



SEX: Male  
AGE: 28

## Toxic & Essential Elements; Hair

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 <sup>th</sup> 95 <sup>th</sup>
Aluminum (Al)	2.2	< 7.0	
Antimony (Sb)	0.013	< 0.066	
Arsenic (As)	0.034	< 0.080	
Barium (Ba)	0.74	< 1.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	0.007	< 2.0	
Cadmium (Cd)	< 0.009	< 0.065	
Lead (Pb)	0.24	< 0.80	
Mercury (Hg)	0.03	< 0.80	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	< 0.001	< 0.002	
Thorium (Th)	< 0.001	< 0.002	
Uranium (U)	0.015	< 0.060	
Nickel (Ni)	0.14	< 0.20	
Silver (Ag)	0.01	< 0.08	
Tin (Sn)	0.03	< 0.30	
Titanium (Ti)	0.35	< 0.60	
Total Toxic Representation			

ESSENTIAL AND OTHER ELEMENTS					
	RESULT µg/g	REFERENCE INTERVAL	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)	601	200- 750			
Magnesium (Mg)	41	25- 75			
Sodium (Na)	73	20- 180			
Potassium (K)	15	9- 80			
Copper (Cu)	15	11- 30			
Zinc (Zn)	180	130- 200			
Manganese (Mn)	0.07	0.08- 0.50			
Chromium (Cr)	0.27	0.40- 0.70			
Vanadium (V)	0.016	0.018- 0.065			
Molybdenum (Mo)	0.034	0.025- 0.060			
Boron (B)	0.53	0.40- 3.0			
Iodine (I)	0.46	0.25- 1.8			
Lithium (Li)	0.023	0.007- 0.020			
Phosphorus (P)	175	150- 220			
Selenium (Se)	0.58	0.70- 1.2			
Strontium (Sr)	6.1	0.30- 3.5			
Sulfur (S)	47700	44000- 50000			
Cobalt (Co)	0.007	0.004- 0.020			
Iron (Fe)	7.4	7.0- 16			
Germanium (Ge)	0.031	0.030- 0.040			
Rubidium (Rb)	0.012	0.011- 0.12			
Zirconium (Zr)	0.030	0.020- 0.44			

SPECIMEN DATA		RATIOS	
<b>COMMENTS:</b>		<b>ELEMENTS</b>	<b>RATIOS</b>
Date Collected: 05/14/2014		Ca/Mg	14.7
Date Received: 05/20/2014		Ca/P	3.43
Date Completed: 05/24/2014		Na/K	4.87
Methodology: ICP/MS		Zn/Cu	12
Sample Size: 0.205 g		Zn/Cd	> 999
Sample Type: Head			
Hair Color: Brown			
Treatment:			
Shampoo: Nizoa1			
		<b>RANGE</b>	
		4- 30	
		0.8- 8	
		0.5- 10	
		4- 20	
		> 800	

## Health history for hair test 965

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

- hemochromatosis, with slightly elevated ferritin
- significant yellowing of the hands and feet
- hypogonadal, borderline hypothyroid
- multiple left-sided abnormalities
- > strabismus of the left eye
- > left-sided ataxia
- > left-sided atrophy of the arms, legs, chest and back muscles
- brain fog
- food sensitivities (grains, dairy), extreme reaction to sulfur foods like burning sensation only of the left side of the brain with heavy muscle twitching after consumption

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

- wisdom teeth removed at 14
- several ceramic fillings, never amalgam

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

- none

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

- unknown

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

- hepatitis C, mumps, no flu shots

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

- Generic multivitamin, 6 grams fish oil, 20mg PQQ, 100mg CoQ10, 10grams self-made liposomal vitamin c, 400IU Vitamin E, 5000IU Vitamin D3, 45mcg Vitamin K, up to 5 grams magnesium citrate powder

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

- 28 years, 184cm, 84 kg

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

- fatigue started about 5-6 years ago, probably related to increased fish consumption (not sure)
- after that periods (up to 6 months then a break for a couple months) of heavy fish consumption (1-1.5kg / day) mostly pollack, earlier up to 600grams of tuna/day which I stopped in 2008 due to noticeable hair loss.

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

- Birmingham, UK