

Toxic & Essential Elements; Hair

TOXIC METALS				PERCENTILE	
		RESULT µg/g	REFERENCE INTERVAL	68 th	95 th
Aluminum	(Al)	5.6	< 7.0		
Antimony	(Sb)	0.012	< 0.066		
Arsenic	(As)	0.069	< 0.080		
Barium	(Ba)	5.0	< 1.0		
Beryllium	(Be)	< 0.01	< 0.020		
Bismuth	(Bi)	< 0.002	< 2.0		
Cadmium	(Cd)	0.009	< 0.065		
Lead	(Pb)	1.2	< 0.80		
Mercury	(Hg)	0.82	< 0.80		
Platinum	(Pt)	< 0.003	< 0.005		
Thallium	(Tl)	< 0.001	< 0.002		
Thorium	(Th)	< 0.001	< 0.002		
Uranium	(U)	0.006	< 0.060		
Nickel	(Ni)	0.39	< 0.20		
Silver	(Ag)	0.03	< 0.08		
Tin	(Sn)	0.26	< 0.30		
Titanium	(Ti)	0.46	< 0.60		
Total Toxic Representation					

ESSENTIAL AND OTHER ELEMENTS				PERCENTILE				
		RESULT µg/g	REFERENCE INTERVAL	2.5 th	16 th	50 th	84 th	97.5 th
Calcium	(Ca)	1240	200- 750					
Magnesium	(Mg)	190	25- 75					
Sodium	(Na)	32	20- 180					
Potassium	(K)	7	9- 80					
Copper	(Cu)	12	11- 30					
Zinc	(Zn)	170	130- 200					
Manganese	(Mn)	0.16	0.08- 0.50					
Chromium	(Cr)	0.44	0.40- 0.70					
Vanadium	(V)	0.13	0.038- 0.065					
Molybdenum	(Mo)	0.025	0.025- 0.060					
Boron	(B)	0.63	0.40- 3.0					
Iodine	(I)	0.63	0.25- 1.8					
Lithium	(Li)	0.004	0.007- 0.020					
Phosphorus	(P)	159	150- 220					
Selenium	(Se)	0.53	0.70- 1.2					
Strontium	(Sr)	12	0.30- 3.5					
Sulfur	(S)	48600	44000- 50000					
Cobalt	(Co)	0.006	0.004- 0.020					
Iron	(Fe)	8.3	7.0- 16					
Germanium	(Ge)	0.033	0.030- 0.040					
Rubidium	(Rb)	0.007	0.011- 0.12					
Zirconium	(Zr)	< 0.007	0.020- 0.44					

SPECIMEN DATA

RATIOS

COMMENTS:

Date Collected: 06/15/2018
Date Received: 08/02/2018
Date Completed: 08/03/2018
Methodology: ICP/MS

Sample Size: 0.201 g
Sample Type: Head
Hair Color: Blond
Treatment:
Shampoo: Organic

ELEMENTS	RATIOS	RANGE
Ca/Mg	6.53	4- 30
Ca/P	7.8	0.8- 8
Na/K	4.57	0.5- 10
Zn/Cu	14.2	4- 20
Zn/Cd	> 999	> 8000

Toxic & Essential Elements; Hair

TOXIC METALS					
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE		
			68 th		95 th
Aluminum (Al)	3.8	< 7.0			
Antimony (Sb)	0.010	< 0.066			
Arsenic (As)	0.066	< 0.080			
Barium (Ba)	7.0	< 1.0			
Beryllium (Be)	< 0.01	< 0.020			
Bismuth (Bi)	< 0.002	< 2.0			
Cadmium (Cd)	< 0.009	< 0.065			
Lead (Pb)	0.40	< 0.80			
Mercury (Hg)	1.8	< 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)	0.24	< 0.20			
Silver (Ag)	0.05	< 0.08			
Tin (Sn)	0.34	< 0.30			
Titanium (Ti)	0.34	< 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)	2100	200- 750					
Magnesium (Mg)	310	25- 75					
Sodium (Na)	25	20- 180					
Potassium (K)	11	9- 80					
Copper (Cu)	11	11- 30					
Zinc (Zn)	170	130- 200					
Manganese (Mn)	0.26	0.08- 0.50					
Chromium (Cr)	0.36	0.40- 0.70					
Vanadium (V)	0.021	0.018- 0.065					
Molybdenum (Mo)	0.021	0.025- 0.060					
Boron (B)	0.39	0.40- 3.0					
Iodine (I)	0.63	0.25- 1.8					
Lithium (Li)	0.008	0.007- 0.020					
Phosphorus (P)	158	150- 220					
Selenium (Se)	0.66	0.70- 1.2					
Strontium (Sr)	16	0.30- 3.5					
Sulfur (S)	45200	44000- 50000					
Cobalt (Co)	0.013	0.004- 0.020					
Iron (Fe)	13	7.0- 16					
Germanium (Ge)	0.032	0.030- 0.040					
Rubidium (Rb)	0.013	0.011- 0.12					
Zirconium (Zr)	0.010	0.020- 0.44					

SPECIMEN DATA		RATIOS		
COMMENTS:		ELEMENTS	RATIOS	RANGE
Date Collected: 10/18/2015	Sample Size: 0.199 g	Ca/Mg	6.77	4- 30
Date Received: 10/29/2015	Sample Type: Head	Ca/P	13.3	0.8- 8
Date Completed: 10/31/2015	Hair Color: Blond	Na/K	2.27	0.5- 10
Methodology: ICP/MS	Treatment:	Zn/Cu	15.5	4- 20
	Shampoo: Organic	Zn/Cd	> 999	> 800

Toxic & Essential Elements; Hair

TOXIC METALS					
		RESULT µg/g	REFERENCE INTERVAL	PERCENTILE	
				68 th	95 th
Aluminum	(Al)	3.6	< 2.5		
Antimony	(Sb)	< 0.01	< 0.048		
Arsenic	(As)	0.098	< 0.085		
Barium	(Ba)	0.96	< 2.5		
Beryllium	(Be)	< 0.01	< 0.028		
Bismuth	(Bi)	0.005	< 2.5		
Cadmium	(Cd)	0.022	< 0.005		
Lead	(Pb)	0.52	< 0.20		
Mercury	(Hg)	3.9	< 0.40		
Platinum	(Pt)	< 0.003	> 0.008		
Thallium	(Tl)	< 0.001	< 0.002		
Thorium	(Th)	< 0.001	< 0.002		
Uranium	(U)	0.034	> 0.080		
Nickel	(Ni)	0.25	< 0.25		
Silver	(Ag)	0.05	< 0.00		
Tin	(Sn)	0.18	< 0.10		
Titanium	(Ti)	0.28	> 0.40		
Total Toxic Representation					

ESSENTIAL AND OTHER ELEMENTS								
		RESULT µg/g	REFERENCE INTERVAL	PERCENTILE				
				2.5 th	10 th	50 th	90 th	97.5 th
Calcium	(Ca)	463	300- 350					
Magnesium	(Mg)	150	25- 70					
Sodium	(Na)	36	30- 140					
Potassium	(K)	22	5- 60					
Copper	(Cu)	11	20- 30					
Zinc	(Zn)	140	120- 200					
Manganese	(Mn)	0.07	0.28- 0.30					
Chromium	(Cr)	0.37	0.40- 0.70					
Vanadium	(V)	0.028	0.018- 0.033					
Molybdenum	(Mo)	0.030	0.028- 0.090					
Boron	(B)	1.3	0.30- 1.0					
Iodine	(I)	0.85	0.25- 1.5					
Lithium	(Li)	0.009	0.007- 0.020					
Phosphorus	(P)	144	180- 220					
Selenium	(Se)	0.70	0.30- 0.5					
Strontium	(Sr)	3.2	0.30- 3.5					
Sulfur	(S)	46700	46000- 50000					
Cobalt	(Co)	0.007	0.004- 0.020					
Iron	(Fe)	8.0	7.0- 18					
Germanium	(Ge)	0.026	0.020- 0.040					
Rubidium	(Rb)	0.028	0.011- 0.18					
Zirconium	(Zr)	0.018	0.008- 0.04					

SPECIMEN DATA		RATIOS		
COMMENTS:		ELEMENTS	RATIOS	RANGE
Date Collected: 04/23/2014	Sample Size: 0.199 g	Ca/Mg	3.09	4- 10
Date Received: 05/07/2014	Sample Type: <i>Head</i>	Ca/P	3.22	1.5- 5
Date Completed: 05/10/2014	Hair Color:	Na/K	1.64	0.5- 10
Methodology: ICP/MS	Treatment:	Zn/Cu	12.7	8- 20
	Shampoo: <i>Organic</i>	Zn/Cd	> 999	< 200

Hair Test 984

1) What are your current symptoms and health history?

- still photosensitive, less frequent migranes now of reduced intensity, more general energy, somewhat sensitive to exercise and fatigue which provoke redistribution symptoms.

2) Dental history (wisdom teeth removed? First root canal placed? Braces? First amalgam etc...)

15 amalgams in adolescence. Several were redone uncleanly 8 years ago creating major symptoms.

3) What dental work do you currently have in place? What part of the dental cleanup have you completed?

All amalgams removed cleanly, main work finished in Sept 2013

A crown was replaced in Jan 2013 and amalgam cleanly removed from below it.

Three months FDC with DMPS

Four months FDC with ALA and DMSA

Hair test 984 was done at this stage.

Three more months FDC with ALA and DMSA

Two months with ALA only. Now at 25mg/3hrs, total of 40 rounds.

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

Unknown

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

Flu, Tetanus, Yellow fever 20 years ago

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

Vit C 500mg 4-5 times per day (1000mg on round)

Vit E 800 IU morning

Zinc 50mg morning

Magnesium 250mg morning

Selenium 100ug morning (200ug on round)

Fish oil, occasional Taurine

Occasional ALA rounds at 25mg

7) What is your age, height and weight?

58 years old, 1m80, 55kg

8) Other information you feel may be relevant?

I became intolerant to even the smallest doses of DMSA and DMPS

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

New Caledonia, South Pacific