

Toxic & Essential Elements; Hair

TOXIC METALS

		RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 th 95 th	
Aluminum (Al)		1.6	< 7.0		
Antimony (Sb)		0.018	< 0.066		
Arsenic (As)		0.045	< 0.080		
Barium (Ba)		0.32	< 1.0		
Beryllium (Be)		< 0.01	< 0.020		
Bismuth (Bi)		0.010	< 2.0		
Cadmium (Cd)		0.020	< 0.065		
Lead (Pb)		0.24	< 0.80		
Mercury (Hg)		17	< 0.80		
Platinum (Pt)		< 0.003	< 0.005		
Thallium (Tl)		0.001	< 0.002		
Thorium (Th)		< 0.001	< 0.002		
Uranium (U)		0.005	< 0.060		
Nickel (Ni)		0.36	< 0.20		
Silver (Ag)		0.02	< 0.08		
Tin (Sn)		0.03	< 0.30		
Titanium (Ti)		0.20	< 0.60		
Total Toxic Representation					

ESSENTIAL AND OTHER ELEMENTS

		RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 2.5 th 16 th 50 th 84 th 97.5 th				
Calcium (Ca)		356	200 - 750					
Magnesium (Mg)		49	25 - 75					
Sodium (Na)		23	20 - 180					
Potassium (K)		21	9 - 80					
Copper (Cu)		12	11 - 30					
Zinc (Zn)		230	130 - 200					
Manganese (Mn)		0.18	0.08 - 0.50					
Chromium (Cr)		0.41	0.40 - 0.70					
Vanadium (V)		0.023	0.018 - 0.065					
Molybdenum (Mo)		0.029	0.025 - 0.060					
Boron (B)		2.0	0.40 - 3.0					
Iodine (I)		1.2	0.25 - 1.8					
Lithium (Li)		< 0.004	0.007 - 0.020					
Phosphorus (P)		173	150 - 220					
Selenium (Se)		0.99	0.70 - 1.2					
Strontium (Sr)		0.76	0.30 - 3.5					
Sulfur (S)		44800	44000 - 50000					
Cobalt (Co)		0.004	0.004 - 0.020					
Iron (Fe)		5.0	7.0 - 16					
Germanium (Ge)		0.029	0.030 - 0.040					
Rubidium (Rb)		0.028	0.011 - 0.12					
Zirconium (Zr)		0.37	0.020 - 0.44					

SPECIMEN DATA

COMMENTS:

Date Collected: 11/06/2012
Date Received: 11/13/2012
Date Completed: 11/14/2012
Methodology: ICP/MS

Sample Size: 0.19 g
Sample Type: Head
Hair Color: Brown
Treatment:
Shampoo:

RATIOS

ELEMENTS	RATIOS	RANGE
Ca/Mg	7.27	4 - 30
Ca/P	2.06	0.8 - 8
Na/K	1.1	0.5 - 10
Zn/Cu	19.2	4 - 20
Zn/Cd	> 999	> 800



PATIENT: Number 762
 follow up
 SEX: Male
 AGE: 52

This Hair Test was made after 105 DMSA+ALA days-on during a 7+ months period.

Toxic & Essential Elements; Hair

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 th 95 th
Aluminum (Al)	2.3	< 7.0	
Antimony (Sb)	0.011	< 0.066	
Arsenic (As)	0.020	< 0.080	
Barium (Ba)	0.57	< 1.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	0.007	< 2.0	
Cadmium (Cd)	< 0.009	< 0.065	
Lead (Pb)	0.40	< 0.80	
Mercury (Hg)	2.5	< 0.80	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	< 0.001	< 0.002	
Thorium (Th)	< 0.001	< 0.002	
Uranium (U)	0.005	< 0.060	
Nickel (Ni)	0.12	< 0.20	
Silver (Ag)	0.02	< 0.08	
Tin (Sn)	0.04	< 0.30	
Titanium (Ti)	0.29	< 0.60	
Total Toxic Representation			

ESSENTIAL AND OTHER ELEMENTS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 2.5 th 16 th 50 th 84 th 97.5 th
Calcium (Ca)	400	200- 750	
Magnesium (Mg)	45	25- 75	
Sodium (Na)	28	20- 180	
Potassium (K)	13	9- 80	
Copper (Cu)	11	11- 30	
Zinc (Zn)	330	130- 200	
Manganese (Mn)	0.18	0.08- 0.50	
Chromium (Cr)	0.33	0.40- 0.70	
Vanadium (V)	0.050	0.018- 0.065	
Molybdenum (Mo)	0.029	0.025- 0.060	
Boron (B)	0.91	0.40- 3.0	
Iodine (I)	0.94	0.25- 1.8	
Lithium (Li)	< 0.004	0.007- 0.020	
Phosphorus (P)	164	150- 220	
Selenium (Se)	0.99	0.70- 1.2	
Strontium (Sr)	1.1	0.30- 3.5	
Sulfur (S)	49300	44000- 50000	
Cobalt (Co)	0.007	0.004- 0.020	
Iron (Fe)	5.9	7.0- 16	
Germanium (Ge)	0.030	0.030- 0.040	
Rubidium (Rb)	0.022	0.011- 0.12	
Zirconium (Zr)	0.11	0.020- 0.44	

SPECIMEN DATA		RATIOS	
COMMENTS:		ELEMENTS	RATIOS
Date Collected: 07/19/2013		Ca/Mg	8.89
Date Received: 07/22/2013		Ca/P	2.44
Date Completed: 07/23/2013		Na/K	2.15
Methodology: ICP/MS		Zn/Cu	30
Sample Size: 0.199 g	Sample Type: Head	Zn/Cd	> 999
Hair Color: Brown	Treatment:		
Shampoo:			
		RANGE	
		4- 30	
		0.8- 8	
		0.5- 10	
		4- 20	
		> 800	

Health history for hair test 762

1. What are your current symptoms and health history?

Lifelong asthma and eczema since early childhood (1-2 years old), early coronary problems (at 42 years old), mild panic disorder, anxiety, poor sleep

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

Had 5-6 amalgams since childhood. Were redone 10-15 years ago, then 6 years ago. All were removed completely May 2012 without proper care

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

Amalgams completely removed and substituted with porcelain

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

Mother had lots of amalgam work done before pregnancy. She had a miscarriage with first child, then came me with lots of difficulty during pregnancy. Could have been a miscarriage too.

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

I had all my typical vaccines at that time (early sixties in Switzerland)

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

Lots of supplements and medications (e.g. Omega 3 DHA/EPA, Curcumin, L-Carnitine, D3, Resveratrol, Green Tea extract, multivitamins, milk thistle, Vit K, Aspirin 325 mgs, Rosuvastatin 10 mgs, Ramipril 10 mgs, Niacin Slow Release 1.5 grs)

7. What is your age, height and weight?

I'm 52, 5 feet 10 inches, 190 pounds

8. Other information you feel may be relevant?

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

Caracas – Venezuela (have lived here for 48 years)