



PATIENT: Number 638  
 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)	4.0	< 7.0	
Antimony (Sb)	< 0.01	< 0.066	
Arsenic (As)	0.012	< 0.080	
Barium (Ba)	0.56	< 1.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	0.015	< 2.0	
Cadmium (Cd)	0.011	< 0.065	
Lead (Pb)	0.36	< 0.80	
Mercury (Hg)	0.41	< 0.80	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	< 0.001	< 0.002	
Thorium (Th)	< 0.001	< 0.002	
Uranium (U)	0.004	< 0.060	
Nickel (Ni)	0.05	< 0.20	
Silver (Ag)	0.02	< 0.08	
Tin (Sn)	0.04	< 0.30	
Titanium (Ti)	0.31	< 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)	1120	200- 750			
Magnesium (Mg)	33	25- 75			
Sodium (Na)	5	20- 180			
Potassium (K)	4	9- 80			
Copper (Cu)	30	11- 30			
Zinc (Zn)	240	130- 200			
Manganese (Mn)	0.07	0.08- 0.50			
Chromium (Cr)	0.33	0.40- 0.70			
Vanadium (V)	0.011	0.018- 0.065			
Molybdenum (Mo)	0.019	0.025- 0.060			
Boron (B)	0.07	0.40- 3.0			
Iodine (I)	0.17	0.25- 1.8			
Lithium (Li)	0.008	0.007- 0.020			
Phosphorus (P)	178	150- 220			
Selenium (Se)	0.53	0.70- 1.2			
Strontium (Sr)	2.3	0.30- 3.5			
Sulfur (S)	46600	44000- 50000			
Cobalt (Co)	0.093	0.004- 0.020			
Iron (Fe)	7.3	7.0- 16			
Germanium (Ge)	0.032	0.030- 0.040			
Rubidium (Rb)	< 0.003	0.011- 0.12			
Zirconium (Zr)	0.031	0.020- 0.44			

SPECIMEN DATA		RATIOS	
<b>COMMENTS:</b>		<b>ELEMENTS</b>	<b>RATIOS</b>
Date Collected: 6/25/2012		Ca/Mg	33.9
Date Received: 7/2/2012		Ca/P	6.29
Date Completed: 7/6/2012		Na/K	1.25
Methodology: ICP/MS		Zn/Cu	8
Sample Size: 0.2 g	Sample Type: Head	Zn/Cd	> 999
Hair Color: Blond	Treatment:		
Shampoo: Schwarzkopf			
		<b>RANGE</b>	
		4- 30	
		0.8- 8	
		0.5- 10	
		4- 20	
		> 800	



PATIENT: Number 638 Follow-up Test  
 SEX: Male  
 AGE: 29

**Toxic & Essential Elements; Hair**

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 <sup>th</sup> 95 <sup>th</sup>
Aluminum (Al)	0.9	< 7.0	
Antimony (Sb)	< 0.01	< 0.066	
Arsenic (As)	0.010	< 0.080	
Barium (Ba)	0.61	< 1.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	< 0.002	< 2.0	
Cadmium (Cd)	< 0.009	< 0.065	
Lead (Pb)	0.28	< 0.80	
Mercury (Hg)	0.22	< 0.80	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	< 0.001	< 0.002	
Thorium (Th)	< 0.001	< 0.002	
Uranium (U)	0.001	< 0.060	
Nickel (Ni)	0.06	< 0.20	
Silver (Ag)	0.02	< 0.08	
Tin (Sn)	< 0.02	< 0.30	
Titanium (Ti)	0.37	< 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)	925	200- 750			
Magnesium (Mg)	28	25- 75			
Sodium (Na)	14	20- 180			
Potassium (K)	< 3	9- 80			
Copper (Cu)	37	11- 30			
Zinc (Zn)	190	130- 200			
Manganese (Mn)	0.05	0.08- 0.50			
Chromium (Cr)	0.28	0.40- 0.70			
Vanadium (V)	0.010	0.018- 0.065			
Molybdenum (Mo)	0.026	0.025- 0.060			
Boron (B)	0.37	0.40- 3.0			
Iodine (I)	0.61	0.25- 1.8			
Lithium (Li)	0.004	0.007- 0.020			
Phosphorus (P)	174	150- 220			
Selenium (Se)	0.64	0.70- 1.2			
Strontium (Sr)	2.4	0.30- 3.5			
Sulfur (S)	47400	44000- 50000			
Cobalt (Co)	0.072	0.004- 0.020			
Iron (Fe)	5.8	7.0- 16			
Germanium (Ge)	0.034	0.030- 0.040			
Rubidium (Rb)	0.003	0.011- 0.12			
Zirconium (Zr)	< 0.007	0.020- 0.44			

SPECIMEN DATA		RATIOS	
<b>COMMENTS:</b>		ELEMENTS	RATIOS
Date Collected: 06/27/2013	Sample Size: 0.201 g	Ca/Mg	33
Date Received: 07/05/2013	Sample Type: Head	Ca/P	5.32
Date Completed: 07/08/2013	Hair Color: Blond	Na/K	4.67
Methodology: ICP/MS	Treatment:	Zn/Cu	5.14
	Shampoo: Alverde Men	Zn/Cd	> 999
		RANGE	
			4- 30
			0.8- 8
			0.5- 10
			4- 20
			> 800

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

- low energy, tired, feeling weak
- low immune system
- depressive episodes
- slow thinking, sometimes brain overflow, bad memory, often low ability to concentrate
- hard time making decisions
- being sensitive
- anxiety
- insomnia
- low self-esteem, low stress tolerance, ADD like behavior (all of them not always but often)

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

- First amalgam when I was about 7 - 9 years old
- About 6 - 9 amalgam fillings
- Had braces
- Most fillings got removed at about age 13 to 16, after braces were removed. These fillings got replaced by composites.
- Amalgam has not been removed with protection besides the last one (removal of last one in August 2012)
- Four molar teeth removed. At least one of them had an amalgam filling
- Wisdom teeth are not removed, but have just three.
- Redone composites in early 2013 besides one

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

I have 2 or 3 composite fillings (I'm not sure if it's one or two fillings in one teeth).  
One of these composites is about 10 years old. The others I renewed this year.  
1 ceramic inlay  
Last amalgam filling was safely removed end of August 2012.

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

My mother has amalgams but is not sure since when. She had contact with a broken mercury thermometer as a child.

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

Not known precisely, I had standard vaccinations given in Germany.

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

Long time use:

- Vitamin C (> 2g)
- Magnesium
- For several months I took 120 - 160mg a day (misunderstanding about the used supplement)
- Since about 2 weeks I'm on 800 - 1000mg (citrate, sometimes also oxide)
- Vitamin E (800 - 1200 IU)
- Zinc (50mg)
- sometimes Grapefruit Seed Extract
- Vitamin B Complex ("Biovea ultimate b-complex") twice a day.  
It also contains chromium chloride (makes 100mcg chromium a day), some calcium, choline, phosphorus
- Details: <http://tinyurl.com/Ultimate-B-Complex>
- L-Lysin (500mg)

For several months:

- Selenium 100mcg (from natrium selenite)
- Lithium (5mg orotate)
- ACE 250 – 500mg

Since some weeks:

- Borage Oil (1000mg)
- L-Lysin (1000mg, sometimes more)
- Selenium 200mcg (from L-selenomethionine)
- Iodoral / Lugol's solution (5 – 25mg per dose, not daily)

Other supplements I took over the time: Taurine, vinpocetine, argenine, glutamine, 5-HTP, SAmE, Milk Thistle, Molybdenum

Chelating with DMSA and ALA.

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

29, 175cm, 66kg

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

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

Hannover, Germany