

**Toxic & Essential Elements; Hair**

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 <sup>th</sup> 95 <sup>th</sup>
Aluminum (Al)	8.1	< 8.0	
Antimony (Sb)	0.018	< 0.066	
Arsenic (As)	0.050	< 0.080	
Barium (Ba)	0.28	< 0.75	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	0.003	< 2.0	
Cadmium (Cd)	0.11	< 0.070	
Lead (Pb)	0.14	< 1.0	
Mercury (Hg)	0.03	< 0.40	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	< 0.001	< 0.002	
Thorium (Th)	0.002	< 0.002	
Uranium (U)	0.065	< 0.060	
Nickel (Ni)	0.07	< 0.20	
Silver (Ag)	0.06	< 0.14	
Tin (Sn)	0.11	< 0.30	
Titanium (Ti)	0.62	< 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)	158	160- 500	
Magnesium (Mg)	12	12- 50	
Sodium (Na)	39	20- 200	
Potassium (K)	62	12- 140	
Copper (Cu)	9.0	11- 32	
Zinc (Zn)	180	110- 190	
Manganese (Mn)	0.16	0.08- 0.50	
Chromium (Cr)	0.54	0.40- 0.70	
Vanadium (V)	0.12	0.025- 0.10	
Molybdenum (Mo)	0.066	0.040- 0.090	
Boron (B)	1.2	0.50- 3.5	
Iodine (I)	0.29	0.25- 1.3	
Lithium (Li)	< 0.004	0.007- 0.020	
Phosphorus (P)	130	150- 220	
Selenium (Se)	0.37	0.70- 1.1	
Strontium (Sr)	0.25	0.21- 2.1	
Sulfur (S)	48700	44000- 51000	
Cobalt (Co)	0.005	0.004- 0.020	
Iron (Fe)	12	7.0- 16	
Germanium (Ge)	0.040	0.030- 0.040	
Rubidium (Rb)	0.089	0.008- 0.080	
Zirconium (Zr)	0.12	0.060- 0.70	

SPECIMEN DATA		RATIOS		
<b>COMMENTS:</b>		ELEMENTS	RATIOS	RANGE
Date Collected: 04/07/2018	Sample Size: 0.198 g	Ca/Mg	13.2	4- 30
Date Received: 04/10/2018	Sample Type: Head	Ca/P	1.22	0.8- 8
Date Completed: 04/11/2018	Hair Color: Brown	Na/K	0.629	0.5- 10
Methodology: ICP/MS	Treatment:	Zn/Cu	20	4- 20
	Shampoo: African Black Soap	Zn/Cd	> 999	> 800

## **Hair Test 1373**

### **1. Symptoms**

#### **Current Symptoms:**

Eczema and Psoriasis flare up if he has too much gluten.

Controlling, Obsessive, Compulsive and Impulsive Behaviors.

Unpredictable reactions: Sudden mood changes of anger, anxiety, fear, feeling “uncomfortable”; Has a strong pain threshold (broke his foot in 3 places and reacted relatively calmly), but with other minor injuries has overreacted.

Sensitive and empathetic to situations in movies or books, and will react emotionally.

Unaware of others’ feelings expressed visually or audibly, yet seems to react emotionally to what he senses in others.

Intense and generally expresses a negative view about most things.

Easily over-stimulated, but desires constant stimulation.

Talks loudly, but does not like loud noises or people who talk loudly.

Sensory/Processing challenges.

Focusing challenges.

Does not adjust well to change.

Does not filter what he says and does not understand why he should in social situations.

Picky eater/drinker (will only drink water) – sensitive to taste and texture.

Interprets things literally.

Clumsy (which we suspect might be a balance problem). Also, unaware of his surroundings and where his body is in those surroundings.

Very sharp: Learns and memorizes quickly if it interests him, Was verbal and well-spoken at a young age, Is creative and has a great imagination.

### **History of Health/Symptoms:**

We suspect he was born with Asperger's Syndrome, due to a very difficult infancy from birth. He was an intense baby and did not relax well. He would rarely just rest his head on a shoulder. He was constantly observing everything around him. Would not sleep unless he was in his own crib, but would be exhausted and cranky if he didn't get his sleep on-schedule. Would not fall asleep in his car seat, even on long trips. Did not sleep well until around 24 months of age. Would scream through car trips until we found one music album that appealed to him. Stomach problems as an infant – very gassy. Separation anxiety/fearful as a baby and toddler. Could not leave him in a church nursery or with any babysitter other than family members whom he knew well. Has never liked his hands to be dirty. Extremely sensitive to sound from the beginning, we think. Began "talking" constantly at 5 months old, and has not stopped.

Even though he was not vaccinated, he began displaying more obvious "Spectrum" behaviors at 15 months of age, such as screeching at people when they talked to him and looked at him, and he was uncomfortable with hugs or having his personal space invaded (even by parents and grandparents). He was breast-fed until 23 months old, which we suspect contributed to his increase of symptoms around that time. We recently discovered his mom is mercury-toxic and believe she was during the pregnancy and breastfeeding, also.

### **Illness history:**

He had a serious short stomach illness when a toddler (approximately 3 days).

When 4 and 5 years old, he had low-grade fevers on and off. During that time, he developed an eczema rash.

When 6 years old, he had an illness which lasted a few days and consisted of a 105.4 fever, aches, chills, congestion, lightheadedness and laryngitis.

That was followed by stomach upset for a few days. A month later, he developed what looked like Psoriasis, which spread over both of his legs. That's when he began a gluten-free diet. Both the Eczema and Psoriasis cleared up quickly.

He was never given antibiotics, and he has had only a few half-doses of Acetaminophen.

## **2. Dental history**

None. Only cleanings.

## **3. Current Dental Work**

None.

## **4. Mother's dentistry before or during pregnancy**

One filling and a crown with exposed metal (because the dentist ground down the back of it due to a poor fit).

## **5. Vaccinations/Shots**

None. No vaccinations or travel or flu shots.

## **6. Supplements and medications taken at time of hair test or for the 3-6 months before the sample was taken**

Probiotics only.

## **7. Age, Height, Weight**

8 years old, 50.5", 51.8 lbs

## **8. Other information**

Mother currently has 95-99% probability of mercury poisoning.

## **9. Location**

Tucson, AZ

