



SEX: Male
AGE: 34

Toxic & Essential Elements; Hair

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 th 95 th
Aluminum (Al)	1.8	< 7.0	
Antimony (Sb)	0.024	< 0.066	
Arsenic (As)	0.032	< 0.080	
Barium (Ba)	0.38	< 1.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	< 0.002	< 2.0	
Cadmium (Cd)	< 0.009	< 0.065	
Lead (Pb)	0.12	< 0.80	
Mercury (Hg)	1.0	< 0.80	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	< 0.001	< 0.002	
Thorium (Th)	< 0.001	< 0.002	
Uranium (U)	0.009	< 0.060	
Nickel (Ni)	0.13	< 0.20	
Silver (Ag)	0.02	< 0.08	
Tin (Sn)	0.04	< 0.30	
Titanium (Ti)	0.28	< 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)	321	200- 750			
Magnesium (Mg)	40	25- 75			
Sodium (Na)	9	20- 180			
Potassium (K)	7	9- 80			
Copper (Cu)	44	11- 30			
Zinc (Zn)	180	130- 200			
Manganese (Mn)	0.09	0.08- 0.50			
Chromium (Cr)	0.65	0.40- 0.70			
Vanadium (V)	0.018	0.018- 0.065			
Molybdenum (Mo)	0.026	0.025- 0.060			
Boron (B)	1.1	0.40- 3.0			
Iodine (I)	0.63	0.25- 1.8			
Lithium (Li)	< 0.004	0.007- 0.020			
Phosphorus (P)	150	150- 220			
Selenium (Se)	0.56	0.70- 1.2			
Strontium (Sr)	0.59	0.30- 3.5			
Sulfur (S)	47400	44000- 50000			
Cobalt (Co)	0.005	0.004- 0.020			
Iron (Fe)	8.0	7.0- 16			
Germanium (Ge)	0.031	0.030- 0.040			
Rubidium (Rb)	0.007	0.011- 0.12			
Zirconium (Zr)	0.046	0.020- 0.44			

SPECIMEN DATA		RATIOS		
COMMENTS:		ELEMENTS	RATIOS	RANGE
Date Collected: 03/11/2017		Ca/Mg	8.03	4 - 30
Date Received: 03/17/2017		Ca/P	2.14	0.8 - 8
Date Completed: 03/20/2017		Na/K	1.29	0.5 - 10
Methodology: ICP/MS		Zn/Cu	4.09	4 - 20
Sample Size: 0.204 g		Zn/Cd	> 999	> 800
Sample Type: Head				
Hair Color: Brown				
Treatment:				
Shampoo: 2chic				



AGE: 36

Toxic & Essential Elements; Hair

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 th 95 th
Aluminum (Al)	1.6	< 7.0	
Antimony (Sb)	0.022	< 0.066	
Arsenic (As)	0.032	< 0.080	
Barium (Ba)	0.46	< 1.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	< 0.002	< 2.0	
Cadmium (Cd)	< 0.009	< 0.065	
Lead (Pb)	0.29	< 0.80	
Mercury (Hg)	0.11	< 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)	0.03	< 0.20	
Silver (Ag)	0.02	< 0.08	
Tin (Sn)	0.11	< 0.30	
Titanium (Ti)	0.37	< 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)	366	200- 750			
Magnesium (Mg)	62	25- 75			
Sodium (Na)	52	20- 180			
Potassium (K)	11	9- 80			
Copper (Cu)	21	11- 30			
Zinc (Zn)	180	130- 200			
Manganese (Mn)	0.05	0.08- 0.50			
Chromium (Cr)	0.34	0.40- 0.70			
Vanadium (V)	0.013	0.018- 0.065			
Molybdenum (Mo)	0.027	0.025- 0.060			
Boron (B)	3.3	0.40- 3.0			
Iodine (I)	0.26	0.25- 1.8			
Lithium (Li)	0.005	0.007- 0.020			
Phosphorus (P)	149	150- 220			
Selenium (Se)	0.57	0.70- 1.2			
Strontium (Sr)	0.95	0.30- 3.5			
Sulfur (S)	46000	44000- 50000			
Cobalt (Co)	0.006	0.004- 0.020			
Iron (Fe)	5.8	7.0- 16			
Germanium (Ge)	0.033	0.030- 0.040			
Rubidium (Rb)	0.010	0.011- 0.12			
Zirconium (Zr)	0.018	0.020- 0.44			

SPECIMEN DATA		RATIOS	
COMMENTS:		ELEMENTS	RATIOS
Date Collected: 11/11/2018		Ca/Mg	5.9
Date Received: 11/19/2018		Ca/P	2.46
Date Completed: 11/23/2018		Na/K	4.73
Methodology: ICP/MS		Zn/Cu	8.57
Sample Size: 0.201 g	Sample Type: Head	Zn/Cd	> 999
Hair Color: Brown	Treatment:		
Shampoo: Soap			
		RANGE	
		4- 30	
		0.8- 8	
		0.5- 10	
		4- 20	
		> 800	



SEX: Male
AGE: 35

Toxic & Essential Elements; Hair

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 th 95 th
Aluminum (Al)	2.4	< 7.0	
Antimony (Sb)	0.021	< 0.066	
Arsenic (As)	0.029	< 0.080	
Barium (Ba)	0.44	< 1.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	< 0.002	< 2.0	
Cadmium (Cd)	< 0.009	< 0.065	
Lead (Pb)	0.71	< 0.80	
Mercury (Hg)	0.30	< 0.80	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	< 0.001	< 0.002	
Thorium (Th)	< 0.001	< 0.002	
Uranium (U)	0.008	< 0.060	
Nickel (Ni)	0.12	< 0.20	
Silver (Ag)	0.01	< 0.08	
Tin (Sn)	0.03	< 0.30	
Titanium (Ti)	0.31	< 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)	489	200- 750			
Magnesium (Mg)	53	25- 75			
Sodium (Na)	9	20- 180			
Potassium (K)	11	9- 80			
Copper (Cu)	58	11- 30			
Zinc (Zn)	180	130- 200			
Manganese (Mn)	0.07	0.08- 0.50			
Chromium (Cr)	0.34	0.40- 0.70			
Vanadium (V)	0.020	0.018- 0.065			
Molybdenum (Mo)	0.024	0.025- 0.060			
Boron (B)	2.3	0.40- 3.0			
Iodine (I)	0.17	0.25- 1.8			
Lithium (Li)	< 0.004	0.007- 0.020			
Phosphorus (P)	172	150- 220			
Selenium (Se)	0.62	0.70- 1.2			
Strontium (Sr)	0.74	0.30- 3.5			
Sulfur (S)	48700	44000- 50000			
Cobalt (Co)	0.002	0.004- 0.020			
Iron (Fe)	5.6	7.0- 16			
Germanium (Ge)	0.036	0.030- 0.040			
Rubidium (Rb)	0.008	0.011- 0.12			
Zirconium (Zr)	0.029	0.020- 0.44			

SPECIMEN DATA		RATIOS		
COMMENTS:		ELEMENTS	RATIOS	RANGE
Date Collected: 08/01/2018		Ca/Mg	9.23	4 - 30
Date Received: 08/09/2018		Ca/P	2.84	0.8 - 8
Date Completed: 08/10/2018		Na/K	0.818	0.5 - 10
Methodology: ICP/MS		Zn/Cu	3.1	4 - 20
Sample Size: 0.204 g		Zn/Cd	> 999	> 800
Sample Type: Head				
Hair Color: Brown				
Treatment:				
Shampoo: Body Shop				



SEX: Male
AGE: 35

Toxic & Essential Elements; Hair

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 th 95 th
Aluminum (Al)	1.1	< 7.0	
Antimony (Sb)	0.011	< 0.066	
Arsenic (As)	0.042	< 0.080	
Barium (Ba)	0.29	< 1.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	< 0.002	< 2.0	
Cadmium (Cd)	< 0.009	< 0.065	
Lead (Pb)	0.34	< 0.80	
Mercury (Hg)	0.46	< 0.80	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	< 0.001	< 0.002	
Thorium (Th)	< 0.001	< 0.002	
Uranium (U)	0.008	< 0.060	
Nickel (Ni)	0.05	< 0.20	
Silver (Ag)	0.01	< 0.08	
Tin (Sn)	0.05	< 0.30	
Titanium (Ti)	0.15	< 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)	326	200- 750			
Magnesium (Mg)	41	25- 75			
Sodium (Na)	29	20- 180			
Potassium (K)	23	9- 80			
Copper (Cu)	38	11- 30			
Zinc (Zn)	190	130- 200			
Manganese (Mn)	0.05	0.08- 0.50			
Chromium (Cr)	0.36	0.40- 0.70			
Vanadium (V)	0.024	0.018- 0.065			
Molybdenum (Mo)	0.027	0.025- 0.060			
Boron (B)	5.1	0.40- 3.0			
Iodine (I)	0.91	0.25- 1.8			
Lithium (Li)	< 0.004	0.007- 0.020			
Phosphorus (P)	151	150- 220			
Selenium (Se)	0.70	0.70- 1.2			
Strontium (Sr)	0.61	0.30- 3.5			
Sulfur (S)	48000	44000- 50000			
Cobalt (Co)	0.002	0.004- 0.020			
Iron (Fe)	4.0	7.0- 16			
Germanium (Ge)	0.034	0.030- 0.040			
Rubidium (Rb)	0.013	0.011- 0.12			
Zirconium (Zr)	< 0.007	0.020- 0.44			

SPECIMEN DATA		RATIOS	
COMMENTS:		ELEMENTS	RATIOS
Date Collected: 01/11/2018		Ca/Mg	7.95
Date Received: 01/19/2018		Ca/P	2.16
Date Completed: 01/24/2018		Na/K	1.26
Methodology: ICP/MS		Zn/Cu	5
Sample Size: 0.199 g	Sample Type: Head	Zn/Cd	> 999
Hair Color:	Treatment:		
Shampoo: The Body Shop			
		RANGE	
		4- 30	
		0.8- 8	
		0.5- 10	
		4- 20	
		> 800	

1. What are your current symptoms and health history?

Depression, anxiety, insomnia, fatigue

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

Wisdom teeth removed about 10-15 years ago, had braces as a teenager

3. What dental work do you currently have in place? What part of the dental clean-up have you completed? I've had fillings but no mercury based fillings

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

Unsure

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

Unsure but have had a few vaccinations

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

2017-03-11 hair analysis: no supplements were taken

2018-01-24 and 2018-08-10: quite a few different supplements but no chelators, things like B vitamins, minerals, antioxidants

2018-11-23: Same as previous tests except while using a liquid mineral formula (Biopure microminerals) developed much worsening symptoms

7. What is your age, height and weight?

36, 183cm 65kg

9. Hornsby, Sydney, Australia