



PATIENT: Number 871  
 SEX: Male  
 AGE: 44

**Toxic & Essential Elements; Hair**

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 <sup>th</sup> 95 <sup>th</sup>
Aluminum (Al)	4.4	< 7.0	
Antimony (Sb)	0.013	< 0.066	
Arsenic (As)	0.097	< 0.080	
Barium (Ba)	0.10	< 1.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	0.063	< 2.0	
Cadmium (Cd)	0.025	< 0.065	
Lead (Pb)	0.46	< 0.80	
Mercury (Hg)	1.5	< 0.80	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	< 0.001	< 0.002	
Thorium (Th)	< 0.001	< 0.002	
Uranium (U)	0.025	< 0.060	
Nickel (Ni)	0.09	< 0.20	
Silver (Ag)	0.05	< 0.08	
Tin (Sn)	0.06	< 0.30	
Titanium (Ti)	0.44	< 0.60	
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)	492	200- 750			
Magnesium (Mg)	150	25- 75			
Sodium (Na)	47	20- 180			
Potassium (K)	16	9- 80			
Copper (Cu)	10	11- 30			
Zinc (Zn)	210	130- 200			
Manganese (Mn)	0.08	0.08- 0.50			
Chromium (Cr)	0.43	0.40- 0.70			
Vanadium (V)	0.30	0.018- 0.065			
Molybdenum (Mo)	0.034	0.025- 0.060			
Boron (B)	2.8	0.40- 3.0			
Iodine (I)	1.4	0.25- 1.8			
Lithium (Li)	< 0.004	0.007- 0.020			
Phosphorus (P)	185	150- 220			
Selenium (Se)	3.3	0.70- 1.2			
Strontium (Sr)	2.7	0.30- 3.5			
Sulfur (S)	47700	44000- 50000			
Cobalt (Co)	0.009	0.004- 0.020			
Iron (Fe)	8.2	7.0- 16			
Germanium (Ge)	0.032	0.030- 0.040			
Rubidium (Rb)	0.022	0.011- 0.12			
Zirconium (Zr)	0.048	0.020- 0.44			

SPECIMEN DATA		RATIOS		
<b>COMMENTS:</b>		ELEMENTS	RATIOS	RANGE
Date Collected: 10/18/2013	Sample Size: 0.205 g	Ca/Mg	3.28	4- 30
Date Received: 10/22/2013	Sample Type: Head	Ca/P	2.66	0.8- 8
Date Completed: 10/25/2013	Hair Color: Brown	Na/K	2.94	0.5- 10
Methodology: ICP/MS	Treatment:	Zn/Cu	21	4- 20
	Shampoo: Clairol	Zn/Cd	> 999	> 800

## Health history for hair test 871

1. What are your current symptoms and health history? Fatigue, chest pains, digestive difficulties (eg diarrhea) increasing over past 5+ years; hair loss; underweight; hypothyroid, possibly adrenal insufficiency.
2. Dental history (Wisdom teeth removed and when? Any other extractions. First root canal placed? Braces? First amalgam etc...) 11 amalgam fillings in 1970s, 80s; extractions for braces in early 1980s; wisdom teeth removed in 90s; two root canals in early 2000s.
3. What dental work do you currently have in place? What part of the dental clean-up have you completed? Still have all the amalgams, root canals, and two crowns; no replacements yet.
4. What dentistry did your mother have at any time before or during pregnancy? Unknown
5. What vaccinations have you had and when (including flu and especially travel shots)? Hepatitis, yellow fever, various others for travel in rural Central and S America; dtap
6. Supplements and medications (including dosages) taken at time of hair test, or for the 3-6 months before the sample was taken? Mg, vit c, d, a, b, probiotics last few months
7. What is your age, height and weight? 44; 6'2"; 140 lbs
8. Other information you feel may be relevant? Been eating lots of sushi during the past year; broke a Hg thermometer and played with the Hg in my hands when I was a kid. Used dandruff shampoo 1-2 times during past 6 mos. May explain high Selenium
9. What is your location – city & country (so that we can learn where certain toxins are more prevalent). Grew up in upstate NY