

# HAIR ELEMENTS



**PATIENT: Number 214**  
**SEX: Male**  
**AGE: 34**  
**LOCATION: Seattle, USA**

## POTENTIALLY TOXIC ELEMENTS

| TOXIC ELEMENTS             | RESULT $\mu\text{g/g}$ | REFERENCE RANGE | PERCENTILE       |                  |
|----------------------------|------------------------|-----------------|------------------|------------------|
|                            |                        |                 | 68 <sup>th</sup> | 95 <sup>th</sup> |
| Aluminum                   | 1.0                    | < 7.0           |                  |                  |
| Antimony                   | 0.016                  | < 0.066         |                  |                  |
| Arsenic                    | 0.092                  | < 0.080         |                  |                  |
| Beryllium                  | < 0.01                 | < 0.020         |                  |                  |
| Bismuth                    | 0.045                  | < 2.0           |                  |                  |
| Cadmium                    | 0.081                  | < 0.15          |                  |                  |
| Lead                       | 0.43                   | < 2.0           |                  |                  |
| Mercury                    | 3.8                    | < 1.1           |                  |                  |
| Platinum                   | < 0.003                | < 0.005         |                  |                  |
| Thallium                   | < 0.001                | < 0.010         |                  |                  |
| Thorium                    | < 0.001                | < 0.005         |                  |                  |
| Uranium                    | 0.001                  | < 0.060         |                  |                  |
| Nickel                     | 0.22                   | < 0.40          |                  |                  |
| Silver                     | 0.07                   | < 0.12          |                  |                  |
| Tin                        | 0.13                   | < 0.30          |                  |                  |
| Titanium                   | 0.38                   | < 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    | 154                    | 200- 750        |                   |                  |                  |                  |                    |
| Magnesium  | 15                     | 25- 75          |                   |                  |                  |                  |                    |
| Sodium     | 140                    | 12- 90          |                   |                  |                  |                  |                    |
| Potassium  | 86                     | 9- 40           |                   |                  |                  |                  |                    |
| Copper     | 10                     | 10- 28          |                   |                  |                  |                  |                    |
| Zinc       | 150                    | 130- 200        |                   |                  |                  |                  |                    |
| Manganese  | 0.06                   | 0.15- 0.65      |                   |                  |                  |                  |                    |
| Chromium   | 0.59                   | 0.20- 0.40      |                   |                  |                  |                  |                    |
| Vanadium   | 0.082                  | 0.018- 0.065    |                   |                  |                  |                  |                    |
| Molybdenum | 0.027                  | 0.025- 0.064    |                   |                  |                  |                  |                    |
| Boron      | 2.5                    | 0.40- 3.0       |                   |                  |                  |                  |                    |
| Iodine     | 6.1                    | 0.25- 1.3       |                   |                  |                  |                  |                    |
| Lithium    | 0.024                  | 0.007- 0.023    |                   |                  |                  |                  |                    |
| Phosphorus | 158                    | 160- 250        |                   |                  |                  |                  |                    |
| Selenium   | 1.1                    | 0.95- 1.7       |                   |                  |                  |                  |                    |
| Strontium  | 0.08                   | 0.30- 3.5       |                   |                  |                  |                  |                    |
| Sulfur     | 45000                  | 44500- 52000    |                   |                  |                  |                  |                    |
| Barium     | 0.05                   | 0.16- 1.6       |                   |                  |                  |                  |                    |
| Cobalt     | 0.005                  | 0.013- 0.035    |                   |                  |                  |                  |                    |
| Iron       | 12                     | 5.4- 13         |                   |                  |                  |                  |                    |
| Germanium  | 0.030                  | 0.045- 0.065    |                   |                  |                  |                  |                    |
| Rubidium   | 0.065                  | 0.011- 0.12     |                   |                  |                  |                  |                    |
| Zirconium  | 0.053                  | 0.020- 0.44     |                   |                  |                  |                  |                    |

### SPECIMEN DATA

**COMMENTS:**

Date Collected: 9/10/2008      Sample Size: 0.196 g  
 Date Received: 9/27/2008      Sample Type: Head  
 Date Completed: 10/1/2008      Hair Color: Brown  
 Treatment:  
 Methodology: ICP-MS      Shampoo:

V06.99

### RATIOS

| ELEMENTS | RATIOS | EXPECTED RANGE |
|----------|--------|----------------|
| Ca/Mg    | 10.3   | 4- 30          |
| Ca/P     | 0.975  | 0.8- 8         |
| Na/K     | 1.63   | 0.5- 10        |
| Zn/Cu    | 15     | 4- 20          |
| Zn/Cd    | > 999  | > 800          |

## Health history 213

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

Brain fog, fatigue, depression, anxiety, joints make popping sounds, poor sense of smell, can't remember dreams. Had these symptoms for years.

### **2) Dental history (wisdom teeth removed? First root canal placed?**

#### **Braces? First amalgam etc...)**

Wore between 8-12 medium-large amalgam fillings for about 20 years. Had the last of them replaced properly about three years ago.

### **3) What dental work do you currently have in place? What part of the dental cleanup have you completed?**

Composite resin fillings plus a couple porcelain crowns.

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

Probably several amalgams.

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

None recently. No flu shots ever. I'm 34 so had fewer childhood vaccinations than children these days.

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

Started taking Iodine right before the test. Otherwise no supplements.

### **7) Other information you feel may be relevant? **None****

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

**Seattle, USA.**