



<5-F H9GH.% ' -
 SEX: Female
 AGE: 8

Toxic & Essential Elements; Hair

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 th 95 th
Aluminum (Al)	1.7	< 8.0	
Antimony (Sb)	< 0.01	< 0.066	
Arsenic (As)	0.19	< 0.060	
Barium (Ba)	2.3	< 1.5	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	< 0.002	< 2.0	
Cadmium (Cd)	0.019	< 0.070	
Lead (Pb)	0.41	< 0.80	
Mercury (Hg)	0.53	< 0.40	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	< 0.001	< 0.002	
Thorium (Th)	< 0.001	< 0.002	
Uranium (U)	0.17	< 0.060	
Nickel (Ni)	0.08	< 0.30	
Silver (Ag)	0.03	< 0.18	
Tin (Sn)	0.03	< 0.30	
Titanium (Ti)	0.25	< 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)	639	250- 800	
Magnesium (Mg)	100	25- 90	
Sodium (Na)	16	18- 180	
Potassium (K)	3	10- 90	
Copper (Cu)	68	11- 37	
Zinc (Zn)	210	120- 220	
Manganese (Mn)	0.12	0.08- 0.60	
Chromium (Cr)	0.33	0.40- 0.65	
Vanadium (V)	1.1	0.025- 0.10	
Molybdenum (Mo)	0.042	0.030- 0.090	
Boron (B)	0.41	0.30- 1.7	
Iodine (I)	0.28	0.25- 1.3	
Lithium (Li)	0.006	0.007- 0.020	
Phosphorus (P)	156	150- 220	
Selenium (Se)	0.63	0.70- 1.1	
Strontium (Sr)	5.1	0.37- 3.6	
Sulfur (S)	47100	44000- 51000	
Cobalt (Co)	0.005	0.005- 0.035	
Iron (Fe)	6.3	7.0- 16	
Germanium (Ge)	0.035	0.030- 0.040	
Rubidium (Rb)	< 0.003	0.008- 0.080	
Zirconium (Zr)	0.042	0.030- 0.40	

SPECIMEN DATA		RATIOS		
COMMENTS:		ELEMENTS	RATIOS	RANGE
Date Collected: 12/27/2016	Sample Size: 0.2 g	Ca/Mg	6.39	4- 30
Date Received: 12/30/2016	Sample Type: Head	Ca/P	4.1	1- 12
Date Completed: 01/03/2017	Hair Color:	Na/K	5.33	0.5- 10
Methodology: ICP/MS	Treatment:	Zn/Cu	3.09	4- 20
	Shampoo:	Zn/Cd	> 999	> 800



SEXO: Female
 IDADE: 10

Elementos Tóxicos & Essenciais; Cabelo

METAIS TÓXICOS			
	RESULTADO µg/g	INTERVALO DE REFERÊNCIA	PORCENTAGEM 68 th 95 th
Alumínio (Al)	8.3	< 8.0	
Antimônio (Sb)	< 0.01	< 0.066	
Arsênio (As)	0.052	< 0.060	
Bário (Ba)	9.1	< 1.5	
Berílio (Be)	< 0.01	< 0.020	
Bismuto (Bi)	< 0.002	< 2.0	
Cádmio (Cd)	0.14	< 0.070	
Chumbo (Pb)	0.85	< 0.80	
Mercúrio (Hg)	0.29	< 0.40	
Platina (Pt)	< 0.003	< 0.005	
Tálio (Tl)	< 0.001	< 0.002	
Tório (Th)	0.001	< 0.002	
Urânio (U)	0.19	< 0.060	
Níquel (Ni)	0.22	< 0.30	
Prata (Ag)	0.29	< 0.18	
Estanho (Sn)	0.07	< 0.30	
Titânio (Ti)	0.27	< 0.70	
Indicação Total de Elementos Tóxicos			

ELEMENTOS ESSENCIAIS E OUTROS					
	RESULTADO µg/g	INTERVALO DE REFERÊNCIA	PORCENTAGEM 2.5 th 16 th 50 th 84 th 97.5 th		
Cálcio (Ca)	1770	250- 800			
Magnésio (Mg)	260	25- 90			
Sódio (Na)	68	18- 180			
Potássio (K)	10	10- 90			
Cobre (Cu)	180	11- 37			
Zinco (Zn)	210	120- 220			
Manganês (Mn)	0.51	0.08- 0.60			
Cromo (Cr)	0.38	0.40- 0.65			
Vanádio (V)	2.0	0.025- 0.10			
Molibdênio (Mo)	0.033	0.030- 0.090			
Boro (B)	1.5	0.30- 1.7			
Iodo (I)	0.53	0.25- 1.3			
Lítio (Li)	0.010	0.007- 0.020			
Fósforo (P)	121	150- 220			
Selênio (Se)	0.74	0.70- 1.1			
Estrôncio (Sr)	18	0.37- 3.6			
Enxofre (S)	48000	44000- 51000			
Cobalto (Co)	0.009	0.005- 0.035			
Ferro (Fe)	8.9	7.0- 16			
Germânio (Ge)	0.037	0.030- 0.040			
Rubídio (Rb)	0.015	0.008- 0.080			
Zircônio (Zr)	0.081	0.030- 0.40			

ESPÉCIME DADO		PROPORÇÃO		
Comentários:		ELEMENTOS	PROPORÇÃO	INTERVALO
Data de coleta: 02/07/2018		Ca/Mg	6.81	4- 30
Data de receita: 04/11/2018		Ca/P	14.6	1- 12
Data da análise: 04/13/2018		Na/K	6.8	0.5- 10
Metodologia: ICP/MS		Zn/Cu	1.17	4- 20
Peso da amostra: 0.2 g		Zn/Cd	> 999	> 800
Tipo: Head				
Cor de cabelo: Brown				
Preparação:				
Xampu:				

Health history for hair test XX (Updated February, 2018)

What are your current symptoms and health history?

- Some social withdrawal, but can get easily excited about other things, including anything having to do with her imaginary/fantasy world (e.g. a Ty's birthday)
- Delayed development and maturity (any friends tend to be 2 or 3 years her junior)
- Delayed speech, until GFCF diet and supplements introduced when she was 3.5 years old (since then her language development seems to progress at a normal speed, just always behind)
- Minor semantic/pragmatic issues (slower to understand plays on words, jokes, abstract thinking, etc.), sometimes takes things too literally, and sometimes doesn't understand situations (how to answer, what's expected, etc.)

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

- None of the above.
- Teeth came/come in slightly early for her age

What dental work do you currently have in place? What part of the dental clean-up have you completed?

- Wear removable braces while sleeping *only* (braces are mostly plastic with stainless steel wire around the top back molars and top front row teeth)(*Is this OK or should they not be used during rounds?*)

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

2 amalgams

What vaccinations have you had and when (including flu and especially travel shots)? NO vaccinations ever

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

At time of hair test: Round 30, DMPS 5mg, ALA 10mg

Natural Vitamin E 400 IU/day
Kirkman buffered Vitamin C (1-2 grams per day)
Zinc 75 mg/day
Magnesium 300-400mg/day
Molybdenum Glycinate 1 mg/day
Thorne ACE 100 mg/day average
Sunflower Lecithin 1.2 g/day
Phosphatidyl Serine Soy free 100mg/day
Added Attention 1 tbsp/day most days
Selenium 100 mcg/day
Silymarin 300 mg/day
Vitamin K-2 50 mcg/day
CoQ10 50-100mg/day

NOW B-50 Half a capsule total/day, split between breakfast and lunch
Carlson CLO super 100 gems (1 or 2 per day)
Mercola probiotics (1 or 2 per day)

What is your age, height and weight? 10 years old, 4' 5", 66 lbs.

Other information you feel may be relevant?

- Born by emergency cesarean with meconium, NOT flushed/not aspirated
- At 4 years old discovered food intolerances to food given as a baby, such as egg yolks and broccoli, and dairy
- Copper sulfate **was** used in our swimming pool until February, 2017 (did not add more but did not drain that water for following pool season of December 2017-February 2018)
- Page 117 of hair test book seems accurate: "Elevated hair copper is believed..... to increase spaciness, detachment from reality, and goes along with intelligent, creative childlike and artistic personality traits."
- Color of feces is usually darker brown, but occasionally light brown
- a 2011 hair test (when she was 3) from Trace elements showed high arsenic and even higher uranium, vanadium, and molybdenum; low copper
- Two Great Plains hair tests when she was 4 and 6 years old met NO counting rules; both showed arsenic in high red, uranium in mid-yellow, very high vanadium; at 6 years old also showed barium in yellow***
- a mercury thermometer broke in kitchen 4 or 5 years ago

What is your location – city & country (so that we can learn where certain toxins are more prevalent). Buenos Aires, Argentina