

Toxic & Essential Elements; Hair

| TOXIC METALS | | | | |
|----------------------------|--|----------------|-----------------------|---|
| | | RESULT µg/g | REFERENCE INTERVAL | PERCENTILE 68 th 95 th |
| Aluminum (Al) | | 7.1 | < 7.0 | |
| Antimony (Sb) | | < 0.01 | < 0.050 | |
| Arsenic (As) | | 0.027 | < 0.060 | |
| Barium (Ba) | | 0.20 | < 2.0 | |
| Beryllium (Be) | | < 0.01 | < 0.020 | |
| Bismuth (Bi) | | 0.023 | < 2.0 | |
| Cadmium (Cd) | | < 0.009 | < 0.050 | |
| Lead (Pb) | | 0.06 | < 0.60 | |
| Mercury (Hg) | | 0.22 | < 0.80 | |
| Platinum (Pt) | | < 0.003 | < 0.005 | |
| Thallium (Tl) | | < 0.001 | < 0.002 | |
| Thorium (Th) | | < 0.001 | < 0.002 | |
| Uranium (U) | | 0.005 | < 0.060 | |
| Nickel (Ni) | | 0.03 | < 0.30 | |
| Silver (Ag) | | 0.02 | < 0.15 | |
| Tin (Sn) | | 0.06 | < 0.30 | |
| Titanium (Ti) | | 0.30 | < 0.70 | |
| Total Toxic Representation | | | | |

| ESSENTIAL AND OTHER ELEMENTS | | | | |
|------------------------------|--|----------------|-----------------------|---|
| | | RESULT µg/g | REFERENCE INTERVAL | PERCENTILE 2.5 th 16 th 50 th 84 th 97.5 th |
| Calcium (Ca) | | 250 | 300 - 1200 | |
| Magnesium (Mg) | | 15 | 35 - 120 | |
| Sodium (Na) | | 12 | 20 - 250 | |
| Potassium (K) | | 3 | 8 - 75 | |
| Copper (Cu) | | 9.0 | 11 - 37 | |
| Zinc (Zn) | | 190 | 140 - 220 | |
| Manganese (Mn) | | 0.13 | 0.08 - 0.60 | |
| Chromium (Cr) | | 0.31 | 0.40 - 0.65 | |
| Vanadium (V) | | 0.032 | 0.018 - 0.065 | |
| Molybdenum (Mo) | | 0.032 | 0.020 - 0.050 | |
| Boron (B) | | 0.50 | 0.25 - 1.5 | |
| Iodine (I) | | 1.7 | 0.25 - 1.8 | |
| Lithium (Li) | | < 0.004 | 0.007 - 0.020 | |
| Phosphorus (P) | | 163 | 150 - 220 | |
| Selenium (Se) | | 0.76 | 0.55 - 1.1 | |
| Strontium (Sr) | | 0.31 | 0.50 - 7.6 | |
| Sulfur (S) | | 48800 | 44000 - 50000 | |
| Cobalt (Co) | | 0.005 | 0.005 - 0.040 | |
| Iron (Fe) | | 5.6 | 7.0 - 16 | |
| Germanium (Ge) | | 0.026 | 0.030 - 0.040 | |
| Rubidium (Rb) | | 0.005 | 0.007 - 0.096 | |
| Zirconium (Zr) | | 0.033 | 0.020 - 0.42 | |

| SPECIMEN DATA | | RATIOS | |
|----------------------------|--------------------------|----------|----------|
| COMMENTS: | | ELEMENTS | RATIOS |
| Date Collected: 07/19/2013 | Sample Size: 0.195 g | Ca/Mg | 16.7 |
| Date Received: 07/29/2013 | Sample Type: Head | Ca/P | 1.53 |
| Date Completed: 07/31/2013 | Hair Color: Red | Na/K | 4 |
| Methodology: ICP/MS | Treatment: | Zn/Cu | 21.1 |
| | Shampoo: Pure Essentials | Zn/Cd | > 999 |
| | | RANGE | |
| | | | 4 - 30 |
| | | | 1 - 12 |
| | | | 0.5 - 10 |
| | | | 4 - 20 |
| | | | > 800 |

Health history for hair test 829

What are your current symptoms and health history?

Extreme fatigue, multiple chemical sensitivities, depression, poor short term memory, brain fog.

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

Wisdom teeth removed 1982, Other extractions years later. First root canal 1989.No braces, First amalgam age 7

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

I have 4-5 ? crowns over root canals and and 2 bridges. I have had my amalgams removed (2)

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

I don't know.

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

I had the smallpox vaccine, polio (oral?), diptheria, tetanus, pertussis, and possibly measles, mumps and rubella. In 1980, I must have had shots to travel overseas from USA to Germany

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

I had just started taking Zinc, Magnesium, B complex, C, E, Borage oil, and Flaxseed. Wellbutrin 350 mg, Effexor 75 mg, Lorazepam 5mg, Trazodone 150 mg, Synthroid .4mg Lithothyronine 5mcg

What is your age, height and weight?

Age: 53, 5'2", 110

Other information you feel may be relevant?

I grew up in Massachusetts, USA next to a farm where they sprayed pesticides. I've sprayed our house with Dursban insect killer several times. Highly toxic.

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

I lived in Massachusetts USA for 19 years and the past 25 years I have lived in Charleston South Carolina ,USA