



PATIENT: Number 851  
SEX: Female  
AGE: 39

### 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)              | 0.7            | < 7.0                 |   |
| Antimony (Sb)              | < 0.01         | < 0.050               |   |
| Arsenic (As)               | 0.042          | < 0.060               |   |
| Barium (Ba)                | 0.87           | < 2.0                 |   |
| Beryllium (Be)             | < 0.01         | < 0.020               |   |
| Bismuth (Bi)               | 0.019          | < 2.0                 |   |
| Cadmium (Cd)               | < 0.009        | < 0.050               |   |
| Lead (Pb)                  | 0.81           | < 0.60                |   |
| Mercury (Hg)               | 0.12           | < 0.80                |   |
| Platinum (Pt)              | < 0.003        | < 0.005               |   |
| Thallium (Tl)              | < 0.001        | < 0.002               |   |
| Thorium (Th)               | < 0.001        | < 0.002               |   |
| Uranium (U)                | 0.002          | < 0.060               |   |
| Nickel (Ni)                | 0.05           | < 0.30                |   |
| Silver (Ag)                | 0.03           | < 0.15                |   |
| Tin (Sn)                   | 0.02           | < 0.30                |   |
| Titanium (Ti)              | 0.18           | < 0.70                |   |
| 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)                 | 434            | 300- 1200             |   |  |  |
| Magnesium (Mg)               | 97             | 35- 120               |   |  |  |
| Sodium (Na)                  | 16             | 20- 250               |   |  |  |
| Potassium (K)                | 7              | 8- 75                 |   |  |  |
| Copper (Cu)                  | 61             | 11- 37                |   |  |  |
| Zinc (Zn)                    | 170            | 140- 220              |   |  |  |
| Manganese (Mn)               | 0.08           | 0.08- 0.60            |   |  |  |
| Chromium (Cr)                | 0.33           | 0.40- 0.65            |   |  |  |
| Vanadium (V)                 | 0.091          | 0.018- 0.065          |   |  |  |
| Molybdenum (Mo)              | 0.021          | 0.020- 0.050          |   |  |  |
| Boron (B)                    | 0.48           | 0.25- 1.5             |   |  |  |
| Iodine (I)                   | 0.17           | 0.25- 1.8             |   |  |  |
| Lithium (Li)                 | < 0.004        | 0.007- 0.020          |   |  |  |
| Phosphorus (P)               | 120            | 150- 220              |   |  |  |
| Selenium (Se)                | 0.73           | 0.55- 1.1             |   |  |  |
| Strontium (Sr)               | 0.62           | 0.50- 7.6             |   |  |  |
| Sulfur (S)                   | 48600          | 44000- 50000          |   |  |  |
| Cobalt (Co)                  | 0.009          | 0.005- 0.040          |   |  |  |
| Iron (Fe)                    | 6.5            | 7.0- 16               |   |  |  |
| Germanium (Ge)               | 0.023          | 0.030- 0.040          |   |  |  |
| Rubidium (Rb)                | 0.008          | 0.007- 0.096          |   |  |  |
| Zirconium (Zr)               | 0.045          | 0.020- 0.42           |   |  |  |

| SPECIMEN DATA              |                        | RATIOS   |        |         |
|----------------------------|------------------------|----------|--------|---------|
| <b>COMMENTS:</b>           |                        | ELEMENTS | RATIOS | RANGE   |
| Date Collected: 08/29/2013 | Sample Size: 0.196 g   | Ca/Mg    | 4.47   | 4- 30   |
| Date Received: 09/03/2013  | Sample Type: Head      | Ca/P     | 3.62   | 1- 12   |
| Date Completed: 09/06/2013 | Hair Color: Blond      | Na/K     | 2.29   | 0.5- 10 |
| Methodology: ICP/MS        | Treatment:             | Zn/Cu    | 2.79   | 4- 20   |
|                            | Shampoo: Shikai Volume | Zn/Cd    | > 999  | > 800   |

## Health history for hair test 851

My mother had numerous amalgam fillings/crowns while pregnant with me. I don't know if she had any work done while pregnant. My father says he played with Hg when he was young and also has numerous amalgam fillings/crowns. I grew up in upstate New York near Albany. I'm pretty sure I received all of the vaccinations for a kid born in the US in 1974. I loved swimming and was a pool rat from the age of 3. My blond hair turned green often. My whole family loves sweets and I think my first amalgam happened when I was in middle school, but it could have been earlier. I got sealants on my two lower back teeth (also as a middle schooler, I think). I had to get glasses in late grade school (everyone in my family, except my father, wears glasses, so I think it is, at least, partially genetic). I have always been a shy person, but I was a little more outgoing when I was young. That changed in middle school. I started wearing contacts in middle school because I played soccer and swam. I have worn them pretty exclusively since then. That would have been during the late 80s-90s when thimerosal was in contact lens solutions still. And now the lenses all have the blue tint in them, which is copper. My current optometrist says no copper is leaching out, but that's what was said about mercury and amalgam, so I have strong doubts. I got my only two wisdom teeth extracted in high school with no complications, except for a bad reaction to codeine. I slowly had amalgam fillings added throughout childhood and adulthood, including the last one in 2011, for a total of 10. I was always, at least, slightly overweight, despite all of the sports I participated in. I traveled to Greece in 10<sup>th</sup> grade and I'll bet I had some vaccinations then, but I can't remember.

In 1992, I attended college near Rochester, NY and studied biology and biochemistry. My calves started tightening up a lot while participating in soccer and swimming. I hurt my shoulder during swimming, which still bothers me to this day when it gets overused. I seemed to be getting shyer. I had always done well in school, but only because I could cram for tests the night (or the hour!) before. I would immediately forget most of the information as soon as the test was over. I felt like my memory just wasn't as good as most of the people I knew. Short term was good, but long term was horrible. I traveled to Australia my sophomore year and I am sure I received vaccinations then, but I don't remember. I started taking birth control pills in 1995, which have been shown to elevate body copper levels, and continued on and off until the mid 2000s.

I moved to Boston, MA after college and worked in a hospital research lab. I am pretty sure I got a Hepatitis B vaccine when I started that job since it was in a hospital setting and maybe others, but I don't remember. I used numerous chemicals, including EDTA as a buffer and thimerosal as a preservative, in my daily tasks. I thought it was harmless. In 1999, I contracted Hepatitis A from a person I shared a hotel room with. There were 7 people in a 2 bedroom suite and I was the only one who contracted it from him. I have always had trouble with viruses, having had numerous warts on my hands and feet as a kid. I was yellowish from the Hep A, but from what I have heard, I was not incapacitated for as long as some people, so I thought I had a good immune system.

My liver enzymes slowly decreased over several months and finally returned to normal just before I moved to Northern Virginia to attend graduate school and study environmental science in 2000. Again, I worked in a research lab using various chemicals. I actually taught biology lab classes, but could never remember what I had said because I was so nervous. I had to take a shot of alcohol (something I rarely, rarely imbibed in since it made me flushed, sweaty, and sick to my stomach sometimes – even with just one drink) to give my thesis defense because I was freaking out so much about talking in front of a group. Again, I do not remember anything I said that day. In 2002, a gold/porcelain crown replaced an amalgam filling. No safety precautions were used.

After grad school, I got a field job in Northern Virginia sampling water for pollution, and have been there since. I had become a regular runner, hiker, biker, soccer player, swimmer, etc. but my calves always got wicked tight. I had lost weight and felt the most confident and physically in-shape I had ever felt in my

life. I was still shy, but a lot less so. I figured my shyness was just a lack of self-confidence from body image. In 2004, two of my amalgams were replaced with composites due to decay. No safety precautions were used and the teeth still have a gray tinge. Sometime around 2004, I was introduced to EmergenC multivitamin. I took it a couple of times, but not regularly. I contracted oral herpes in 2005 and, eventually, through trial and error, learned how to control it with diet – low arginine, high lysine, and low sugar. This also helped with my weight issue. Then a coworker got me slowly addicted to Starbucks. First it was once a week, then a few times a week, then every day, and occasionally twice a day. My usual drink was a Venti Green Tea latte with no syrup added. I thought it was healthy, I mean I took the extra sugar out, for gosh sakes. 24 ounces of milk and healthy matcha green tea powder, what could go wrong. By now, I was also taking EmergenC multivitamin one to two times a day because it was “healthy.” Well now I know I was chelating with 1 – 2 mg of ALA everyday with 10 amalgams in my mouth. And drinking a bunch of milk which inhibited my ability to deal with the Hg I was chelating, in addition to the ground up green tea powder, which I have no doubt is akin to cilantro/chlorella, was all a recipe for disaster.

My dentist noticed my gums were started to recede at age 33 and I was starting to get inflamed tissue on the insides of my cheeks. I was put on a 3 times a year cleaning schedule to keep the recession in check. After she had the gall to imply I had poor oral hygiene (I brush and floss religiously) and me convincing her I did all that I was supposed to, she suggested I see my regular physician for a check-up to see if I was diabetic or something. I had been having, what I can only describe as, “liver pain” on and off for a while and I hadn’t had a physical in a while, so I went.

My physical exam went fine and I was talked into getting a DTAP vaccination. I couldn’t remember when I had had one, so she said I should get one. I got blood work done the next day. She called back with the results and said my liver enzymes were elevated. She told me not to take any ibuprofen or alcohol until they went back down. I have taken 600 mg of ibuprofen several times a day for a couple of days a month pretty much ever since I first menstruated. Otherwise, I have debilitating cramps. I now know this is because I am low in magnesium. It really is amazing how these random symptoms all come together! I told her my liver history and we never really figured out why they were elevated. They went back to normal, so it was not pursued at the time.

I have not received any flu vaccines that I know of, at least in my adult life, more out of laziness than anything. In early 2009, I saw an orthopedic doctor because of my numerous muscles injuries and extreme tightness in my calves. He had me do PT, which simply resulted in even tighter calves.

In mid-2009, a back tooth that had been sealed when I was a teenage was causing me some discomfort, so she took it out. There was a lot of decay under it. When the dentist asked what kind of filling I wanted, I asked what she (the professional!) recommended. She said the “silver” ones last longer and she had a mouth full of them, so they must be OK. I already had a bunch and they were cheaper, so I said OK. Of course, many of the symptoms that led me to finally figure out it was mercury poisoning were occurring in my mouth at the time and they just got worse with the new filling. A red inflamed area was noticed at my next dental exam, but I was told it was just an inflamed salivary gland and was harmless. My suspicion now is that some amalgam touched that area. Another old sealant was replaced in 2010 with amalgam.

I saw two chiropractors who specialized in myofascial release to try to loosen up my tight muscles. It would work for a short time, but then I would have to go back for repeated treatment. The second one finally gave up after about 6 months and said he felt something was wrong with me systemically. He recommended I see a rheumatologist and she tested for numerous autoimmune and fatigue ailments. The only thing she found was low Vitamin D. She said I needed to exercise less intensely, sleep more, and take Vitamin D. At that time I wasn’t sleeping well because I had to get up to urinate 4-6 times a night. I told her this and she said to not drink so much near bedtime. I told her I didn’t, but it didn’t matter. If I drank 16 ounces of iced tea at lunch, I could urinate (a lot each time) 4 times within 15 minutes. I now know this is because my adrenals are messed up. When I asked for my records, I did

note that she said I had 18 out of 18 tender points, but she never mentioned fibromyalgia. I was tested for lyme numerous times by different doctors and they all came out negative.

The final amalgam was placed in 2011. At the following cleaning, it was noticed that my cheek insides were getting worse, so she finally sent me to an oral surgeon for evaluation. He said the small red area was fine, but they would keep an eye on it for changes. He did biopsy the inside of my cheek, however. The results came back inconclusive – hyperparakeratosis with lichenoid change, which could be from lichen planus (an immune reaction), oral cinnamon reaction, lupus, lichenoid drug reaction, chronic ulcerative stomatitis, or finally, lichenoid amalgam reaction! I asked the dentist about this since a lot of it was near the last two “silver” fillings she had recently placed and she insisted it was plain old lichen planus. In early 2012, she recommended I see a periodontist for the gum recession and mild bone loss.

I started to take fish oil since I have never eaten seafood, except canned tuna occasionally, and omega 3's were all the rage at the time. I thought maybe this was why I was having all these oral problems. It seemed to help in general, maybe not specifically in my mouth, so the same coworker convinced me to try sashimi tuna. I hated the taste of fish, but he insisted fresh sashimi was good. I tried it and it was delicious. I started eating that once a week. Then I added salmon as well and sometimes ate it twice a week. I thought I was doing myself a huge health favor.

The periodontist did an intensive scaling and planing and said I needed to see her twice a year, alternating with my 2 dentist visits for a total of 4 cleanings a year. My gums would get tender and inflamed occasionally, but I thought this was just a new oral herpes presentation. Then things started to get real bad, real quick. My feet started getting large dry areas. I had had this occasionally before and it would go away. This time it was not going away. The doctor said it was athlete's foot. I insisted that it didn't itch or feel irritated at all, but she prescribed antifungal cream anyways. It didn't work. It got worse and started peeling and then it spread to my hands. My occasional sciatica started acting up a lot and I thought it was because I was sitting more. Then my left thumb started going numb. Then my left pointer finger was going numb. I couldn't do my job (working on a microscope manipulation small things with tweezers) for more than 10 minutes at a time before my finger and hand muscles seized up. I used to do it all day long and not feel a thing. I googled my symptoms and that's when I first thought Hg poisoning.

A friend suggested a Quantum Xrroid Electro Physiological Reactivity test. I realized this could be a bunch of quackery, but I was desperate at this point after having been told repeatedly nothing was really “wrong” with me. Well, the test was pretty dead on for mercury poisoning indications. However, neither I nor the person who gave it to me recognized them as such. It said my stressed organs were pituitary, adrenal, liver, and kidney. It said most of my digestive components were under stress. It said I was allergic to dairy, wheat, food additives, pollen, animals, sugar, salmon, eggs, chicken, coconut, and hops, and that I had chemical allergies. It said my fat digestion was not working and that many of my minerals were off balance, including calcium, potassium, chloride, magnesium, iron, sulphur, zinc, selenium, molybdenum, silica, and vanadium. I stopped eating fish and limited dairy and wheat. My new osteopathic doctor listened to me without immediate dismissal and agreed to do a urine test for mercury. It was “normal” to her, so she now dismissed me. In fact, she said my urine was the “cleanest” she had ever seen (she did some other normal urine tests in addition to the mercury). I sure that has some significance, but I don't know what.

I found the onibusu, FDC, and other websites explaining mercury poisoning more and it just seemed to click. I ordered AI and realized I needed to do an elimination diet, since even after dropping fish and dairy; I was still getting red, flushed face and ears when I ate. For as long as I can remember, I've always hated being hot. I sweat all the time and thought it was weird that I would sweat after taking a shower. I hate Jacuzzis and saunas and hot summer days. All parts of my lower area get inflamed and itchy occasionally, but mostly the anus. It seems to correlate with fat and/or thiol consumption. I have lighter colored stools occasionally and get facial “rosacea” if I eat a lot of dairy. My eyes get red and irritated if I eat thiols (I think). I can never seem to get up in the morning nor go to bed when I should. I have always been a night owl. I used to have a normal sex drive, but for the past 5 or so years, it has been relatively

nonexistent. I have high cholesterol, low Vitamin D, and am very sensitive to bright light. I am very anxious about a lot of things, seemingly for no reason to other people. I have multiple chemical and food sensitivities.

For the past 3-6 months, I have experimented with various supplements, but always take some oral magnesium, Vit. C, milk thistle, Vit. E, lysine, fish oil, digestive enzymes, and Vit. D. I try to take some B-complex, Forskohlii, zinc, potassium, artichoke extract, and calcium. I use Magnesium Chloride oil on my calves almost daily. I got on a cilantro kick several years ago and was eating it as much as possible, including a lot of cilantro pesto.

I have had all of my amalgams replaced with composites over the past 6 months, 1-3 at a time. One had to be replaced with a porcelain crown (titanium based). The gold/porcelain crown that I've had since 2002 was replaced with a new, all-porcelain crown. There was amalgam under the old one and that was removed. All but one crown had been replaced when the hair test was performed. Since the replacement started, I get random muscle twitches and facial neuralgic pulses occasionally.