



PATIENT: Number 633
SEX: Female
AGE: 3

Toxic & Essential Elements; Hair

| TOXIC METALS | | | |
|----------------------------|----------------|-----------------------|---|
| | RESULT µg/g | REFERENCE INTERVAL | PERCENTILE 68 th 95 th |
| Aluminum (Al) | 12 | < 8.0 | |
| Antimony (Sb) | 0.021 | < 0.066 | |
| Arsenic (As) | 0.029 | < 0.080 | |
| Barium (Ba) | 0.67 | < 0.75 | |
| Beryllium (Be) | < 0.01 | < 0.020 | |
| Bismuth (Bi) | 0.035 | < 2.0 | |
| Cadmium (Cd) | 0.049 | < 0.070 | |
| Lead (Pb) | 1.4 | < 1.0 | |
| Mercury (Hg) | 0.04 | < 0.40 | |
| Platinum (Pt) | < 0.003 | < 0.005 | |
| Thallium (Tl) | 0.002 | < 0.002 | |
| Thorium (Th) | 0.006 | < 0.002 | |
| Uranium (U) | 8.7 | < 0.060 | |
| Nickel (Ni) | 0.12 | < 0.30 | |
| Silver (Ag) | 0.19 | < 0.20 | |
| Tin (Sn) | 0.45 | < 0.30 | |
| Titanium (Ti) | 0.44 | < 0.90 | |
| 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) | 605 | 140- 500 | | | |
| Magnesium (Mg) | 34 | 15- 45 | | | |
| Sodium (Na) | 73 | 18- 180 | | | |
| Potassium (K) | 79 | 10- 150 | | | |
| Copper (Cu) | 20 | 11- 24 | | | |
| Zinc (Zn) | 120 | 100- 190 | | | |
| Manganese (Mn) | 0.54 | 0.10- 0.50 | | | |
| Chromium (Cr) | 0.31 | 0.43- 0.70 | | | |
| Vanadium (V) | 0.080 | 0.030- 0.10 | | | |
| Molybdenum (Mo) | 0.076 | 0.050- 0.13 | | | |
| Boron (B) | 1.3 | 0.40- 3.5 | | | |
| Iodine (I) | 1.1 | 0.25- 1.3 | | | |
| Lithium (Li) | 0.022 | 0.007- 0.020 | | | |
| Phosphorus (P) | 122 | 150- 220 | | | |
| Selenium (Se) | 0.73 | 0.70- 1.1 | | | |
| Strontium (Sr) | 1.9 | 0.19- 2.0 | | | |
| Sulfur (S) | 42300 | 45500- 53000 | | | |
| Cobalt (Co) | 0.007 | 0.005- 0.030 | | | |
| Iron (Fe) | 17 | 7.0- 16 | | | |
| Germanium (Ge) | 0.033 | 0.030- 0.040 | | | |
| Rubidium (Rb) | 0.16 | 0.012- 0.16 | | | |
| Zirconium (Zr) | 0.014 | 0.030- 1.0 | | | |

| SPECIMEN DATA | | RATIOS | |
|---------------------------|----------------------|-----------------|---------------|
| COMMENTS: | | ELEMENTS | RATIOS |
| Date Collected: 6/24/2012 | Sample Size: 0.199 g | Ca/Mg | 17.8 |
| Date Received: 7/3/2012 | Sample Type: Head | Ca/P | 4.96 |
| Date Completed: 7/9/2012 | Hair Color: Black | Na/K | 0.924 |
| Methodology: ICP/MS | Treatment: | Zn/Cu | 6 |
| | Shampoo: Pantene | Zn/Cd | > 999 |
| | | RANGE | |
| | | | 4- 30 |
| | | | 1- 12 |
| | | | 0.5- 10 |
| | | | 4- 20 |
| | | | > 800 |

Health history for hair test 633

1. What are your current symptoms and health history?

Aru is a 3 years and 8 month old female dxed with moderate autism at age 2.5, presents as having very little language -just single words like "give", "open", "bye". Very little pointing. Eye contact is present with family but nil with strangers. Also some eye contact is present with people other than immediate family. Mostly seems unaware of other people. Loves hearing rhymes and is most interactive in her playschool when rhymes are being sung.

When she was born, she looked straight into her mothers eyes. However, she was found to have jaundice and was put under biliruben lights for 3 days. Also she was given Hepb shots on day 1 of life. It seems to me (her mother) that after the billi lights she just wasnt interested in us. I tried to engage her but she was not very interested in us. She seemed to be a lot more hyperactive than other children and wasnt eatig well However, she met all her milestones till age 1 and was breastfed for 5 months. She had some language- counting numbers upto 10 and a few words like juice. However she never called us(her parents) by name. She had severe diarrhoea around 1 year and 7 months for several months. At that point she was given strong antibiotic injections.

She was found to have allergies to wheat, gluten, rye, cows milk and egg at age 3. She has been GFCE/Egg free since then. She is a lot more calm since starting the diet and a lot more facially expressive. Overall gut health seems to be good though I suspect some yeast since she stims continuously visually in her down time -stacking and lining up. She is on Speech and occupational therapy.

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

No dental work done.

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?

A metal rod and ceramic cap on 1 tooth. 5 ceramic fillings in other teeth.

5. What vaccinations have you had and when (including flu and especially travel shots)?

First 3 shots of DTap

HepB shots

H1B

pneumoconj

IpV

Only one dose of MMR

One dose of chicken pox

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

Probiotics 1/day

Folinic acid 800mcg/day
DMG 250mg/day
Childrens Multivitamin from childlife 5mlx2/day
Piracetam 400mgx2/day
Nordic Naturals Cod liver oil 5ml/day
Evening primrose oil 5ml/day
B12 shots -once in 3 days
Calcium supplements (with Phosphorus, Mg, Zn)

7. What is your age, height and weight?

Age- 3 years and 8 months
Height- 96cm
Weight- 14.5kg

8. Other information you feel may be relevant?

There may be a genetic component at play too since Arus mother definitely has signs of generalized anxiety disorder, ADD and some sort of social disorder possibly ODD. Also, Arus maternal grandmother is remembered as making as little eye contact as possible. A cousin on the fathers side only spoke clearly at age 4. This childs brother who was born prematurely because of placenta previa also had significant socialization issues and started speaking at age 5.

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

She was born in Santa Clara, California, USA. At the age of 1 year and 7 months, she came to Bangalore in India and has been here since.