



PATIENT:  
ID:  
SEX: Male  
AGE: 48

CLIENT #:  
DOCTOR: [REDACTED]  
[REDACTED]  
[REDACTED]

*Toxic & Essential Elements; Hair*

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 <sup>th</sup> 95 <sup>th</sup>
Aluminum (Al)	2.9	< 7.0	
Antimony (Sb)	< 0.01	< 0.066	
Arsenic (As)	0.035	< 0.080	
Barium (Ba)	0.92	< 1.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	0.005	< 2.0	
Cadmium (Cd)	0.010	< 0.065	
Lead (Pb)	0.34	< 0.80	
Mercury (Hg)	1.6	< 0.80	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	< 0.001	< 0.002	
Thorium (Th)	< 0.001	< 0.002	
Uranium (U)	0.007	< 0.060	
Nickel (Ni)	0.08	< 0.20	
Silver (Ag)	0.06	< 0.08	
Tin (Sn)	0.02	< 0.30	
Titanium (Ti)	0.36	< 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)	453	200- 750			
Magnesium (Mg)	40	25- 75			
Sodium (Na)	38	20- 180			
Potassium (K)	27	9- 80			
Copper (Cu)	11	11- 30			
Zinc (Zn)	200	130- 200			
Manganese (Mn)	0.17	0.08- 0.50			
Chromium (Cr)	0.36	0.40- 0.70			
Vanadium (V)	0.013	0.018- 0.065			
Molybdenum (Mo)	0.021	0.025- 0.060			
Boron (B)	1.5	0.40- 3.0			
Iodine (I)	0.91	0.25- 1.8			
Lithium (Li)	< 0.004	0.007- 0.020			
Phosphorus (P)	210	150- 220			
Selenium (Se)	0.80	0.70- 1.2			
Strontium (Sr)	1.7	0.30- 3.5			
Sulfur (S)	48300	44000- 50000			
Cobalt (Co)	0.011	0.004- 0.020			
Iron (Fe)	6.2	7.0- 16			
Germanium (Ge)	0.033	0.030- 0.040			
Rubidium (Rb)	0.039	0.011- 0.12			
Zirconium (Zr)	0.035	0.020- 0.44			

SPECIMEN DATA		RATIOS	
<b>COMMENTS:</b>		ELEMENTS	RATIOS
Date Collected: 2/24/2012	Sample Size: 0.199 g	Ca/Mg	11.3
Date Received: 2/27/2012	Sample Type: Head	Ca/P	2.16
Date Completed: 2/29/2012	Hair Color: Brown	Na/K	1.41
Methodology: ICP/MS	Treatment:	Zn/Cu	18.2
	Shampoo: Nirvae Botanicals	Zn/Cd	> 999
		RANGE	
		4- 30	
		0.8- 8	
		0.5- 10	
		4- 20	
		> 800	

## Health history for hair test 591

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

Formerly healthy/athletic, 6'2" 175-185 lbs. A whole host of symptoms that began about 8 years ago. Primary core symptoms are:

Fatigue: chronic fatigue, daily 'energy crisis', unrestful sleep

Neuro: Brain Fog, memory - short & long, inability to concentrate

Vision: Acuity (fluctuates throughout day), distance vision challenged, blurry vision, dry eye discomfort too. Also amblyopia (brain ignoring signal from one eye)

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

48 YO male. 1st ever cavity at about 17 YO. Wisdom teeth removed in early 20's followed by reconstructive jaw surgery. 1st root canal at about 20. Braces early teens, again in early 20's (~1984 coincident with jaw surgery). First amalgam in mid-late teens. Substantial increase in # of amalgams (from 4-5 to 10-12) in mid-thirties. Removal of remaining 8 amalgams at 48 (last month).

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

8-10 fillings plus 4 crowns, no more amalgam. 4 crowns = one implant with titanium post/cerac crown. Three root canaled/posted & crowned teeth.

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

I don't know. for sure but I believe she had a # of amalgams

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

Standard vaccines from youth in 1960's? Tetanus. Did have flu vaccine 3 or 4 years in early 2000's.

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

Emergen-C (which is basically C + B & electrolytes), Vit D 1,000-5,000iu/day, CoQ10, Probiotic, Curcumin, MSM, misc others.

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

48 YO male 6'2" 175 lbs

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

dmsa 6 hour urine challenge last month showed substantially elevated lead (24 ug/g cr) and mercury (20 ug/g cr) both bars to far end of red on DD lab.

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

Marin County, CA (near San Francisco), USA