



PATIENT: Number 673  
 SEX: Male  
 AGE: 47

## Toxic & Essential Elements; Hair

| TOXIC METALS               |                |                       |   |
|----------------------------|----------------|-----------------------|---|
|                            | RESULT<br>µg/g | REFERENCE<br>INTERVAL | PERCENTILE<br>68 <sup>th</sup> 95 <sup>th</sup> |
| Aluminum (Al)              | 1.2            | < 7.0                 |   |
| Antimony (Sb)              | < 0.01         | < 0.066               |   |
| Arsenic (As)               | 0.066          | < 0.080               |   |
| Barium (Ba)                | 0.38           | < 1.0                 |   |
| Beryllium (Be)             | < 0.01         | < 0.020               |   |
| Bismuth (Bi)               | 0.006          | < 2.0                 |   |
| Cadmium (Cd)               | 0.011          | < 0.065               |   |
| Lead (Pb)                  | 0.12           | < 0.80                |   |
| Mercury (Hg)               | 0.72           | < 0.80                |   |
| Platinum (Pt)              | < 0.003        | < 0.005               |   |
| Thallium (Tl)              | < 0.001        | < 0.002               |   |
| Thorium (Th)               | < 0.001        | < 0.002               |   |
| Uranium (U)                | 0.029          | < 0.060               |   |
| Nickel (Ni)                | 0.04           | < 0.20                |   |
| Silver (Ag)                | 0.09           | < 0.08                |   |
| Tin (Sn)                   | 0.05           | < 0.30                |   |
| Titanium (Ti)              | 0.40           | < 0.60                |   |
| Total Toxic Representation |                |                       |   |

| ESSENTIAL AND OTHER ELEMENTS |                |                       |   |
|------------------------------|----------------|-----------------------|---|
|                              | RESULT<br>µg/g | REFERENCE<br>INTERVAL | PERCENTILE<br>2.5 <sup>th</sup> 16 <sup>th</sup> 50 <sup>th</sup> 84 <sup>th</sup> 97.5 <sup>th</sup> |
| Calcium (Ca)                 | 255            | 200- 750              |   |
| Magnesium (Mg)               | 20             | 25- 75                |   |
| Sodium (Na)                  | 45             | 20- 180               |   |
| Potassium (K)                | 14             | 9- 80                 |   |
| Copper (Cu)                  | 11             | 11- 30                |   |
| Zinc (Zn)                    | 170            | 130- 200              |   |
| Manganese (Mn)               | 0.05           | 0.08- 0.50            |   |
| Chromium (Cr)                | 0.43           | 0.40- 0.70            |   |
| Vanadium (V)                 | 0.042          | 0.018- 0.065          |   |
| Molybdenum (Mo)              | 0.028          | 0.025- 0.060          |   |
| Boron (B)                    | 11             | 0.40- 3.0             |   |
| Iodine (I)                   | 0.82           | 0.25- 1.8             |   |
| Lithium (Li)                 | < 0.004        | 0.007- 0.020          |   |
| Phosphorus (P)               | 227            | 150- 220              |   |
| Selenium (Se)                | 0.79           | 0.70- 1.2             |   |
| Strontium (Sr)               | 1.0            | 0.30- 3.5             |   |
| Sulfur (S)                   | 45800          | 44000- 50000          |   |
| Cobalt (Co)                  | 0.003          | 0.004- 0.020          |   |
| Iron (Fe)                    | 6.2            | 7.0- 16               |   |
| Germanium (Ge)               | 0.023          | 0.030- 0.040          |   |
| Rubidium (Rb)                | 0.026          | 0.011- 0.12           |   |
| Zirconium (Zr)               | 0.030          | 0.020- 0.44           |   |

| SPECIMEN DATA             |                      | RATIOS   |         |
|---------------------------|----------------------|----------|---------|
| <b>COMMENTS:</b>          |                      | ELEMENTS | RATIOS  |
| Date Collected: 8/19/2012 | Sample Size: 0.196 g | Ca/Mg    | 12.8    |
| Date Received: 8/23/2012  | Sample Type: Head    | Ca/P     | 1.12    |
| Date Completed: 8/25/2012 | Hair Color: Blond    | Na/K     | 3.21    |
| Methodology: ICP/MS       | Treatment:           | Zn/Cu    | 15.5    |
|                           | Shampoo: None        | Zn/Cd    | > 999   |
|                           |                      | RANGE    |         |
|                           |                      |          | 4- 30   |
|                           |                      |          | 0.8- 8  |
|                           |                      |          | 0.5- 10 |
|                           |                      |          | 4- 20   |
|                           |                      |          | > 800   |

### **Health history for hair test 673**

1. My main symptoms now are chronic headache, fatigue, and tinnitus, which are due to electromagnetic hypersensitivity (EHS), which I've had since January. In 2005 I became gluten-sensitive. In 2008, after moving from California to Maryland, I developed Candidiasis and mold illness. Once I discovered that I was suffering from mold illness, I realized that I had to get away from the mold, which was in the building I worked in and in the house I rented. So I decided to move to Arizona. I think it was the combination of a weakened immune system, the stress of the move, and driving for a few days with a cell phone and tablet in the car, turning the car into a microwave oven, that triggered the EHS. When I'm in an electrosmog free area, like in a remote desert area, I don't have any symptoms.

2. I've had many dental problems from an early age. In my twenties I already had several extractions, root canals, and amalgams. Overall, I've had about six root canals and ten amalgams. Later I developed gingivitis, which I was able to take care of through a change in diet and better dental care. 2010 I had two root canals done, which became reinfected a year later. My dentist couldn't find anything wrong with the teeth, so I switched to a biological dentist. He had me get a CBCT scan, which revealed five abscesses, and this was after my allopathic dentist had declared that we were done with the treatment plan, and everything was fine! She had also replaced three old amalgams with composite fillings, but without taking any special precautions. September 2011 my biological dentist removed the three remaining amalgams. So my teeth should be mercury free now, except that I still have two gold crowns that may be hiding some amalgam. He also pulled three of the abscessed teeth.

3. I still have two abscessed teeth, two gold crowns, and one titanium implant. The metal in my mouth may be contributing to my EHS, so I will have the gold crowns removed. I will also have the abscessed teeth extracted within the next few weeks.

5. I've had standard childhood vaccinations and one travel shot in 1988.

6. I had taken krill oil, astaxanthin, chlorella, spirulina, Dr. Mercola's whole food multivitamin plus minerals, 900 mg of Magnesium Ultra (contains four forms of mg), grape seed extract, milk thistle, amalaki C, quercetin, methylcobalamin, and NAC. I also used to take ALA, until I found out that it is a chelator, which was three months before the hair test. I take 3 mg of melatonin before going to bed. I take 25 - 50 mg of diphenhydramine occasionally, when I have trouble sleeping, as a last resort. 7. 47, 5' 7", 150 lbs

8. After three of my abscessed teeth were extracted a year ago, my dentist gave me some colloidal silver to swish a few times a day for about a week. That may explain the high silver value.

9. In January I moved to Tucson, Arizona, from Maryland. I just heard that arsenic levels are quite high in some areas in AZ, so I wonder if that may explain the high arsenic value. The water here is not fluoridated. I use drinking water and shower head filters.