****Current Symptoms and history:**

Spinal stenosis (pain); anxiety (tightness in neck and throat); hypothyroidism and nodules; high cholesterol

**Dental History:**

Many childhood cavities and through adulthood

**Dental work currently in place? What work have you completed?**

Present: several root canals, three bridges, amalgam fillings in remaining teeth

6 month check-ups and x-rays once a year

**Mother's dentistry before or during pregnancy**

Dentures at early age – before pregnancy

**Supplements taken at time of hair test or 3 to 6 months prior**

Multi-vitamin; vitamin D

**Vaccines:**

Smallpox before first grade; polio; tetanus

**Age, height, weight**

82 years of age; 5'4.5"; 190 Lbs.

**Location where you live: city and country**

Dover, New Hampshire, USA