



SEX: Female
 DOB: 07/27/1965
 AGE: 54

Toxic & Essential Elements; Hair

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 th 95 th
Aluminum (Al)	3.4	< 7.0	
Antimony (Sb)	0.026	< 0.050	
Arsenic (As)	0.017	< 0.060	
Barium (Ba)	2.9	< 2.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	< 0.002	< 2.0	
Cadmium (Cd)	0.061	< 0.050	
Lead (Pb)	1.6	< 0.60	
Mercury (Hg)	0.79	< 0.80	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	0.005	< 0.002	
Thorium (Th)	< 0.001	< 0.002	
Uranium (U)	0.003	< 0.060	
Nickel (Ni)	0.14	< 0.30	
Silver (Ag)	2.0	< 0.15	
Tin (Sn)	0.36	< 0.30	
Titanium (Ti)	0.29	< 0.70	
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)	903	300- 1200					
Magnesium (Mg)	170	35- 120					
Sodium (Na)	370	20- 250					
Potassium (K)	63	8- 75					
Copper (Cu)	15	11- 37					
Zinc (Zn)	2400	140- 220					
Manganese (Mn)	1.1	0.08- 0.60					
Chromium (Cr)	0.34	0.40- 0.65					
Vanadium (V)	0.029	0.018- 0.065					
Molybdenum (Mo)	0.012	0.020- 0.050					
Boron (B)	0.97	0.25- 1.5					
Iodine (I)	0.84	0.25- 1.8					
Lithium (Li)	0.021	0.007- 0.020					
Phosphorus (P)	135	150- 220					
Selenium (Se)	1.2	0.55- 1.1					
Strontium (Sr)	4.5	0.50- 7.6					
Sulfur (S)	46100	44000- 50000					
Cobalt (Co)	0.058	0.005- 0.040					
Iron (Fe)	10	7.0- 16					
Germanium (Ge)	0.033	0.030- 0.040					
Rubidium (Rb)	0.056	0.007- 0.096					
Zirconium (Zr)	0.021	0.020- 0.42					

SPECIMEN DATA		RATIOS		
COMMENTS:		ELEMENTS	RATIOS	RANGE
Date Collected:	Sample Size: 0.202 g	Ca/Mg	5.31	4- 30
Date Received: 09/09/2019	Sample Type: Head	Ca/P	6.69	1- 12
Date Reported: 09/12/2019	Hair Color:	Na/K	5.87	0.5- 10
Methodology: ICP/MS	Treatment:	Zn/Cu	160	4- 20
	Shampoo:	Zn/Cd	> 999	> 800



SEX: Female
AGE: 53

Toxic & Essential Elements; Hair

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 th 95 th
Aluminum (Al)	3.8	< 7.0	
Antimony (Sb)	0.024	< 0.050	
Arsenic (As)	0.017	< 0.060	
Barium (Ba)	3.2	< 2.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	0.008	< 2.0	
Cadmium (Cd)	0.051	< 0.050	
Lead (Pb)	0.95	< 0.60	
Mercury (Hg)	0.82	< 0.80	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	0.005	< 0.002	
Thorium (Th)	0.001	< 0.002	
Uranium (U)	0.008	< 0.060	
Nickel (Ni)	0.18	< 0.30	
Silver (Ag)	0.71	< 0.15	
Tin (Sn)	0.97	< 0.30	
Titanium (Ti)	0.42	< 0.70	
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)	833	300- 1200					
Magnesium (Mg)	140	35- 120					
Sodium (Na)	110	20- 250					
Potassium (K)	12	8- 75					
Copper (Cu)	13	11- 37					
Zinc (Zn)	1800	140- 220					
Manganese (Mn)	0.63	0.08- 0.60					
Chromium (Cr)	0.35	0.40- 0.65					
Vanadium (V)	0.035	0.018- 0.065					
Molybdenum (Mo)	0.026	0.020- 0.050					
Boron (B)	0.99	0.25- 1.5					
Iodine (I)	2.4	0.25- 1.8					
Lithium (Li)	0.016	0.007- 0.020					
Phosphorus (P)	151	150- 220					
Selenium (Se)	0.77	0.55- 1.1					
Strontium (Sr)	4.6	0.50- 7.6					
Sulfur (S)	46400	44000- 50000					
Cobalt (Co)	0.029	0.005- 0.040					
Iron (Fe)	13	7.0- 16					
Germanium (Ge)	0.033	0.030- 0.040					
Rubidium (Rb)	0.022	0.007- 0.096					
Zirconium (Zr)	0.082	0.020- 0.42					

SPECIMEN DATA		RATIOS		
COMMENTS:		ELEMENTS	RATIOS	RANGE
Date Collected: 09/01/2018	Sample Size: 0.2 g	Ca/Mg	5.95	4- 30
Date Received: 10/19/2018	Sample Type: Head	Ca/P	5.52	1- 12
Date Completed: 10/22/2018	Hair Color: Brown	Na/K	9.17	0.5- 10
Methodology: ICP/MS	Treatment:	Zn/Cu	138	4- 20
	Shampoo: Shea Moisture	Zn/Cd	> 999	> 800



SEX: Female
AGE: 51

Toxic & Essential Elements; Hair

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 th 95 th
Aluminum (Al)	14	< 7.0	
Antimony (Sb)	0.024	< 0.050	
Arsenic (As)	0.029	< 0.060	
Barium (Ba)	2.2	< 2.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	0.004	< 2.0	
Cadmium (Cd)	0.038	< 0.050	
Lead (Pb)	0.45	< 0.60	
Mercury (Hg)	0.64	< 0.80	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	0.004	< 0.002	
Thorium (Th)	0.001	< 0.002	
Uranium (U)	0.006	< 0.060	
Nickel (Ni)	0.12	< 0.30	
Silver (Ag)	0.59	< 0.15	
Tin (Sn)	0.24	< 0.30	
Titanium (Ti)	21	< 0.70	
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)	711	300- 1200					
Magnesium (Mg)	250	35- 120					
Sodium (Na)	52	20- 250					
Potassium (K)	24	8- 75					
Copper (Cu)	13	11- 37					
Zinc (Zn)	750	140- 220					
Manganese (Mn)	0.53	0.08- 0.60					
Chromium (Cr)	0.37	0.40- 0.65					
Vanadium (V)	0.032	0.018- 0.065					
Molybdenum (Mo)	0.032	0.020- 0.050					
Boron (B)	1.5	0.25- 1.5					
Iodine (I)	1.3	0.25- 1.8					
Lithium (Li)	0.013	0.007- 0.020					
Phosphorus (P)	145	150- 220					
Selenium (Se)	0.87	0.55- 1.1					
Strontium (Sr)	4.3	0.50- 7.6					
Sulfur (S)	47300	44000- 50000					
Cobalt (Co)	0.033	0.005- 0.040					
Iron (Fe)	12	7.0- 16					
Germanium (Ge)	0.033	0.030- 0.040					
Rubidium (Rb)	0.029	0.007- 0.096					
Zirconium (Zr)	0.21	0.020- 0.42					

SPECIMEN DATA		RATIOS		
COMMENTS:		ELEMENTS	RATIOS	RANGE
Date Collected: 05/14/2017	Sample Size: 0.202 g	Ca/Mg	2.84	4- 30
Date Received: 05/18/2017	Sample Type: Head	Ca/P	4.9	1- 12
Date Completed: 05/20/2017	Hair Color: Brown	Na/K	2.17	0.5- 10
Methodology: ICP/MS	Treatment: Dye	Zn/Cu	57.7	4- 20
	Shampoo: Earth Science	Zn/Cd	> 999	> 800

Health history for hair test 1393

1) What are your current symptoms and health history?

Have always had slow thyroid (not clinically hypo). Grave's Disease in Feb (very high T3) but was able to treat holistically and be in remission after five months).

Mostly I feel well. Though pretty active sympathetic nervous system. The only physical symptoms I notice slightly swollen finger joints in the morning some congestions. (I have shown a mold reaction on testing and some food sensitivity to primarily eggs and dairy). My genetics are not good for detoxing.

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

Wisdom teeth removed. (Mercury amalgams removed long time ago, but I believe in the era before we were concerned about them.) Braces for for years.

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

Several crowns.

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)?

General U.S. vaccinations. Only one flu shot.

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

Holistic Heal multi-vitamin. Lots of Herbs. NAC, Glutathione. Selenium. Magnesium. Colloidal silver, Probiotic, others. (Also a course of candida supplements)

7) Other information you feel may be relevant?

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

Lived in San Francisco for 30 years.