



PATIENT: Number 735  
 SEX: Female  
 AGE: 3

## Toxic & Essential Elements; Hair

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 <sup>th</sup> 95 <sup>th</sup>
Aluminum (Al)	4.8	< 8.0	
Antimony (Sb)	0.064	< 0.066	
Arsenic (As)	0.049	< 0.080	
Barium (Ba)	0.97	< 0.75	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	2.3	< 2.0	
Cadmium (Cd)	0.022	< 0.070	
Lead (Pb)	0.53	< 1.0	
Mercury (Hg)	0.04	< 0.40	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	< 0.001	< 0.002	
Thorium (Th)	0.001	< 0.002	
Uranium (U)	0.017	< 0.060	
Nickel (Ni)	0.18	< 0.30	
Silver (Ag)	0.03	< 0.20	
Tin (Sn)	0.20	< 0.30	
Titanium (Ti)	0.53	< 0.90	
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)	1010	140- 500			
Magnesium (Mg)	140	15- 45			
Sodium (Na)	82	18- 180			
Potassium (K)	28	10- 150			
Copper (Cu)	13	11- 24			
Zinc (Zn)	200	100- 190			
Manganese (Mn)	0.40	0.10- 0.50			
Chromium (Cr)	0.31	0.43- 0.70			
Vanadium (V)	0.025	0.030- 0.10			
Molybdenum (Mo)	0.058	0.050- 0.13			
Boron (B)	0.65	0.40- 3.5			
Iodine (I)	0.43	0.25- 1.3			
Lithium (Li)	0.007	0.007- 0.020			
Phosphorus (P)	133	150- 220			
Selenium (Se)	0.89	0.70- 1.1			
Strontium (Sr)	2.3	0.19- 2.0			
Sulfur (S)	48800	45500- 53000			
Cobalt (Co)	0.023	0.005- 0.030			
Iron (Fe)	12	7.0- 16			
Germanium (Ge)	0.028	0.030- 0.040			
Rubidium (Rb)	0.028	0.012- 0.16			
Zirconium (Zr)	0.38	0.030- 1.0			

SPECIMEN DATA		RATIOS	
<b>COMMENTS:</b>		ELEMENTS	RATIOS
Date Collected: 02/19/2013	Sample Size: 0.199 g	Ca/Mg	7.21
Date Received: 02/22/2013	Sample Type: Head	Ca/P	7.59
Date Completed: 02/26/2013	Hair Color: Brown	Na/K	2.93
Methodology: ICP/MS	Treatment:	Zn/Cu	15.4
	Shampoo: Aussie	Zn/Cd	> 999
		RANGE	
			4- 30
			1- 12
			0.5- 10
			4- 20
			> 800



PATIENT: Number 735 - follow up test  
 SEX: Female  
 AGE: 4

**Toxic & Essential Elements; Hair**

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 <sup>th</sup> 95 <sup>th</sup>
Aluminum (Al)	5.9	< 8.0	
Antimony (Sb)	0.025	< 0.066	
Arsenic (As)	0.048	< 0.080	
Barium (Ba)	0.52	< 0.75	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	3.3	< 2.0	
Cadmium (Cd)	0.014	< 0.070	
Lead (Pb)	0.62	< 1.0	
Mercury (Hg)	0.13	< 0.40	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	< 0.001	< 0.002	
Thorium (Th)	< 0.001	< 0.002	
Uranium (U)	0.016	< 0.060	
Nickel (Ni)	0.06	< 0.30	
Silver (Ag)	0.05	< 0.20	
Tin (Sn)	0.23	< 0.30	
Titanium (Ti)	0.73	< 0.90	
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)	445	140- 500			
Magnesium (Mg)	33	15- 45			
Sodium (Na)	43	18- 180			
Potassium (K)	14	10- 150			
Copper (Cu)	11	11- 24			
Zinc (Zn)	190	100- 190			
Manganese (Mn)	0.23	0.10- 0.50			
Chromium (Cr)	0.30	0.43- 0.70			
Vanadium (V)	0.031	0.030- 0.10			
Molybdenum (Mo)	0.078	0.050- 0.13			
Boron (B)	1.5	0.40- 3.5			
Iodine (I)	0.52	0.25- 1.3			
Lithium (Li)	< 0.004	0.007- 0.020			
Phosphorus (P)	163	150- 220			
Selenium (Se)	1.0	0.70- 1.1			
Strontium (Sr)	0.83	0.19- 2.0			
Sulfur (S)	45600	45500- 53000			
Cobalt (Co)	0.007	0.005- 0.030			
Iron (Fe)	11	7.0- 16			
Germanium (Ge)	0.023	0.030- 0.040			
Rubidium (Rb)	0.012	0.012- 0.16			
Zirconium (Zr)	0.13	0.030- 1.0			

SPECIMEN DATA		RATIOS		
<b>COMMENTS:</b>		ELEMENTS	RATIOS	RANGE
Date Collected: 11/08/2013	Sample Size: 0.193 g	Ca/Mg	13.5	4- 30
Date Received: 11/15/2013	Sample Type: Head	Ca/P	2.73	1- 12
Date Completed: 11/19/2013	Hair Color: Brown	Na/K	3.07	0.5- 10
Methodology: ICP/MS	Treatment:	Zn/Cu	17.3	4- 20
	Shampoo: Jason Naturals	Zn/Cd	> 999	> 800



HAIRTEST 735 follow-up  
 SEX: Female  
 AGE: 6

*Toxic & Essential Elements; Hair*

TOXIC METALS				
		RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 <sup>th</sup> 95 <sup>th</sup>
Aluminum (Al)		6.5	< 8.0	
Antimony (Sb)		0.12	< 0.066	
Arsenic (As)		0.065	< 0.060	
Barium (Ba)		0.87	< 1.5	
Beryllium (Be)		< 0.01	< 0.020	
Bismuth (Bi)		0.84	< 2.0	
Cadmium (Cd)		0.024	< 0.070	
Lead (Pb)		0.73	< 0.80	
Mercury (Hg)		0.04	< 0.40	
Platinum (Pt)		< 0.003	< 0.005	
Thallium (Tl)		0.001	< 0.002	
Thorium (Th)		0.002	< 0.002	
Uranium (U)		0.011	< 0.060	
Nickel (Ni)		0.09	< 0.30	
Silver (Ag)		0.08	< 0.18	
Tin (Sn)		0.43	< 0.30	
Titanium (Ti)		1.2	< 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)		363	250- 800		
Magnesium (Mg)		24	25- 90		
Sodium (Na)		160	18- 180		
Potassium (K)		69	10- 90		
Copper (Cu)		12	11- 37		
Zinc (Zn)		200	120- 220		
Manganese (Mn)		0.60	0.08- 0.60		
Chromium (Cr)		0.44	0.40- 0.65		
Vanadium (V)		0.059	0.025- 0.10		
Molybdenum (Mo)		0.076	0.030- 0.090		
Boron (B)		3.5	0.30- 1.7		
Iodine (I)		1.3	0.25- 1.3		
Lithium (Li)		0.016	0.007- 0.020		
Phosphorus (P)		140	150- 220		
Selenium (Se)		0.90	0.70- 1.1		
Strontium (Sr)		0.75	0.37- 3.6		
Sulfur (S)		45500	44000- 51000		
Cobalt (Co)		0.014	0.005- 0.035		
Iron (Fe)		9.5	7.0- 16		
Germanium (Ge)		0.034	0.030- 0.040		
Rubidium (Rb)		0.077	0.008- 0.080		
Zirconium (Zr)		0.049	0.030- 0.40		

SPECIMEN DATA		RATIOS	
<b>COMMENTS:</b>		<b>ELEMENTS</b>	<b>RATIOS</b>
Date Collected: 09/19/2015		Ca/Mg	15.1
Date Received: 09/23/2015		Ca/P	2.59
Date Completed: 09/24/2015		Na/K	2.32
Methodology: ICP/MS		Zn/Cu	16.7
Sample Size: 0.203 g	Sample Type: Head	Zn/Cd	> 999
Hair Color: Brown	Treatment:		
Shampoo: Avalon Organics			
		<b>RANGE</b>	
			4- 30
			1- 12
			0.5- 10
			4- 20
			> 800



Date Collected: 10/05/2015  
 Date Received: 10/06/2015  
 Date of Report: 10/21/2015

Ordering Physician:  
 Direct Laboratory Services  
 Referring Laboratory

4040 Florida St  
 Ste 101  
 Mandeville, LA 70448



**0060 Porphyrins Profile - Urine**

Methodology: UPLC/Fluorescence detection, Colorimetry

Ranges are for ages 1 - 12

Compound Tested	Results nmol/g creatinine	Quintile Ranking 1st   2nd   3rd   4th   5th	95% Reference Range
<b>Porphyrin Pathway Intermediates</b>			
1. Uroporphyrin I & III	22.3 <b>H</b>		<= 27.4
2. Heptacarboxyporphyrin	5.1		<= 12.6
3. Hexacarboxyporphyrin	<DL*		<= 3.3
4. Pentacarboxyporphyrin	<DL*		<= 7.2
5. Precoproporphyrin‡	18.5		<= 31.7
6. Coproporphyrin I	36		<= 70
7. Coproporphyrin III	179		<= 278
<b>Calculated Values</b>			
8. Total Porphyrins	242		<= 372
9. Precopro/Uro I & III	0.83		<= 2.13
10. Copro I/Copro III	0.2		<= 0.49

Creatinine = 108 mg/dL



## 0060 Porphyrins Profile - Urine

*Methodology: UPLC/Fluorescence detection, Colorimetry*

\* <DL = less than detection limit

\*\* >LIN = greater than linearity limit

\*\*\*UC\* = Unable to Calculate

‡Precoproporphyrin is an atypical porphyrin associated with mercury toxicity.<sup>1 2</sup>

1. J.S. Woods, M.A. Bowers, H.A. Davis, Toxicology and Applied Pharmacology 110, 464-476 (1991).

2. D. Echeverria et.al.. Neurotoxicology and Teratology 28 (2006) 39-48.

The following comments pertain to abnormalities found on this report.

A moderate elevation of Uroporphyrin I & III is consistent with stimulation of the porphyrin pathway. Such stimulation can be due to many pharmaceuticals and environmental chemicals, including ethanol.



## 0060 Porphyrins Profile - Urine

*Methodology: UPLC/Fluorescence detection, Colorimetry*

Pediatric reference ranges on the porphyrin profile were established using an outpatient population of children 1-12 years of age. Values of some porphyrins may be higher in children under the age of 2.<sup>1 2</sup>

1. J Dermatol, 1999 Jul;26(7):409-15. Urinary porphyrin excretion measurements in healthy neonates. Oxalla MD, Herrero C, Ventura PJ, Lecha M.
2. Eur J Clin Chem Biochem 1996; 34:439-443. Age dependent reference values of urinary porphyrins in children. Minder, E.I., Schneider-Yin,X.

Although the Genova Diagnostics, Inc. profile will reveal disruptions in the heme pathway, the data is not reviewed by a specialist who can make a diagnosis of hereditary porphyrias. Abnormalities may be due to combinations of genetic or physiological factors and environmental exposures. All potential impacts on porphyrin synthesis should be considered when interpreting the results. The comments provided are intended to help alert clinicians to factors that may be relevant according to published studies.

## Health history for hair test 735 follow-up test

**What are your current symptoms and health history:** Autism, yeast, speech delay, bacterial issues, gut, food allergies

**Dental history (Wisdom teeth removed and when? Any other extractions. First root canal placed? Braces? First amalgam etc...)** None

**What dental work do you currently have in place?** What part of the dental clean-up have you completed? Does not apply.

**What dentistry did your mother have at any time before or during pregnancy?** None

**What vaccinations have you had and when (including flu and especially travel shots)?** All the standard vaccines except MMR.

**Supplements and medications (including dosages) taken at time of hair test, or for the 3-6 months before the sample was taken?** Oh boy here we go. Biotin 1000 mcg 3x, NOW Cal/Mag 1 teaspoon 2 x, Kirkman liquid zinc 1/2 teaspoon 2X, Barleans OLE 2 X, Enhansa 1 scoop day, Liver Life 12 drops 2X, Klaire digestive enzymes 1 with each meal, Nordic naturals Cod liver oil 1 teaspoon 1X, Culturelle 2 chewables, Life extension TMG 500 mg, Seeking Health b12/metafolin, Brainchild multi and mineral level 1, parasite cleanse, Kirkman vit C chewables 1x day, Klaire Alpha ketoglutaric acid 1 capsule, Thorne selenmethionine(sp)? 1/2 cap 125 mcg, milk thistle 100 mg( taken before we started liver life)

**What is your age, height and weight?** 4 yr female, 33 pounds, not sure on height.

**Other information you feel may be relevant?** I was able to get a hold of all her vaccine manufacturer and lot numbers so i researched them on VAERS and every single one there were a multitude of other kids with bad reactions to the same lot numbers. Esp her first dose of pentacel, a 5 in 1 shot. I did not vaccinate her until starting at about 8 months due to a weird feeling about it. I gave in at the 9 month checkup to the Dr and shortly thereafter little symptoms starting popping up. At 10 months she had another full series of "catchup" shots, 9 in all. Then at 2 weeks following 12 month shot series she was GONE. She is doing Andys protocol now with great results. We are on rd 31 with ALA only. At the time of test we had done 29 rounds. Her 8 yr old sister just had a hair test done and her number is . Which met some counting rules from what i can tell.

**What is your location – city & country (so that we can learn where certain toxins are more prevalent).** Trenton, Mi USA