

PATIENT: Number 566

SEX: Male AGE: 44

### Toxic & Essential Elements; Hair

| TOXIC METALS             |      |                |                       |  |  |  |  |
|--------------------------|------|----------------|-----------------------|--|--|--|--|
|                          |      | RESULT<br>μg/g | REFERENCE<br>INTERVAL | PERCENTILE 68 <sup>th</sup> 95 <sup>th</sup> |  |  |  |
| Aluminum                 | (AI) | 1.1            | < 7.0                 |  |  |  |  |
| Antimony                 | (Sb) | 0.010          | < 0.066               | •  |  |  |  |
| Arsenic                  | (As) | 0.069          | < 0.080               |  |  |  |  |
| Barium                   | (Ba) | 0.16           | < 1.0                 |  |  |  |  |
| Beryllium                | (Be) | < 0.01         | < 0.020               |  |  |  |  |
| Bismuth                  | (Bi) | 0.009          | < 2.0                 | •  |  |  |  |
| Cadmium                  | (Cd) | < 0.009        | < 0.065               |  |  |  |  |
| Lead                     | (Pb) | 0.02           | < 0.80                | •  |  |  |  |
| Mercury                  | (Hg) | 0.17           | < 0.80                |  |  |  |  |
| Platinum                 | (Pt) | < 0.003        | < 0.005               |  |  |  |  |
| Thallium                 | (TI) | < 0.001        | < 0.002               |  |  |  |  |
| Thorium                  | (Th) | < 0.001        | < 0.002               |  |  |  |  |
| Uranium                  | (U)  | 0.029          | < 0.060               |  |  |  |  |
| Nickel                   | (Ni) | 0.06           | < 0.20                |  |  |  |  |
| Silver                   | (Ag) | 0.01           | < 0.08                |  |  |  |  |
| Tin                      | (Sn) | 0.06           | < 0.30                |  |  |  |  |
| Titanium                 | (Ti) | 0.18           | < 0.60                |  |  |  |  |
| Total Toxic Representati | ion  |                |                       |  |  |  |  |

| Total Toxic Representa       |            |             |                      |  |  |  |  |  |
|------------------------------|------------|-------------|----------------------|--|--|--|--|--|
| ESSENTIAL AND OTHER ELEMENTS |            |             |                      |  |  |  |  |  |
|                              |            | RESULT      | REFERENCE            | PERCENTILE 2.5 <sup>th</sup> 16 <sup>th</sup> 50 <sup>th</sup> 84 <sup>th</sup> 97.5 <sup>th</sup> |  |  |  |  |
| Calcium                      | (Ca)       | μg/g<br>456 | INTERVAL<br>200- 750 | 2.5 16 50 84 97.5  |  |  |  |  |
|                              | 1 /        |             |                      |  |  |  |  |  |
| Magnesium                    | (Mg)       | 44          | 25- 75               |  |  |  |  |  |
| Sodium                       | (Na)       | 10          | 20- 180              |  |  |  |  |  |
| Potassium                    | (K)        | 8           | 9- 80                |  |  |  |  |  |
| Copper                       | (Cu)       | 13          | 11- 30               |  |  |  |  |  |
| Zinc                         | (Zn)       | 210         | 130- 200             |  |  |  |  |  |
| Manganese                    | (Mn)       | 0.05        | 0.08- 0.50           |  |  |  |  |  |
| Chromium                     | (Cr)       | 0.47        | 0.40- 0.70           |  |  |  |  |  |
| Vanadium                     | (V)        | 0.034       | 0.018- 0.065         | •  |  |  |  |  |
| Molybdenum                   | (Mo)       | 0.031       | 0.025- 0.060         |  |  |  |  |  |
| Boron                        | (B)        | 2.3         | 0.40- 3.0            |  |  |  |  |  |
| lodine                       | <b>(I)</b> | 0.23        | 0.25- 1.8            |  |  |  |  |  |
| Lithium                      | (Li)       | < 0.004     | 0.007- 0.020         |  |  |  |  |  |
| Phosphorus                   | (P)        | 174         | 150- 220             | -  |  |  |  |  |
| Selenium                     | (Se)       | 6.0         | 0.70- 1.2            |  |  |  |  |  |
| Strontium                    | (Sr)       | 0.46        | 0.30- 3.5            |  |  |  |  |  |
| Sulfur                       | (S)        | 47400       | 44000- 50000         | -  |  |  |  |  |
| Cobalt                       | (Co)       | 0.006       | 0.004- 0.020         | -  |  |  |  |  |
| Iron                         | (Fe)       | 6.2         | 7.0- 16              |  |  |  |  |  |
| Germanium                    | (Ge)       | 0.032       | 0.030- 0.040         |  |  |  |  |  |
| Rubidium                     | (Rb)       | 0.009       | 0.011- 0.12          |  |  |  |  |  |
| Zirconium                    | (Zr)       | 0.072       | 0.020- 0.44          |  |  |  |  |  |

| SPECIMEN DATA              |                            |          | RATIOS |         |  |
|----------------------------|----------------------------|----------|--------|---------|--|
| COMMENTS:                  |                            | ELEMENTS | RATIOS | RANGE   |  |
|                            |                            | Ca/Mg    | 10.4   | 4- 30   |  |
| Date Collected: 11/13/2011 | Sample Size: 0.136 g       | Ca/P     | 2.62   | 0.8- 8  |  |
| Date Received: 11/28/2011  | Sample Type: Head          | Na/K     | 1.25   | 0.5- 10 |  |
| Date Completed: 12/1/2011  | Hair Color: Black          | Zn/Cu    | 16.2   | 4- 20   |  |
| Methodology: ICP/MS        | Treatment:                 | Zn/Cd    | > 999  | > 800   |  |
|                            | Shampoo Amer Crew Moisture | •        |        |         |  |

#### Health history for hair test 566

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

Currently: depression, tiredness, low energy, fatigued by late afternoon, lack of motivation, hard time focusing on tasks, hard time caring about tasks, sometimes disconnected spaciness, irritability, short fuse, anger, dark moods, thinking feels slow and labored, can't hold big picture in mind, fear of being found out as a phony, tend to get overwhelmed by high-energy enthusiastic people, cold hands/feet something to point of no feeling, can't get warm until lay down to sleep then hands go flush, distracted obsessive thinking, trouble with memory, undereat/underweight, muscle weakness, sciatica

Past: tonsils out as quite young child; appendix out in early teens; bouts of IBS from teens to early thirties; depression common but "low-grade"; functional, productive member of society hiding out in the open; not "sick" in any large sense, but far from thriving (is it in my head, or is it in head?!)

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

cavities and fillings began in early grade school; oral surgery to remove and make room for teeth in conjunction with braces as a pre-teen; wisdom teeth out in early 20's; root canal late 20's;

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

currently, from self inspection, it appears I have 3 molars with silver fillings and 2 crowns

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

unknown

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

standard childhood vaccines from late 60's through 70's; tetanus booster > 10yrs ago?; no flu shots! As an aside, I do remember playing with mercury, in class, in the 6<sup>th</sup> grade a couple times.

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

Vitamin D3 10,000-20,000 IU daily for about a month before the hair test [I tested low for vit. D so I'm megadosing now and have retest coming up soon]

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

44, 5'6", 110lbs

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

Stress is a major factor here. The past 4-5 years have been just intense with work stress, economic stress, relationship stress, family stress, etc. Even prior to that, in the high-tech startup world, stress was a given and even a badge of honor. But, again, these past years have been something else. In terms of being "sick", I'm not laid-out sick. But I'm feeling really taxed to hold life/work/family together and am trying to figure out if it's purely mental or is there a physiological piece to it before I go over the edge.

Since the hair test, just the past couple weeks actually, and in addition to the D3, I've been taking Histidine, Tyrosine, and 5HTP. Big help in terms of mood. Still have trouble concentrating/focusing (probably even moreso) and still peter out by end of day.

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

Sacramento, CA, USA (born in NYC, grew up in Los Angeles)