



SEX: Female
AGE: 47

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Toxic & Essential Elements; Hair

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 th 95 th
Aluminum (Al)	4.8	< 7.0	
Antimony (Sb)	< 0.01	< 0.050	
Arsenic (As)	0.028	< 0.060	
Barium (Ba)	0.11	< 2.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	< 0.002	< 2.0	
Cadmium (Cd)	< 0.009	< 0.050	
Lead (Pb)	0.23	< 0.60	
Mercury (Hg)	0.94	< 0.80	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	0.001	< 0.002	
Thorium (Th)	0.001	< 0.002	
Uranium (U)	0.045	< 0.060	
Nickel (Ni)	0.06	< 0.30	
Silver (Ag)	0.01	< 0.15	
Tin (Sn)	< 0.02	< 0.30	
Titanium (Ti)	0.31	< 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)	397	300- 1200			
Magnesium (Mg)	30	35- 120			
Sodium (Na)	11	20- 250			
Potassium (K)	10	8- 75			
Copper (Cu)	18	11- 37			
Zinc (Zn)	180	140- 220			
Manganese (Mn)	2.4	0.08- 0.60			
Chromium (Cr)	0.28	0.40- 0.65			
Vanadium (V)	0.16	0.018- 0.065			
Molybdenum (Mo)	0.018	0.020- 0.050			
Boron (B)	0.38	0.25- 1.5			
Iodine (I)	0.23	0.25- 1.8			
Lithium (Li)	0.060	0.007- 0.020			
Phosphorus (P)	174	150- 220			
Selenium (Se)	0.53	0.55- 1.1			
Strontium (Sr)	0.76	0.50- 7.6			
Sulfur (S)	47500	44000- 50000			
Cobalt (Co)	0.005	0.005- 0.040			
Iron (Fe)	5.2	7.0- 16			
Germanium (Ge)	0.029	0.030- 0.040			
Rubidium (Rb)	0.024	0.007- 0.096			
Zirconium (Zr)	0.009	0.020- 0.42			

SPECIMEN DATA		RATIOS		
COMMENTS:		ELEMENTS	RATIOS	RANGE
Date Collected: 02/07/2014	Sample Size: 0.197 g	Ca/Mg	13.2	4- 30
Date Received: 02/18/2014	Sample Type: Head	Ca/P	2.28	1- 12
Date Completed: 02/20/2014	Hair Color: Brown	Na/K	1.1	0.5- 10
Methodology: ICP/MS	Treatment:	Zn/Cu	10	4- 20
	Shampoo: Morocco Method	Zn/Cd	> 999	> 800

What are your current symptoms and health history?

I am not actually sick. My symptoms are more emotional and mental, with a few physical symptoms. I am afraid that my brain function is deteriorating.

History:

- shy, try to avoid social situations esp. amongst strangers, dread events for weeks beforehand, always felt as if I don't fit in, poor social skills
- emotionally labile (irritable esp. when blood sugar low, prone to sudden tears, angry thoughts about trivialities or imagined scenarios)
- imagine bad things happening e.g. say if walking down the stairs with a pair of scissors I might imagine tripping and injuring myself with the scissors
- Fearful
- Sometimes a bit obsessive
- Sometimes a bit paranoid about other people 'ganging up on me' or mocking me behind my back, often suspicious of others' motives, negativity
- low blood sugar (self-diagnosed, become sweaty, weak and shaky which will go away if I eat or pass on its own after an hour or so, had a glucose tolerance test in my mid-twenties which came back normal, can be largely controlled by exercise and reducing sugar intake)
- periods of mild depression (no medication)
- easily stressed and often anxious even when I can't consciously think of a reason why, can't make decisions, pretty bad procrastinator.
- can't think properly when stressed / nervous, mind just goes blank – it's like a short circuit
- brain fog sometimes
- easily fatigued (sometimes lie down for a sleep after exercising)
- infrequent so-called panic attacks associated with heavy, painful periods (always occurred on first day of period, could avoid a full-blown attack by taking pain killers in time, 10 – 15 attacks over about 30 years, first one at age 16)
- saw an optometrist at about age 17 because my eyesight would go blurry during and after exams, found nothing wrong
- always found it difficult to follow conversations in noisy environments
- nose bleeds as a child, thought to be from chlorine in the swimming pool. Grew out of them or maybe it was because I started wearing nose plugs when swimming
- can remember getting pains in my forearms and lower legs as a child – can remember I particularly got it in the lower legs towards dusk when playing outside barefoot and my feet got very cold. It felt really deep inside as if it was in the bones. Also remember my father being sympathetic as he said he had the same thing when he was a child and it was put down to 'growing pains' and he suggested eating more salt
- didn't have asthma, but used to get what we called a 'tight chest' – grew out of it

- dry skin
- allergies (grass pollen, house dust mite and cats verified by skin prick test done recently), also have had reactions to skin products, limit use of bleach in the house because it makes me feel bad, don't use perfume, spray deodorant (as I developed very itchy underarms from them) and have stopped using any commercial moisturisers, hardly ever wear make-up etc. Only use organic, cold pressed oils when I really need it.
- Suffer from bad daytime sleepiness during the pollen season
- Suffered from sinusitis as a consequence of blocked nose cause by allergies until I finally realised in my 30s that I had allergies and started taking medication in the summer months – have not had sinusitis since
- Had a period of time in my mid-thirties where I got diarrhoea (sp?) quite often
- Think that wheat (gluten) makes me feel depressed. Cut it out about 2 years ago and thought I felt better, but because I really like bread I slowly started eating it again. I cut it out again about 4 weeks ago and feel better again
- Suspect other food intolerances, but not sure what because I don't have really obvious reactions
- Sore left knee and right wrist – comes and goes
- Also had about 4 scary episodes a few years ago where I couldn't see properly for a while. It was like my peripheral vision had gone black. Longest time lasted a few hours and I went to bed and when I woke up I could see again. Haven't had that again recently
- Always have had dark circles around my eyes
- Recurrent itchy rash on my upper back between the base of my neck and shoulder blades, think it first started in my late thirties – can go away for months and then comes back. Seems to go away when go on holiday and get sun and sea water
- A few years ago when my allergies were particularly bad, I woke up with an itchy hive-like (wasn't really that visible unless you looked closely but I could feel the bumps and was incredibly itchy) rash all over my upper chest, neck and lower face. I took antihistamines and it slowly went away, but I felt my breathing was a bit laboured and wheezy (just noticeable) for a while afterwards. Also experienced prickly heat rashes, generally on my upper chest and the tops of my feet (calmed with steroid cream) as a teenager and again around my early thirties and one more episode a few years ago.

Current symptoms (some of which could just be due to aging / menopause):

- What I think is hot flushes. Get them for a few weeks or months and then they go away again
- Go through periods of waking up hot in the early hours, throwing covers off and difficulty going back to sleep
- Non-existent sex drive

- In the last five years I have also had some periods of time where I wake up in the night and my hands feel like they have gone to sleep. Then I won't have it at all for months
- mild headaches which feel like my brain is dehydrated, has shrunk and there is a vacuum between it and my skull
- Haven't menstruated for 10 months, so if I don't in the next two months I will officially be post-menopausal
- Started wearing reading glasses a couple of years ago and the blurry eyesight is back with a vengeance – it can last all day. Sometimes it only takes five minutes of reading after I wake up for my eyesight to go blurry.
- Feel like I am going stupid for the past 5 years
- Short term memory getting bad
- Sometimes zone out because I am having difficulty following conversations
- Can't concentrate – very easily distracted
- Sometimes having difficulty processing what is being said to me – slow to answer because the sounds have gone into my brain but it's like I have to rewind and actually parse the words, process the meaning and then only can I reply
- Weight gain since the age of about 40, with difficulty losing and keeping weight down, although I did manage to lose 10 kg. and recently lost another 2 after gaining back 5 of the 10
- Often have puffy eyes and they also often get very itchy because of my allergies and possibly food intolerances
- Lowish blood pressure and heart rate in the last three months – average 106/ 65, heart rate 54 (over 13 readings in the last 3 months) – have white coat syndrome so blood pressure is always higher than normal when measured at the doctor.
- In the last two to three years quite often have a feeling of upward pressure on my throat around the adam's apple. Not sure if this is reflux. It does seem to get worse on lying down or bending over.
- Went on holiday in early January this year for a week. Had a massage every day and went in a steam room for 15 mins to half an hour on about 4 consecutive days. Slept really badly and had night sweats. Got hot and sweaty on the plane back and had a mild panic attack (about 50 – 60% of previous ones in the taxi on the way back from the airport – no period because I haven't had one for 10 months). For about 3 weeks after I got back was depressed, still sleeping very badly with night sweats in the early hours. My scalp also felt very itchy and almost sore like it was raw in places (it wasn't). I don't like to wash my hair more often than every three days because of my dry skin and hair, but washing it would relieve the itchiness and it would slowly return until I couldn't stand it by the 3rd day again and a few times washed my hair before the 3rd day. I also felt my head seemed to get quite smelly. As I said before I have now cut out wheat again and last week took quite a lot of B & C vits and a few others. The scalp problem has now gone away and I am feeling more upbeat. I have also suffered from dandruff in the past.
- Often a bit constipated now, but not bad. I don't take anything for it.

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

I have all my wisdom teeth, none of which have fillings and have had no problems with them.

Had first amalgam filling and an extraction under G/A at about age 7. The reason I ended up having it under G/A instead of under local anaesthetic was that my older brother told me that having a filling was one of the worst things that could happen to you (out of the mouths of babes) and I was obviously quite traumatised even before the dentist began. It didn't help that he slapped me because I moved my head while he was drilling and shortly after that I apparently passed out. All I can remember was him then slapping my cheeks to bring me round. He aborted the procedure much to my relief. I think this filling might have been in a baby molar which later came out.

I had metal railway track braces (top teeth only) at the age of 14 for 6 months, followed by wearing a removable retainer for a few years and then at night only until age 19. After the railway tracks came off, I had to have a filling in at least one of the two upper 6's which had had the metal bands around them, maybe both of them, so that must have been at about 15 years old. Around the same time I think I also had a spot amalgam filling placed near the gum on the second upper incisor.

At the age of about 23,24 the filling was replaced (no precautions) with another amalgam. At about age 26 this filling was replaced again (no precautions), but this time with a gold overlay (don't know if there is amalgam underneath it) and I had a number of other fillings (at least six) at the same time. However, some of these were white fillings which are all on the same side as the gold overlay. So at that point I think I had 4 amalgams and the spot amalgam and the gold overlay and 2 or 3 white fillings.

I can't remember the exact timing although I think it must have been within a year of that dental work, but at some stage around then I had a particularly bad panic attack and also had seven ulcers in my mouth at the time of the attack. I had occasionally had mouth ulcers before that but never more than one or two at a time. I haven't had mouth ulcers now for many years.

The last dentistry I had was when I had the largest of the amalgam fillings replaced (no precautions) about 4 - 6 years ago, thankfully with a white filling, although I don't know if all the amalgam was taken out. It is in the last 5 years or so that I have been thinking increasingly that something is wrong with me, although some of my symptoms seem to have improved a bit since then (at least the low mood and feelings of life being pointless).

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

Three amalgams plus the small one on the incisor, a gold overlay (don't know what is underneath) and 2 - 4 white fillings (difficult to see properly). No root canals. The dental clean-up is ahead of me.

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

My mother had 7 amalgams placed at age 13 in the late 40s. I don't know if any were replaced at any stage before I was born, but she had 5 gold inlays at the tops of her upper front teeth put in after my brother was born and before I was born (3 years between us)

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

Had all the usual vaccinations / shots as a baby / small child (BCG for TB and polio syrup). Grew up and spent the first 30 years of my life in South Africa. The vaccination mark on my arm (smallpox think when a toddler) is rather large though to the extent that some people would remark on it and I wonder if this means I had some kind of reaction to it. When I asked my mother about it she said 'you always reacted badly to everything'. It was/is probably about 2 - 3 times the size of my peers. Had what my mother thinks might have been a tetanus shot at about the age of about 3 as a precaution after an altercation with a scorpion (from what could be deciphered from a screaming 3 year old). My mother is adamant that I had both mumps (at the same time as whooping cough!) and measles (again around 3 or 4 years old), so I don't know when MMR came out but obviously we couldn't have had it in SA at that time. Threw a hissy fit and refused to let my parents sign the consent form for me to have the rubella vaccine at age 13 at school, not because I was particularly clever or anything, but because I was terrified. Never had any flu or travel shots.

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

I do periodically take supplements, which I find together with exercise make me feel better, but haven't really been taking anything consistently in the 3 - 6 months before the test. I have been using magnesium oil on and off on my knees, calves and sometimes other places on my body and also had a dead sea salt bath once. I have also been oil pulling for 20 mins every morning since the beginning of October.

In order of how frequently I probably took any supplements:

- Solgar Vitamin B complex tablets (all the Bs, plus inositol, choline, silicon dioxide, titanium dioxide, kelp, alfalfa, acerola extract, parsley, rosehips, watercress, D-biotin)

- Vitabiotics Osteocare (D, Calcium, Magnesium, Zinc, Copper, Manganese, Selenium, Boron – took for about 2 weeks, planned to take over the winter, but after a while I stopped because the pills were really big and I had difficulty swallowing them and I think it made the pressure feeling on my throat, what I think might be reflux, flare up.)
- Quest Vitamin C 1000 mg, timed release (now and then, never more than 1 in a day)
- Everyday Health Magnesium 300mg (now and then, mainly magnesium hydroxide and some magnesium stearate, fillers)
- Boots Vitamin C with Zinc (now and then, can't even find amounts, but ingredients say ascorbic acid, calcium carbonate, zinc oxide, magnesium stearate, silicon dioxide, fillers)
- Perfectil Original Skin, hair & nails (rarely, D, E, C Bs, Folic acid, Iron, magnesium, zinc, iodine, manganese, copper, Chromium GTF, Selenium, Cystine, mixed carotenoids, grape seed extract, 95% proanthocyanidins)

What is your age, height and weight?

47 years old, 161 cm (about 5 foot 3 inches) and plus minus 55 kg

Other information you feel may be relevant?

Can remember someone bringing a little vial with mercury – small amount, probably a broken thermometer - in it to school at age 11. Some of us played with it, putting it on our hands. Can't remember if I actually touched it. It was also dropped on the floor (wooden floorboards) scattering out in tiny balls and some kids tried to retrieve it using pens to push it onto a piece of paper. Also broke a thermometer myself at university in the chemistry lab. The mercury went down the drain! I reported it and don't know if any cleanup was attempted. Worked in laboratories for about 10 years of my life.

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

London, UK – but spent the first 30 years of my life in South Africa.