

Toxic & Essential Elements; Hair

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 th 95 th
Aluminum (Al)	1.7	< 7.0	
Antimony (Sb)	0.016	< 0.066	
Arsenic (As)	0.10	< 0.080	
Barium (Ba)	0.04	< 1.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	0.016	< 2.0	
Cadmium (Cd)	< 0.009	< 0.065	
Lead (Pb)	0.09	< 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)	0.004	< 0.060	
Nickel (Ni)	0.06	< 0.20	
Silver (Ag)	0.14	< 0.08	
Tin (Sn)	0.04	< 0.30	
Titanium (Ti)	0.32	< 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)	124	200- 750	
Magnesium (Mg)	45	25- 75	
Sodium (Na)	32	20- 180	
Potassium (K)	18	9- 80	
Copper (Cu)	7.9	11- 30	
Zinc (Zn)	190	130- 200	
Manganese (Mn)	0.05	0.08- 0.50	
Chromium (Cr)	0.53	0.40- 0.70	
Vanadium (V)	0.050	0.018- 0.065	
Molybdenum (Mo)	0.026	0.025- 0.060	
Boron (B)	4.3	0.40- 3.0	
Iodine (I)	0.32	0.25- 1.8	
Lithium (Li)	0.004	0.007- 0.020	
Phosphorus (P)	171	150- 220	
Selenium (Se)	0.79	0.70- 1.2	
Strontium (Sr)	0.39	0.30- 3.5	
Sulfur (S)	45900	44000- 50000	
Cobalt (Co)	0.003	0.004- 0.020	
Iron (Fe)	5.4	7.0- 16	
Germanium (Ge)	0.026	0.030- 0.040	
Rubidium (Rb)	0.013	0.011- 0.12	
Zirconium (Zr)	0.12	0.020- 0.44	
SPECIMEN DATA		RATIOS	
COMMENTS:		ELEMENTS	RATIOS
Date Collected: 7/12/2012	Sample Size: 0.202 g	Ca/Mg	2.76
Date Received: 7/21/2012	Sample Type: Head	Ca/P	0.725
Date Completed: 7/26/2012	Hair Color: Brown	Na/K	1.78
Methodology: ICP/MS	Treatment:	Zn/Cu	24.1
	Shampoo: System Professional	Zn/Cd	> 999
			RANGE
			4- 30
			0.8- 8
			0.5- 10
			4- 20
			> 800

Symptoms: weakness, exhaustion, a 'drained' feeling and slight headache at times, these can vary in intensity from mild to strong. I can also feel my face flushing red at these times of fatigue and after exercise sometimes. My eyes would also feel sore at times, a kind of strained feeling as if I would need to change my glasses but that would pass, and eye examinations would show that I did not need new lenses. Difficulty dealing with stress at times. I have experienced anxiety, irritability, restlessness and 'down' or dark feelings.

I had my first teeth extracted at around age 10, I think three teeth in all. I also have had amalgam fillings done in my teens, three or four amalgams at that time. More recently around 2004 I had five large amalgams done, one was quite large and deep and I had this removed in 2005 as it was causing a bad taste in my mouth and another dentist replaced it with a white filling. In 2010 I attended another dentist who filled the tooth with another white filling, he also provided cleaning of the teeth. He also filled another tooth with an amalgam.

I received vaccinations in childhood but do not know what they were. There was a vaccination for whooping cough that I did not receive. Supplements I took 3-6 months before hair test included vitamin C, Rhodiola, multi vitamin Pharmaton, Echinacea drops, CQ10, adrenergize, omega three capsules, magnesium, lysine. I am aged 35, Height: six foot one, Weight: 13 stone.

In terms of diet I have eaten a lot of canned food, including tuna in recent years. I also would occasionally get cravings for sugar.

Have lived most of my life in Spiddal, Co.Galway, Ireland.