

# HAIR ELEMENTS



PATIENT: Number 355  
SEX: Male  
AGE: 38  
LOCATION: Folsom, California, USA

## POTENTIALLY TOXIC ELEMENTS

TOXIC ELEMENTS	RESULT $\mu\text{g/g}$	REFERENCE RANGE	PERCENTILE	
			68 <sup>th</sup>	95 <sup>th</sup>
Aluminum	2.8	< 12		
Antimony	0.038	< 0.080		
Arsenic	0.059	< 0.12		
Beryllium	< 0.01	< 0.020		
Bismuth	0.17	< 2.0		
Cadmium	0.073	< 0.15		
Lead	1.2	< 2.0		
Mercury	5.3	< 1.1		
Platinum	< 0.003	< 0.005		
Thallium	< 0.001	< 0.010		
Thorium	< 0.001	< 0.005		
Uranium	0.044	< 0.060		
Nickel	0.14	< 0.40		
Silver	0.03	< 0.10		
Tin	0.23	< 0.30		
Titanium	0.48	< 1.0		
Total Toxic Representation				

## ESSENTIAL AND OTHER ELEMENTS

ELEMENTS	RESULT $\mu\text{g/g}$	REFERENCE RANGE	PERCENTILE				
			2.5 <sup>th</sup>	16 <sup>th</sup>	50 <sup>th</sup>	84 <sup>th</sup>	97.5 <sup>th</sup>
Calcium	481	375– 1100					
Magnesium	190	40– 140					
Sodium	73	24– 180					
Potassium	18	20– 80					
Copper	12	9.0– 26					
Zinc	170	120– 200					
Manganese	0.14	0.20– 0.65					
Chromium	0.24	0.20– 0.45					
Vanadium	0.033	0.018– 0.065					
Molybdenum	0.060	0.040– 0.10					
Boron	0.41	0.70– 4.0					
Iodine	0.32	0.25– 1.3					
Lithium	0.014	0.008– 0.040					
Phosphorus	218	250– 400					
Selenium	1.2	0.95– 1.7					
Strontium	2.3	1.0– 6.0					
Sulfur	42400	42000– 49000					
Barium	1.4	0.50– 3.0					
Cobalt	0.034	0.013– 0.050					
Iron	7.6	5.8– 14					
Germanium	0.035	0.045– 0.065					
Rubidium	0.018	0.030– 0.25					
Zirconium	0.43	0.040– 1.0					

## SPECIMEN DATA

### COMMENTS:

Date Collected:  
Date Received: 4/29/2008  
Date Completed: 5/1/2008

Sample Size: 0.199 g  
Sample Type: Pubic  
Hair Color:  
Treatment:  
Shampoo:

Methodology: ICP-MS

V06.99

## RATIOS

ELEMENTS	RATIOS	EXPECTED RANGE
Ca/Mg	2.53	4– 30
Ca/P	2.21	0.8– 8
Na/K	4.06	0.5– 10
Zn/Cu	14.2	4– 20
Zn/Cd	> 999	> 800

# HAIR ELEMENTS



PATIENT: Number 355a

SEX: Male

AGE: 40

## POTENTIALLY TOXIC ELEMENTS

TOXIC ELEMENTS	RESULT µg/g	REFERENCE RANGE	PERCENTILE	
			68 <sup>th</sup>	95 <sup>th</sup>
Aluminum	2.2	< 7.0		
Antimony	0.038	< 0.066		
Arsenic	0.030	< 0.080		
Barium	0.37	< 1.0		
Beryllium	< 0.01	< 0.020		
Bismuth	0.029	< 2.0		
Cadmium	0.019	< 0.065		
Lead	0.16	< 0.80		
Mercury	0.67	< 0.80		
Platinum	< 0.003	< 0.005		
Thallium	< 0.001	< 0.002		
Thorium	< 0.001	< 0.002		
Uranium	0.008	< 0.060		
Nickel	0.03	< 0.20		
Silver	0.02	< 0.08		
Tin	0.07	< 0.30		
Titanium	0.35	< 0.60		
Total Toxic Representation				

## ESSENTIAL AND OTHER ELEMENTS

ELEMENTS	RESULT µg/g	REFERENCE RANGE	PERCENTILE				
			2.5 <sup>th</sup>	16 <sup>th</sup>	50 <sup>th</sup>	84 <sup>th</sup>	97.5 <sup>th</sup>
Calcium	288	200– 750					
Magnesium	24	25– 75					
Sodium	90	20– 180					
Potassium	32	9– 80					
Copper	11	11– 30					
Zinc	140	130– 200					
Manganese	0.10	0.08– 0.50					
Chromium	0.44	0.40– 0.70					
Vanadium	0.031	0.018– 0.065					
Molybdenum	0.029	0.025– 0.060					
Boron	2.6	0.40– 3.0					
Iodine	0.38	0.25– 1.8					
Lithium	0.004	0.007– 0.020					
Phosphorus	182	150– 220					
Selenium	1.0	0.70– 1.2					
Strontium	0.59	0.30– 3.5					
Sulfur	47000	44000– 50000					
Cobalt	0.005	0.004– 0.020					
Iron	8.4	7.0– 16					
Germanium	0.029	0.030– 0.040					
Rubidium	0.046	0.011– 0.12					
Zirconium	0.29	0.020– 0.44					

## SPECIMEN DATA

### COMMENTS:

Date Collected: 6/8/2009

Date Received: 6/11/2009

Date Completed: 6/13/2009

Client Reference:

Methodology: ICP-MS

Sample Size: 0.198 g

Sample Type: Head

Hair Color: Black

Treatment:

Shampoo:

V010.08

## RATIOS

ELEMENTS	RATIOS	EXPECTED RANGE
Ca/Mg	12	4– 30
Ca/P	1.58	0.8– 8
Na/K	2.81	0.5– 10
Zn/Cu	12.7	4– 20
Zn/Cd	> 999	> 800

## **Health history for hair test 355**

**8 June 2009**

**1) What are your current symptoms and health history?**

Great difficulty concentrating.

Chronic fatigue.

Mentally disabled.

Irritability

Sleep apnea is, as far as I can tell, gone or significantly reduced.

Got diagnosed with Asthma around December 2005. Last symptom in March 2008. Cured now.

Obesity from 1996 until 2007, and from 2008 to 2009.

Before 2001, health history was mostly good (other than obesity).

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

**Braces? First amalgam etc...)**

Had amalgam fillings since my teens.

Wisdom teeth removed when I was 18 or 19, along with a molar extraction.

4 more extractions when I was 20 to make room for orthodontic work.

3 root canals (upper front teeth). Probably done when I was 25.

Several crowns and one bridge, including 3 crowns and the bridge placed on top of not completely removed amalgam fillings.

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

Several crowns and one bridge, including 3 crowns and the bridge placed on top of not completely removed amalgam fillings.

2 dental implants (titanium), crowned with LAVA post crowns (made of Zirconium). The bridge and a few other crowns are LAVA post too. Older crowns are made of an alloy including Nickel I believe.

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

I don't know.

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

Had a few vaccinations when I was in primary school. They included the one against Tuberculosis.

Had a few more vaccines when I turned 18 (required by the school I started attending in France). They included the one against Polio.

Had a couple more vaccines when I was 24 (required to attend a university in Texas).

I had a flu shot when I was 29.

Had a couple more vaccines when I was 33 (required to get the green card).

I had about 8 months of allergy shots, almost weekly.

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

Several supplements, including DMSA in high doses once per week-end day, alpha lipoic acid in high doses at random times, melatonin, multi-vitamin, VitaXan, ZingoMin, B12, potassium, DHEA, Zinc. No medications.

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

40, 5'11, 210 lbs.

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

I had 5 monthly injections of DMPS from May through September 2008. The last injection was a challenge test.

## **History for subsequent hair test on 29 April 2008**

**1) What are your current symptoms and health history?**

Insomnia since 2002.

Chronic fatigue

Irritability

Sleep apnea

Got diagnosed with Asthma around December 2005. Last symptom as recent as March 2008.

Obesity from 1996 until 2007.

Before 2001, health history was mostly good (other than obesity).

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

Had amalgam fillings since my teens.

Wisdom teeth removed when I was 18 or 19, along with a molar extraction.

4 more extractions when I was 20 to make room for orthodontic work.

3 root canals (upper front teeth). Probably done when I was 25.

Several crowns and one bridge, including 3 crowns and the bridge placed on top of not completely removed amalgam fillings.

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

Several crowns and one bridge, including 3 crowns and the bridge placed on top of not completely removed amalgam fillings.

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

I don't know.

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

Had a few vaccinations when I was in primary school. They included the one against Tuberculosis.

Had a few more vaccines when I turned 18 (required by the school I started attending in France). They included the one against Polio.

Had a couple more vaccines when I was 24 (required to attend a university in Texas).

I had a flu shot when I was 29.

Had a couple more vaccines when I was 33 (required to get the green card).

I had about 8 months of allergy shots, almost weekly.

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

Several supplements, including Releana (a sublingual hCG), melatonin, multi-vitamin, VitaXan, ZingoMin, B12, potassium, DHEA, Zinc. No medication, other than maybe Releana (not sure if it's a medication or supplement).

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

38 (almost 39), 5'11, 160 lbs.

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

I lost a net of 55 pounds, mostly fat, in the 180 days preceding the test. That's the peak to through loss. That included 60 days during which I lost about a pound a day, mostly fat. That probably release a lot of stored mercury from my fat cells to my blood stream.

I was also using a couple of very hot baths per week, from November 2007 to the test day. I was monitoring the bath temperature with a water resistant thermometer. There is a chance some mercury was released from the thermometer.

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

Folsom, California, USA.