

Molybdenum

Boron

-))<sup>.</sup> SEX: Male AGE: 28

(Mo)

(B)

## Toxic & Essential Elements; Hair

		TOXIC N	/IETALS				
		RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 <sup>th</sup> 95 <sup>th</sup>			
Aluminum	(AI)	2.4	< 7.0				
Antimony	(Sb)	< 0.01	< 0.066				
Arsenic	(As)	0.036	< 0.080				
Barium	(Ba)	0.82	< 1.0				
Beryllium	(Be)	< 0.01	< 0.020				
Bismuth	(Bi)	0.050	< 2.0	•			
Cadmium	(Cd)	< 0.009	< 0.065				
Lead	(Pb)	0.22	< 0.80				
Mercury	(Hg)	0.36	< 0.80				
Platinum	(Pt)	< 0.003	< 0.005				
Thallium	(TI)	< 0.001	< 0.002				
Thorium	(Th)	< 0.001	< 0.002				
Uranium	(U)	0.038	< 0.060				
Nickel	(Ni)	0.13	< 0.20				
Silver	(Ag)	0.01	< 0.08				
Tin	(Sn)	0.03	< 0.30				
Titanium	(Ti)	0.28	< 0.60				
Total Toxic Representat	ion						
		ESSENTIAL AND C	THER ELEMENTS				
		RESULT µg/g	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)	603	200- 750				
Magnesium	(Mg)	62	25- 75				
Sodium	(Na)	19	20- 180				
Potassium	(K)	8	9- 80				
Copper	(Cu)	14	11- 30	—			
Zinc	(Zn)	280	130- 200				
Manganese	(Mn)	0.09	0.08- 0.50				
Chromium	(Cr)	0.30	0.40- 0.70				
Vanadium	(V)	0.033	0.018- 0.065	•			

(0)	0.30	0.40-	5.0					
(I)	0.23	0.25-	1.8	•				
(Li)	0.007	0.007-	0.020					
(P)	148	150-	220	•				
(Se)	8.6	0.70-	1.2					
(Sr)	1.2	0.30-	3.5		•			
(S)	48300	44000-	50000					
(Co)	0.009	0.004-	0.020		-			
(Fe)	8.0	7.0-	16					
(Ge)	0.031	0.030-	0.040					
(Rb)	0.011	0.011-	0.12					
(Zr)	0.036	0.020-	0.44					
SPECIMEN DATA					RATIOS			
COMMENTS:				ELEMENTS	RATIOS	RANGE		
				Ca/Mg	9.73	4- 30		
Date Collected: 03/25/2014 Sample Size: 0.201 g					4.07	0.8- 8		
Date Received: 04/11/2014 Sample Type: Head					2.38	0.5- 10		
Date Completed: 04/13/2014 Hair Color: Brown					20	4- 20		
Methodology: ICP/MS Treatment:					> 999	> 800		
	(I) (Li) (P) (Se) (Sr) (S) (Co) (Fe) (Ge) (Rb) (Zr) SPECIMEN I SPECIMEN I	(Li)     0.007       (P)     148       (Se)     8.6       (Sr)     1.2       (S)     48300       (Co)     0.009       (Fe)     8.0       (Ge)     0.031       (Rb)     0.011       (Zr)     0.036       SPECIMEN DATA       Sample Size: 0.201 c       Sample Type: Head       Hair Color: Brown	(I)     0.23     0.25-       (Li)     0.007     0.007-       (P)     148     150-       (Se)     8.6     0.70-       (Sr)     1.2     0.30-       (S)     48300     44000-       (Co)     0.009     0.004-       (Fe)     8.0     7.0-       (Ge)     0.031     0.030-       (Rb)     0.011     0.011-       Zr)     0.036     0.020-       SPECIMEN DATA     Sample Size: 0.201 g     Sample Type: Head       Hair Color:     Brown     Sample Type: Head	(i)     0.23     0.25-     1.8       (Li)     0.007     0.007-     0.020       (P)     148     150-     220       (Se)     8.6     0.70-     1.2       (Sr)     1.2     0.30-     3.5       (S)     48300     44000-     50000       (Co)     0.009     0.004-     0.020       (Fe)     8.0     7.0-     16       (Ge)     0.031     0.030-     0.040       (Rb)     0.011     0.112     0.12       (Zr)     0.036     0.020-     0.44       Sample Size: 0.201 g       Sample Size: 0.201 g     Sample Size: 0.201 g       Sample Size: 0.201 g     Sample Size: 0.201 g       Sample Size: 0.201 g     Sample Size: 0.201 g	(i)   0.23   0.25-   1.8   (III)     (Li)   0.007   0.007-   0.020     (P)   148   150-   220     (Se)   8.6   0.70-   1.2     (Sr)   1.2   0.30-   3.5     (S)   48300   44000-   50000     (Co)   0.009   0.004-   0.020     (Fe)   8.0   7.0-   16     (Ge)   0.031   0.030-   0.040     (Rb)   0.011   0.011-   0.12     (Zr)   0.036   0.020-   0.44     ELEMENTS     Sample Size:   0.201 g   Ca/Mg     Sample Size:   0.201 g   Na/K     Hair Color:   Brown   Zn/Cu	(i)   0.23   0.25-   1.8     (Li)   0.007   0.007-   0.020     (P)   148   150-   220     (Se)   8.6   0.70-   1.2     (Sr)   1.2   0.30-   3.5     (S)   48300   44000-   50000     (Co)   0.009   0.004-   0.020     (Fe)   8.0   7.0-   16     (Ge)   0.031   0.030-   0.040     (Rb)   0.011   0.11-   0.12     SPECIMEN DATA   RATIOS     Sample Size:   0.201 g   Ca/Mg   9.73     Sample Size:   0.201 g   Ca/P   4.07     Mair Color:   Brown   Zn/Cu   20		

0.025- 0.060

3.0

0.40-

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0.033

0.50

Shampoo: Hs

- 1. What are your current symptoms and health history?
  - My key symptom is a severe never-ending burning pain on the left side of my tongue (after 4 years of burning it's getting harder to keep depression at bay). I have a white coating on my tongue. Very audible ringing in the ears. I also have brain fog, fatigue (mild to moderate), I feel socially withdrawn because the act of speaking is painful (so I have to force myself to interact with friends and colleagues). My short-term memory has declined slightly and I find it much harder to concentrate than before my incident. (Incident described in my dental history).

I also tested positive for Systemic Candidiasis (C. Albicans).

- 2. Dental history (Wisdom teeth removed and when? Any other extractions. First root canal placed? Braces? First amalgam etc...)
  - Wisdom teeth have not been removed. Apparently there is no need to in my case.
  - No other teeth have been extracted.
  - Total of 3 root-canals. Two when I was about 11-12 yrs, and one more recently on 23/04/2012.
  - I am currently using Invisalign for orthodontics to avoid metal braces.

In terms of my amalgam history, when I was younger at around 12-13 yrs old (around 1997-1998), I had 4 big amalgam fillings, and one or two smaller ones. During mid-2011, one of the amalgams (#37) chipped creating a sharp edge. This was the beginning of the end of my life as I knew it. It sliced the side of my tongue so I went in to have it checked, the dentist simply filed down the sharp edge and said it was now fine. However, over the weeks and months to follow, a severe burning sensation began to develop on the left side of my tongue that hasn't gone away since.

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

All amalgam fillings ultimately replaced with composite fillings or hypoallergenic crowns (all completed by October 2013). Hypoallergenic glues and cements were also used. Unfortunately, I remember the amalgams being drilled out with bits of metal flying everywhere (I had no idea about the dangers of amalgam removal at the time).

- 4. What dentistry did your mother have at any time before or during pregnancy? Around 2-3 amalgams at the time.
- 5. What vaccinations have you had and when (including flu and especially travel shots)? All of the usual vaccinations as a child. Regular flu shots (but I am stopping those from this year), and a recent yellow fever injection for traveling to Zanzibar (4th Q 2011).
- 6. Supplements and medications (including dosages) taken at time of hair test, or for the 3-6 months before the sample was taken?

The 3-6 months before the sample was taken I was on an anti-candida diet and supplementing with garlic oil (2-3 pills a day) and mastic gum (2-3 pills a day) for a few weeks. I was also on Ketoconazole (200mg/day) for 30 days and Adco Sporozole (200mg/day) for 7 days. Needless to say, the Candida still remains at this stage. The C. Albicans tested sensitive to Fluconazole but I am delaying this course of treatment until I know more about my heavy metal situation.

- 7. What is your age, height and weight? Age: 29 Height: 173cm Weight: 65kg
- 8. Other information you feel may be relevant?

Before finally getting the hypoallergenic crowns, another dentist installed 'porcelain' crowns which I reacted badly to. It was later found to have had nickel hiding under them. The nickel seemed to cause my gums to become permanently inflamed and the burning on my tongue flared up much worse than usual becoming unbearable (it felt like the reaction went into overdrive). Removal of the nickel reduced the symptoms back to a barely bearable burning sensation.

Head&Shoulders (sensitive scalp care, non-clinical version off the shelf stuff) shampoo ingredients: Aqua, Sodium Lauryl Sulfate, Sodium Luareth Sulfate, Glycol Disterate, Zinc Carbonate, Sodium Chloride Dimethicone, Sodium Xylenesulfate, Zinc Pyrithione, Cocamidopropyl Betaine, Parfum, Sodium Benzoate, Guar Hydroxypropyltrimonium Chloride, Hydrochloric Acid, Magnesium Carbonate Hydroxide, Linalool, Butyphenyl Methylpropional, Magnesium Nitrate, Aloe Barbadenis Leaf Juice, Sodium Polynaphthalenesulfate, Methylchloroisothiazolinone, Magnesium Chloride, Methylisothiazoline, Ascorbic Acid, Citric Acid, Potassium Sorbate, Sodium Sulfate.

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