

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	(AI)	1.8	< 7.0			
Antimony	(Sb)	0.020	< 0.066			
Arsenic	(As)	0.14	< 0.080			
Barium	(Ba)	0.30	< 1.0			
Beryllium	(Be)	< 0.01	< 0.020			
Bismuth	(Bi)	0.023	< 2.0	•		
Cadmium	(Cd)	0.066	< 0.065			
Lead	(Pb)	0.59	< 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)	0.032	< 0.060			
Nickel	(Ni)	0.06	< 0.20			
Silver	(Ag)	0.42	< 0.08			
Tin	(Sn)	0.80	< 0.30			
Titanium	(Ti)	0.33	< 0.60			
Total Toxic Represent	ation					

ESSENTIAL AND OTHER ELEMENTS									
		RESULT	REFERENCE	PERCENTILE					
		μg/g	INTERVAL	2.5 <sup>th</sup> 16 <sup>th</sup> 50 <sup>th</sup> 84 <sup>th</sup> 97.5 <sup>th</sup>					
Calcium	(Ca)	194	200- 750						
Magnesium	(Mg)	14	25- 75						
Sodium	(Na)	17	20- 180						
Potassium	(K)	11	9- 80						
Copper	(Cu)	13	11- 30						
Zinc	(Zn)	130	130- 200						
Manganese	(Mn)	0.08	0.08- 0.50						
Chromium	(Cr)	0.33	0.40- 0.70						
Vanadium	(V)	0.036	0.018- 0.065						
Molybdenum	(Mo)	0.049	0.025- 0.060						
Boron	(B)	0.14	0.40- 3.0						
Iodine	(I)	0.64	0.25- 1.8						
Lithium	(Li)	< 0.004	0.007- 0.020						
Phosphorus	(P)	168	150- 220						
Selenium	(Se)	0.66	0.70- 1.2						
Strontium	(Sr)	0.87	0.30- 3.5						
Sulfur	(S)	42800	44000- 50000						
Cobalt	(Co)	0.004	0.004- 0.020						
Iron	(Fe)	5.8	7.0- 16						
Germanium	(Ge)	0.031	0.030- 0.040						
Rubidium	(Rb)	0.015	0.011- 0.12						
Zirconium	(Zr)	0.086	0.020- 0.44	•					

SPECIMEN DATA			RATIOS		
COMMENTS:		ELEMENTS	RATIOS	RANGE	
		Ca/Mg	13.9	4- 30	
Date Collected: 01/06/2015	Sample Size: 0.195 g	Ca/P	1.15	0.8- 8	
Date Received: 01/10/2015	Sample Type: неаd	Na/K	1.55	0.5- 10	
Date Completed: 01/12/2015	Hair Color:	Zn/Cu	10	4- 20	
Methodology: ICP/MS	Treatment:	Zn/Cd	> 999	> 800	
	Shampoo: Dandruff	<u>-</u>			

## Health history for hair test 1045

## What are your current symptoms and health history?

Continuous, low-level muscle twitching starting in the arms roughly 1 ½ years ago, progressively worsening to full body twitching, primarily in the arms and chest. Over the past 4-6 months, a degeneration of muscle mass and strength has occurred, as well as a large decrease in strength of grip. Neurological issues (depression, anxiety, mental fog) started roughly ten years ago and may be unrelated, but have been worsening in recent months. Also, breathing no longer seems to be automatic, and has become progressively more shallow in recent years. These symptoms appear to correlate to mercury and copper toxicity, although blood and hair tests for both are in the normal range. I can provide exact values if it is beneficial, though it is my understanding that these tests may not be useful for determining metal sensitivity or accurately assessing body burden for these metals.

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

No dental currently in place, and no amalgams. Wore retainer on and off for several years. Braces from around age 10 to 12, and age 14-15. Four wisdom teeth removed around age 16. Not positive, but I believe I had a root canal.

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

**Amalgams** 

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

Travel vaccinations for India roughly four months ago, including hepatitis, tetnis, typhoid, and malaria.

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

Bupropion: (A.K.A Welbutrin/Zyban: antidepressant) 100mg daily

Magnesium: ~200mg daily

Vitamin C: ~1000mg daily

Also: less frequent doses of Vitamin D and B-Complex, occasional melatonin and 5htp at low dosage for sleep.

6. What is your age, height and weight?

Age: 28/ Height: 6'1 / Weight: 150 lbs

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

United States: Telluride, Colorado.