

# HAIR ELEMENTS



**PATIENT: Number 191**  
**SEX: Female**  
**AGE: 44**

POTENTIALLY TOXIC ELEMENTS				
TOXIC ELEMENTS	RESULT $\mu\text{g/g}$	REFERENCE RANGE	PERCENTILE	
			68 <sup>th</sup>	95 <sup>th</sup>
Aluminum	3.2	< 7.0		
Antimony	0.063	< 0.050		
Arsenic	0.041	< 0.060		
Beryllium	< 0.01	< 0.020		
Bismuth	0.11	< 2.0		
Cadmium	0.061	< 0.10		
Lead	0.59	< 1.0		
Mercury	0.26	< 1.1		
Platinum	< 0.003	< 0.005		
Thallium	< 0.001	< 0.010		
Thorium	< 0.001	< 0.005		
Uranium	0.006	< 0.060		
Nickel	0.27	< 0.40		
Silver	1.8	< 0.15		
Tin	0.36	< 0.30		
Titanium	0.36	< 1.0		
Total Toxic Representation				

ESSENTIAL AND OTHER ELEMENTS							
ELEMENTS	RESULT $\mu\text{g/g}$	REFERENCE RANGE	PERCENTILE				
			2.5 <sup>th</sup>	16 <sup>th</sup>	50 <sup>th</sup>	84 <sup>th</sup>	97.5 <sup>th</sup>
Calcium	942	300- 1200					
Magnesium	61	35- 120					
Sodium	36	12- 90					
Potassium	21	8- 38					
Copper	12	12- 35					
Zinc	160	140- 220					
Manganese	0.26	0.15- 0.65					
Chromium	0.71	0.20- 0.40					
Vanadium	0.052	0.018- 0.065					
Molybdenum	0.046	0.028- 0.056					
Boron	2.4	0.30- 2.0					
Iodine	0.85	0.25- 1.3					
Lithium	< 0.004	0.007- 0.023					
Phosphorus	147	160- 250					
Selenium	0.80	0.95- 1.7					
Strontium	2.3	0.50- 7.6					
Sulfur	46900	44500- 52000					
Barium	1.1	0.26- 3.0					
Cobalt	0.013	0.013- 0.050					
Iron	15	5.4- 14					
Germanium	0.034	0.045- 0.065					
Rubidium	0.018	0.007- 0.096					
Zirconium	0.028	0.020- 0.42					

SPECIMEN DATA				RATIOS		
<b>COMMENTS:</b>				<b>ELEMENTS</b>	<b>RATIOS</b>	<b>EXPECTED RANGE</b>
Date Collected: 7/7/2008	Sample Size: 0.199 g			Ca/Mg	15.4	4- 30
Date Received: 7/16/2008	Sample Type: Head			Ca/P	6.41	1- 12
Date Completed: 7/18/2008	Hair Color: Brown			Na/K	1.71	0.5- 10
	Treatment:			Zn/Cu	13.3	4- 20
Methodology: ICP-MS	Shampoo: Avalon Organics			Zn/Cd	> 999	> 800
	V06.99					

## Health history hair test 191

1. **current symptoms** - brain fog, depression, digestive problems, muscle weakness, joint pains/dislocations. Dry hair, skin, thin nails... -- this has been going on for years, but the joint pain and muscle weakness have gotten much worse.
2. Had complete **dental revision** at Huggins clinic in 2003 - had wisdom teeth removed in '92. Braces from '76 through '79 with amalgams in mouth. Had root canals in 80's and 90's - but removed in 2003.
3. Just had to have another root canal in '07 but no mercury. Currently being fitted for bridge and porcelain crown.
4. No idea about my mother's dentistry.
5. Typical vaccinations for U.S. in '64. Never had travel or flu shots.
6. Been taking p5p and zinc for months, at time of hair test – Vit C, Vit E, probiotics, B's, p5p, zinc, magnesium.
7. Had 2 DMPS injections down my spine (so stupid!) in '03 and '04. Had DMPS IV challenge in '02 and '04.
8. Washington D.C. USA