



PATIENT: Hair Test 518
 SEX: Male
 AGE: 31
 LOCATION: Ann Arbor, Michigan, USA

Toxic & Essential Elements; Hair

| TOXIC METALS | | | |
|----------------------------|----------------|-----------------------|---|
| | RESULT µg/g | REFERENCE INTERVAL | PERCENTILE 68 th 95 th |
| Aluminum (Al) | 8.8 | < 7.0 | |
| Antimony (Sb) | < 0.01 | < 0.066 | |
| Arsenic (As) | 0.053 | < 0.080 | |
| Barium (Ba) | 0.22 | < 1.0 | |
| Beryllium (Be) | < 0.01 | < 0.020 | |
| Bismuth (Bi) | 0.007 | < 2.0 | |
| Cadmium (Cd) | 0.11 | < 0.065 | |
| Lead (Pb) | 0.94 | < 0.80 | |
| Mercury (Hg) | 0.04 | < 0.80 | |
| Platinum (Pt) | < 0.003 | < 0.005 | |
| Thallium (Tl) | < 0.001 | < 0.002 | |
| Thorium (Th) | < 0.001 | < 0.002 | |
| Uranium (U) | 0.018 | < 0.060 | |
| Nickel (Ni) | 0.06 | < 0.20 | |
| Silver (Ag) | 0.07 | < 0.08 | |
| Tin (Sn) | 0.07 | < 0.30 | |
| Titanium (Ti) | 0.20 | < 0.60 | |
| 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) | 480 | 200- 750 | | | |
| Magnesium (Mg) | 35 | 25- 75 | | | |
| Sodium (Na) | 280 | 20- 180 | | | |
| Potassium (K) | 120 | 9- 80 | | | |
| Copper (Cu) | 9.2 | 11- 30 | | | |
| Zinc (Zn) | 180 | 130- 200 | | | |
| Manganese (Mn) | 0.07 | 0.08- 0.50 | | | |
| Chromium (Cr) | 0.45 | 0.40- 0.70 | | | |
| Vanadium (V) | 0.056 | 0.018- 0.065 | | | |
| Molybdenum (Mo) | 0.033 | 0.025- 0.060 | | | |
| Boron (B) | 1.1 | 0.40- 3.0 | | | |
| Iodine (I) | 0.22 | 0.25- 1.8 | | | |
| Lithium (Li) | < 0.004 | 0.007- 0.020 | | | |
| Phosphorus (P) | 146 | 150- 220 | | | |
| Selenium (Se) | 0.90 | 0.70- 1.2 | | | |
| Strontium (Sr) | 0.76 | 0.30- 3.5 | | | |
| Sulfur (S) | 47800 | 44000- 50000 | | | |
| Cobalt (Co) | 0.004 | 0.004- 0.020 | | | |
| Iron (Fe) | 6.7 | 7.0- 16 | | | |
| Germanium (Ge) | 0.029 | 0.030- 0.040 | | | |
| Rubidium (Rb) | 0.095 | 0.011- 0.12 | | | |
| Zirconium (Zr) | 4.2 | 0.020- 0.44 | | | |

| SPECIMEN DATA | | RATIOS | |
|---------------------------|----------------------|-----------------|---------------|
| COMMENTS: | | ELEMENTS | RATIOS |
| Date Collected: 8/14/2011 | Sample Size: 0.205 g | Ca/Mg | 13.7 |
| Date Received: 8/20/2011 | Sample Type: Head | Ca/P | 3.29 |
| Date Completed: 8/22/2011 | Hair Color: Brown | Na/K | 2.33 |
| Methodology: ICP/MS | Treatment: | Zn/Cu | 19.6 |
| | Shampoo: Pert | Zn/Cd | > 999 |
| | | RANGE | |
| | | | 4- 30 |
| | | | 0.8- 8 |
| | | | 0.5- 10 |
| | | | 4- 20 |
| | | | > 800 |

Health history for hair test 518

1. Damaged gut, psychologically but not physically housebound, extreme lack of ambition, not very social, no interest in exercise or health, weak.
2. None.
3. None.
4. Unsure. Not much if at all.
5. The usual for 1980s. Navy boot camp vaccinations in late 1990s which sickened entire group of recruits (bad batch of vaccine?), everyone else recovered, had to drop out due to poor health, majority of symptoms started here.
6. None.
7. 31, 5'10", 140 pounds
8. High school vocational electronics classes could be source of lead? Soldering, etc. Aging remarkably slowly, as does mother and brother.
9. Ann Arbor, Michigan, USA.