



PATIENT: Number 719  
 SEX: Male  
 AGE: 43

**Toxic & Essential Elements; Hair**

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 <sup>th</sup> 95 <sup>th</sup>
Aluminum (Al)	0.9	< 7.0	
Antimony (Sb)	< 0.01	< 0.066	
Arsenic (As)	0.038	< 0.080	
Barium (Ba)	1.3	< 1.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	0.047	< 2.0	
Cadmium (Cd)	< 0.009	< 0.065	
Lead (Pb)	0.04	< 0.80	
Mercury (Hg)	0.21	< 0.80	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	< 0.001	< 0.002	
Thorium (Th)	< 0.001	< 0.002	
Uranium (U)	0.023	< 0.060	
Nickel (Ni)	0.02	< 0.20	
Silver (Ag)	0.01	< 0.08	
Tin (Sn)	0.04	< 0.30	
Titanium (Ti)	0.22	< 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)	322	200- 750			
Magnesium (Mg)	35	25- 75			
Sodium (Na)	140	20- 180			
Potassium (K)	23	9- 80			
Copper (Cu)	11	11- 30			
Zinc (Zn)	200	130- 200			
Manganese (Mn)	0.10	0.08- 0.50			
Chromium (Cr)	0.53	0.40- 0.70			
Vanadium (V)	0.016	0.018- 0.065			
Molybdenum (Mo)	0.015	0.025- 0.060			
Boron (B)	4.0	0.40- 3.0			
Iodine (I)	0.97	0.25- 1.8			
Lithium (Li)	0.009	0.007- 0.020			
Phosphorus (P)	176	150- 220			
Selenium (Se)	0.69	0.70- 1.2			
Strontium (Sr)	2.1	0.30- 3.5			
Sulfur (S)	46300	44000- 50000			
Cobalt (Co)	0.002	0.004- 0.020			
Iron (Fe)	5.1	7.0- 16			
Germanium (Ge)	0.035	0.030- 0.040			
Rubidium (Rb)	0.016	0.011- 0.12			
Zirconium (Zr)	0.011	0.020- 0.44			

SPECIMEN DATA		RATIOS		
<b>COMMENTS:</b>		ELEMENTS	RATIOS	RANGE
Date Collected: 12/03/2012	Sample Size: 0.196 g	Ca/Mg	9.2	4- 30
Date Received: 12/07/2012	Sample Type: Head	Ca/P	1.83	0.8- 8
Date Completed: 12/10/2012	Hair Color:	Na/K	6.09	0.5- 10
Methodology: ICP/MS	Treatment:	Zn/Cu	18.2	4- 20
	Shampoo: Broener	Zn/Cd	> 999	> 800

## **Hair Test 719**

1. **What are your current symptoms and health history?** fatigue, muscle pains, muscle cramps, muscle twitches, insomnia,
2. **Dental history (Wisdom teeth removed and when? Any other extractions. First root canal placed? Braces? First amalgam etc...)** - first amalgams when I was 8-9
3. **What dental work do you currently have in place? What part of the dental clean-up have you completed?** removed all amalgams in 12/2003.
4. **What dentistry did your mother have at any time before or during pregnancy?** not sure about that
5. **What vaccinations have you had and when (including flu and especially travel shots)?** - all flu shoots that were kids receiving back in 1970-80 in former Yugoslavia
6. **Supplements and medications (including dosages) taken at time of hair test, or for the 3-6 months before the sample was taken?** nothing
7. **What is your age, height and weight?** 43, 181, 71 kg
8. Other information you feel may be relevant?
9. **What is your location – city & country (so that we can learn where certain toxins are more prevalent).**- Houston, TX