

# HAIR ELEMENTS



**PATIENT: Number 529**  
**SEX: Male**  
**AGE: 34**

POTENTIALLY TOXIC ELEMENTS				
TOXIC ELEMENTS	RESULT $\mu\text{g/g}$	REFERENCE RANGE	PERCENTILE	
			68 <sup>th</sup>	95 <sup>th</sup>
Aluminum	2.0	< 7.0		
Antimony	0.010	< 0.066		
Arsenic	0.032	< 0.080		
Barium	0.64	< 1.0		
Beryllium	< 0.01	< 0.020		
Bismuth	0.019	< 2.0		
Cadmium	0.076	< 0.065		
Lead	0.09	< 0.80		
Mercury	0.80	< 0.80		
Platinum	< 0.003	< 0.005		
Thallium	< 0.001	< 0.002		
Thorium	< 0.001	< 0.002		
Uranium	0.047	< 0.060		
Nickel	0.14	< 0.20		
Silver	0.04	< 0.08		
Tin	0.06	< 0.30		
Titanium	0.40	< 0.60		
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	1050	200- 750					
Magnesium	91	25- 75					
Sodium	21	20- 180					
Potassium	8	9- 80					
Copper	20	11- 30					
Zinc	360	130- 200					
Manganese	0.15	0.08- 0.50					
Chromium	0.49	0.40- 0.70					
Vanadium	0.027	0.018- 0.065					
Molybdenum	0.037	0.025- 0.060					
Boron	0.26	0.40- 3.0					
Iodine	0.27	0.25- 1.8					
Lithium	< 0.004	0.007- 0.020					
Phosphorus	172	150- 220					
Selenium	1.6	0.70- 1.2					
Strontium	2.3	0.30- 3.5					
Sulfur	49700	44000- 50000					
Cobalt	0.007	0.004- 0.020					
Iron	7.2	7.0- 16					
Germanium	0.045	0.030- 0.040					
Rubidium	0.010	0.011- 0.12					
Zirconium	0.026	0.020- 0.44					

SPECIMEN DATA			RATIOS		
<b>COMMENTS:</b>			<b>ELEMENTS</b>	<b>RATIOS</b>	<b>EXPECTED RANGE</b>
Date Collected: 11/28/2009	Sample Size: 0.205 g		Ca/Mg	11.5	4- 30
Date Received: 12/4/2009	Sample Type: Head		Ca/P	6.1	0.8- 8
Date Completed: 12/9/2009	Hair Color:		Na/K	2.63	0.5- 10
Client Reference:	Treatment:		Zn/Cu	18	4- 20
Methodology: ICP-MS	Shampoo: Natures Gate		Zn/Cd	> 999	> 800

# HAIR ELEMENTS



**PATIENT: Number 529**  
**SEX: Male**  
**AGE: 35**

POTENTIALLY TOXIC ELEMENTS				
TOXIC ELEMENTS	RESULT $\mu\text{g/g}$	REFERENCE RANGE	PERCENTILE	
			68 <sup>th</sup>	95 <sup>th</sup>
Aluminum	1.8	< 7.0		
Antimony	0.020	< 0.066		
Arsenic	0.042	< 0.080		
Barium	0.80	< 1.0		
Beryllium	< 0.01	< 0.020		
Bismuth	0.013	< 2.0		
Cadmium	0.027	< 0.065		
Lead	0.09	< 0.80		
Mercury	0.21	< 0.80		
Platinum	< 0.003	< 0.005		
Thallium	< 0.001	< 0.002		
Thorium	< 0.001	< 0.002		
Uranium	0.031	< 0.060		
Nickel	0.07	< 0.20		
Silver	0.04	< 0.08		
Tin	0.05	< 0.30		
Titanium	0.34	< 0.60		
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	1050	200- 750					
Magnesium	100	25- 75					
Sodium	54	20- 180					
Potassium	13	9- 80					
Copper	11	11- 30					
Zinc	290	130- 200					
Manganese	0.06	0.08- 0.50					
Chromium	0.39	0.40- 0.70					
Vanadium	0.020	0.018- 0.065					
Molybdenum	0.040	0.025- 0.060					
Boron	0.66	0.40- 3.0					
Iodine	0.58	0.25- 1.8					
Lithium	< 0.004	0.007- 0.020					
Phosphorus	183	150- 220					
Selenium	1.1	0.70- 1.2					
Strontium	2.3	0.30- 3.5					
Sulfur	48200	44000- 50000					
Cobalt	0.004	0.004- 0.020					
Iron	13	7.0- 16					
Germanium	0.029	0.030- 0.040					
Rubidium	0.012	0.011- 0.12					
Zirconium	0.041	0.020- 0.44					

SPECIMEN DATA			RATIOS		
<b>COMMENTS:</b>			<b>ELEMENTS</b>	<b>RATIOS</b>	<b>EXPECTED RANGE</b>
Date Collected:	Sample Size:	0.197 g	Ca/Mg	10.5	4- 30
Date Received: 12/8/2010	Sample Type:	Head	Ca/P	5.74	0.8- 8
Date Completed: 12/10/2010	Hair Color:		Na/K	4.15	0.5- 10
Client Reference:	Treatment:		Zn/Cu	26.4	4- 20
Methodology: ICP-MS	Shampoo:		Zn/Cd	> 999	> 800

V010.08

## **Health history for hair test 529**

### **What are your current symptoms and health history?**

1989 - Undiagnosable arthritis condition begins and is managed without medication.

1995 - Began developing a sensitivity to deoderants which results in redness and itching.

2006/2008 - Tiredness symptom begins.

2009 July - Diagnosed with Celiac disease / Immediately went on 100% Gluten Free Diet

2009 Oct - Muscle weakness symptom begins

2009 Dec - Follow up intestinal biopsy shows near 100% recovery from Celiac, yet muscle weakness and tiredness remain and continue to get progressively worse. Arthritis continues as well.

2010/2011 Dark circles under my eyes have developed.

I also have mild allergies to mold, dust, cats, ragweed.... this goes back to at least the late 80's/early 90's.

### **Dental history (Wisdom teeth removed and when? Any other extractions. First root canal placed? Braces? First amalgam etc...)**

One wisdom tooth removed May 2011. Three wisdom teeth remain. No root canals. I had braces for a few years near maybe 1989. First Amalgam placed in 1984.

### **What dental work do you currently have in place? What part of the dental clean-up have you completed?**

All 8 amalgams were removed May 2011. All thats left is composite fillings that replaced them. No other dental work exists.

### **What dentistry did your mother have at any time before or during pregnancy?**

before: approximately 8-9 amalgams placed at least 10 years before pregnancy.

during: no more than 1 amalgam filling, possibly none.

### **What vaccinations have you had and when (including flu and especially travel shots)?**

Only standard vaccinations required as a child in the USA for someone born in the mid 70's. No flu shots. No other vaccinations. I also had approximately 1-2 years of weekly allergy shots, most likely in the 1990's.

### **Supplements and medications (including dosages) taken at time of hair test, or for the 3-6 months before the sample was taken?**

Nov 2009 Test: Took Entocort EC for 7 weeks prior (taken for Celiac)

Dec 2010 Test: No supplements prior.

### **What is your age, height and weight?**

35 years old. Height 5 ft 5 inches. Weight 120 lbs.

### **Other information you feel may be relevant?**

Nov 2009 Test was from ends of lower back of head hair.

Dec 2010 Test was from ends of side and front head hair.

I completed 7-day water fast June 2010 followed by a reduced meat/more vegetable diet.

Eliminated all seafood consumption July 2010.

**What is your location – city & country (so that we can learn where certain toxins are more prevalent).**

Detroit, USA