



PATIENT: Number 534  
 SEX: Female  
 AGE: 7

## Toxic & Essential Elements; Hair

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 <sup>th</sup> 95 <sup>th</sup>
Aluminum (Al)	5.7	< 8.0	
Antimony (Sb)	0.019	< 0.066	
Arsenic (As)	0.015	< 0.060	
Barium (Ba)	4.0	< 1.5	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	< 0.002	< 2.0	
Cadmium (Cd)	0.042	< 0.070	
Lead (Pb)	0.86	< 0.80	
Mercury (Hg)	0.60	< 0.40	
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)	7.3	< 0.30	
Silver (Ag)	0.05	< 0.18	
Tin (Sn)	0.18	< 0.30	
Titanium (Ti)	0.61	< 0.70	
Total Toxic Representation			

ESSENTIAL AND OTHER ELEMENTS					
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 2.5 <sup>th</sup> 16 <sup>th</sup> 50 <sup>th</sup> 84 <sup>th</sup> 97.5 <sup>th</sup>		
Calcium (Ca)	1240	250- 800			
Magnesium (Mg)	350	25- 90			
Sodium (Na)	23	18- 180			
Potassium (K)	14	10- 90			
Copper (Cu)	52	11- 37			
Zinc (Zn)	170	120- 220			
Manganese (Mn)	0.53	0.08- 0.60			
Chromium (Cr)	0.42	0.40- 0.65			
Vanadium (V)	0.16	0.025- 0.10			
Molybdenum (Mo)	0.060	0.030- 0.090			
Boron (B)	0.80	0.30- 1.7			
Iodine (I)	1.2	0.25- 1.3			
Lithium (Li)	< 0.004	0.007- 0.020			
Phosphorus (P)	171	150- 220			
Selenium (Se)	0.79	0.70- 1.1			
Strontium (Sr)	2.6	0.37- 3.6			
Sulfur (S)	50500	44000- 51000			
Cobalt (Co)	0.046	0.005- 0.035			
Iron (Fe)	8.9	7.0- 16			
Germanium (Ge)	0.030	0.030- 0.040			
Rubidium (Rb)	0.018	0.008- 0.080			
Zirconium (Zr)	0.060	0.030- 0.40			

SPECIMEN DATA		RATIOS	
COMMENTS: results checked		ELEMENTS	RATIOS
Date Collected: 8/11/2011	Sample Size: 0.198 g	Ca/Mg	3.54
Date Received: 8/17/2011	Sample Type: Head	Ca/P	7.25
Date Completed: 8/20/2011	Hair Color:	Na/K	1.64
Methodology: ICP/MS	Treatment:	Zn/Cu	3.27
	Shampoo:	Zn/Cd	> 999
		RANGE	
			4- 30
			1- 12
			0.5- 10
			4- 20
			> 800

## Health history for hair test 534

Currently age 7

1. What are your current symptoms and health history? **Hair falling out in clumps, extremely thin nails with peeling nail beds, low blood sugar and severe mood swings/depression. Lack of focus despite ability - she is aware that she can't concentrate and it frustrates her. Very pale skin with dark circles under eyes (currently improving with Difflucan). Experienced two bouts of pneumonia following return to HK.**
2. Dental history (Wisdom teeth removed and when? Any other extractions. First root canal placed? Braces? First amalgam etc...) **None.**
3. What dental work do you currently have in place? What part of the dental clean-up have you completed? **None.**
4. What dentistry did your mother have at any time before or during pregnancy? **No work prior to pregnancy, however have at least 6 amalgams.**
5. What vaccinations have you had and when (including flu and especially travel shots)? **Minimally vaccinated. Oral Polio x 2, DTap x 2, and school mandated MMR at age 5 to which she (and her sister) had a very severe reaction. Was bedridden with fever and vomiting for nearly 2 weeks.**
6. Supplements and medications (including dosages) taken at time of hair test, or for the 3-6 months before the sample was taken? **Multi-vitamin, Vitamin C (500 mg x 3), Cod Liver Oil and EFA supplement, Probiotics. Homeopathy. Additionally, was treated (hospitalized) for pneumonia in June with multiple antibiotics.**
7. What is your age, height and weight? **7 years old, about 52 inches, 50 pounds.**
8. Other information you feel may be relevant? **She seemed to be "normal" until our return to HK in August 2010. Mother is Rh- and was administered Rhogam 2x during pregnancy. Like their brother, both girls are very bright, working significantly above grade level.**
9. What is your location – city & country (so that we can learn where certain toxins are more prevalent). **Born in NYC, lived in India for 3 years, Bahrain for 1 1/2 years, Hong Kong for 2 years, NYC for 7 months and returned to HK in August 2010.**