

HAIR ELEMENTS



PATIENT: Number 378 Test 1
SEX: Male
AGE: 3
LOCATION: Allentown, PA - USA

POTENTIALLY TOXIC ELEMENTS

| TOXIC ELEMENTS | RESULT $\mu\text{g/g}$ | REFERENCE RANGE | PERCENTILE | |
|----------------------------|------------------------|-----------------|------------------|------------------|
| | | | 68 th | 95 th |
| Aluminum | 7.3 | < 8.0 | | |
| Antimony | 0.13 | < 0.066 | | |
| Arsenic | 0.050 | < 0.080 | | |
| Barium | 0.19 | < 0.50 | | |
| Beryllium | < 0.01 | < 0.020 | | |
| Bismuth | 0.10 | < 2.0 | | |
| Cadmium | 0.016 | < 0.070 | | |
| Lead | 0.23 | < 1.0 | | |
| Mercury | 0.09 | < 0.40 | | |
| Platinum | < 0.003 | < 0.005 | | |
| Thallium | < 0.001 | < 0.002 | | |
| Thorium | < 0.001 | < 0.002 | | |
| Uranium | 0.027 | < 0.060 | | |
| Nickel | 1.5 | < 0.20 | | |
| Silver | 0.05 | < 0.20 | | |
| Tin | 0.17 | < 0.30 | | |
| Titanium | 1.2 | < 1.0 | | |
| Total Toxic Representation | | | | |

ESSENTIAL AND OTHER ELEMENTS

| ELEMENTS | RESULT $\mu\text{g/g}$ | REFERENCE RANGE | PERCENTILE | | | | |
|------------|------------------------|-----------------|-------------------|------------------|------------------|------------------|--------------------|
| | | | 2.5 th | 16 th | 50 th | 84 th | 97.5 th |
| Calcium | 120 | 125- 370 | | | | | |
| Magnesium | 22 | 12- 30 | | | | | |
| Sodium | 7 | 20- 200 | | | | | |
| Potassium | < 3 | 12- 200 | | | | | |
| Copper | 25 | 11- 18 | | | | | |
| Zinc | 170 | 100- 190 | | | | | |
| Manganese | 0.24 | 0.10- 0.50 | | | | | |
| Chromium | 0.71 | 0.43- 0.80 | | | | | |
| Vanadium | 0.018 | 0.030- 0.10 | | | | | |
| Molybdenum | 0.046 | 0.050- 0.13 | | | | | |
| Boron | 0.19 | 0.70- 5.0 | | | | | |
| Iodine | 0.92 | 0.25- 1.3 | | | | | |
| Lithium | 0.010 | 0.007- 0.020 | | | | | |
| Phosphorus | 189 | 150- 220 | | | | | |
| Selenium | 0.77 | 0.70- 1.1 | | | | | |
| Strontium | 0.11 | 0.16- 1.0 | | | | | |
| Sulfur | 46300 | 45500- 53000 | | | | | |
| Cobalt | 0.031 | 0.004- 0.020 | | | | | |
| Iron | 15 | 7.0- 16 | | | | | |
| Germanium | 0.035 | 0.030- 0.040 | | | | | |
| Rubidium | 0.007 | 0.016- 0.18 | | | | | |
| Zirconium | 2.3 | 0.040- 1.0 | | | | | |

SPECIMEN DATA

COMMENTS: Insufficient hair to repeat
 Date Collected: 1/26/2009 Sample Size: 0.2 g
 Date Received: 1/29/2009 Sample Type: Head
 Date Completed: 2/2/2009 Hair Color: Blond
 Client Reference: Treatment:
 Methodology: ICP-MS Shampoo: Child Earths Best

RATIOS

| ELEMENTS | RATIOS | EXPECTED RANGE |
|----------|--------|----------------|
| Ca/Mg | 5.45 | 4- 30 |
| Ca/P | 0.635 | 0.8- 8 |
| Na/K | 2.33 | 0.5- 10 |
| Zn/Cu | 6.8 | 4- 20 |
| Zn/Cd | > 999 | > 800 |

HAIR ELEMENTS



PATIENT: Number 378 Test 2
SEX: Male
AGE: 5
LOCATION: Allentown, PA - USA

POTENTIALLY TOXIC ELEMENTS

| TOXIC ELEMENTS | RESULT $\mu\text{g/g}$ | REFERENCE RANGE | PERCENTILE | |
|----------------------------|------------------------|-----------------|------------------|------------------|
| | | | 68 th | 95 th |
| Aluminum | 4.4 | < 8.0 | | |
| Antimony | 0.015 | < 0.066 | | |
| Arsenic | 0.020 | < 0.080 | | |
| Barium | 0.05 | < 0.50 | | |
| Beryllium | < 0.01 | < 0.020 | | |
| Bismuth | 0.071 | < 2.0 | | |
| Cadmium | < 0.009 | < 0.070 | | |
| Lead | 0.18 | < 1.0 | | |
| Mercury | 0.03 | < 0.40 | | |
| Platinum | < 0.003 | < 0.005 | | |
| Thallium | 0.001 | < 0.002 | | |
| Thorium | < 0.001 | < 0.002 | | |
| Uranium | 0.013 | < 0.060 | | |
| Nickel | 0.06 | < 0.20 | | |
| Silver | 0.05 | < 0.20 | | |
| Tin | 0.20 | < 0.30 | | |
| Titanium | 3.7 | < 1.0 | | |
| Total Toxic Representation | | | | |

ESSENTIAL AND OTHER ELEMENTS

| ELEMENTS | RESULT $\mu\text{g/g}$ | REFERENCE RANGE | PERCENTILE | | | | |
|------------|------------------------|-----------------|-------------------|------------------|------------------|------------------|--------------------|
| | | | 2.5 th | 16 th | 50 th | 84 th | 97.5 th |
| Calcium | 115 | 125- 370 | | | | | |
| Magnesium | 16 | 12- 30 | | | | | |
| Sodium | 27 | 20- 200 | | | | | |
| Potassium | 5 | 12- 200 | | | | | |
| Copper | 13 | 11- 18 | | | | | |
| Zinc | 490 | 100- 190 | | | | | |
| Manganese | 0.06 | 0.10- 0.50 | | | | | |
| Chromium | 0.32 | 0.43- 0.80 | | | | | |
| Vanadium | 0.012 | 0.030- 0.10 | | | | | |
| Molybdenum | 0.055 | 0.050- 0.13 | | | | | |
| Boron | 0.32 | 0.70- 5.0 | | | | | |
| Iodine | 0.75 | 0.25- 1.3 | | | | | |
| Lithium | 0.004 | 0.007- 0.020 | | | | | |
| Phosphorus | 197 | 150- 220 | | | | | |
| Selenium | 0.64 | 0.70- 1.1 | | | | | |
| Strontium | 0.10 | 0.16- 1.0 | | | | | |
| Sulfur | 48000 | 45500- 53000 | | | | | |
| Cobalt | 0.003 | 0.004- 0.020 | | | | | |
| Iron | 5.5 | 7.0- 16 | | | | | |
| Germanium | 0.035 | 0.030- 0.040 | | | | | |
| Rubidium | 0.007 | 0.016- 0.18 | | | | | |
| Zirconium | 0.53 | 0.040- 1.0 | | | | | |

SPECIMEN DATA

COMMENTS:
 Date Collected: 5/20/2010 Sample Size: 0.197 g
 Date Received: 5/24/2010 Sample Type: Head
 Date Completed: 5/28/2010 Hair Color: Blond
 Client Reference: 1228851 Treatment:
 Methodology: ICP-MS Shampoo: Little Twig

RATIOS

| ELEMENTS | RATIOS | EXPECTED RANGE |
|----------|--------|----------------|
| Ca/Mg | 7.19 | 4- 30 |
| Ca/P | 0.584 | 0.8- 8 |
| Na/K | 5.4 | 0.5- 10 |
| Zn/Cu | 37.7 | 4- 20 |
| Zn/Cd | > 999 | > 800 |



PATIENT: Number 378 Test 3
 SEX: Male
 AGE: 6

Toxic & Essential Elements; Hair

| TOXIC METALS | | | |
|----------------------------|----------------|-----------------------|---|
| | RESULT µg/g | REFERENCE INTERVAL | PERCENTILE 68 th 95 th |
| Aluminum (Al) | 3.6 | < 8.0 | |
| Antimony (Sb) | 0.031 | < 0.066 | |
| Arsenic (As) | 0.50 | < 0.080 | |
| Barium (Ba) | 0.25 | < 0.75 | |
| Beryllium (Be) | < 0.01 | < 0.020 | |
| Bismuth (Bi) | 0.029 | < 2.0 | |
| Cadmium (Cd) | 0.039 | < 0.070 | |
| Lead (Pb) | 0.29 | < 1.0 | |
| Mercury (Hg) | 0.08 | < 0.40 | |
| Platinum (Pt) | < 0.003 | < 0.005 | |
| Thallium (Tl) | < 0.001 | < 0.002 | |
| Thorium (Th) | < 0.001 | < 0.002 | |
| Uranium (U) | 0.029 | < 0.060 | |
| Nickel (Ni) | 0.08 | < 0.20 | |
| Silver (Ag) | 0.18 | < 0.14 | |
| Tin (Sn) | 0.26 | < 0.30 | |
| Titanium (Ti) | 1.1 | < 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) | 65 | 160- 500 | |
| Magnesium (Mg) | 52 | 12- 50 | |
| Sodium (Na) | 31 | 20- 200 | |
| Potassium (K) | 14 | 12- 140 | |
| Copper (Cu) | 15 | 11- 32 | |
| Zinc (Zn) | 580 | 110- 190 | |
| Manganese (Mn) | 0.15 | 0.08- 0.50 | |
| Chromium (Cr) | 0.35 | 0.40- 0.70 | |
| Vanadium (V) | 0.036 | 0.025- 0.10 | |
| Molybdenum (Mo) | 0.097 | 0.040- 0.090 | |
| Boron (B) | 0.33 | 0.50- 3.5 | |
| Iodine (I) | 2.1 | 0.25- 1.3 | |
| Lithium (Li) | 0.070 | 0.007- 0.020 | |
| Phosphorus (P) | 172 | 150- 220 | |
| Selenium (Se) | 2.2 | 0.70- 1.1 | |
| Strontium (Sr) | 0.20 | 0.21- 2.1 | |
| Sulfur (S) | 51600 | 44000- 51000 | |
| Cobalt (Co) | 0.009 | 0.004- 0.020 | |
| Iron (Fe) | 8.9 | 7.0- 16 | |
| Germanium (Ge) | 0.032 | 0.030- 0.040 | |
| Rubidium (Rb) | 0.015 | 0.008- 0.080 | |
| Zirconium (Zr) | 0.36 | 0.060- 0.70 | |

| SPECIMEN DATA | | RATIOS | |
|---------------------------|-------------------------|----------|---------|
| COMMENTS: | | ELEMENTS | RATIOS |
| Date Collected: 8/2/2011 | Sample Size: 0.2 g | Ca/Mg | 1.25 |
| Date Received: 8/8/2011 | Sample Type: Head | Ca/P | 0.378 |
| Date Completed: 8/10/2011 | Hair Color: Blond | Na/K | 2.21 |
| Methodology: ICP/MS | Treatment: | Zn/Cu | 38.7 |
| | Shampoo: Desert Essence | Zn/Cd | > 999 |
| | | RANGE | |
| | | | 4- 30 |
| | | | 0.8- 8 |
| | | | 0.5- 10 |
| | | | 4- 20 |
| | | | > 800 |

Health history for hair test 265

1) What are your current symptoms and health history?

He had a number of reactions, which lasted a month, to his 12 month vaccinations. To this day, his cervical gland remains swollen and visible. He has SPD, and 23 food allergies as confirmed by an IgG report done at ImmunoLabs. His emotional state fluctuates dramatically, although since going GFCF and corn-free in addition to removing the allergen foods, he has been slightly more consistent, however yeast appears to be a major battle, daily.

2) Dental history (wisdom teeth removed? First root canal placed? Braces? First amalgam etc...)

n/a

3) What dental work do you currently have in place? What part of the dental cleanup have you completed?

n/a

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

7 amalgams

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

All vaccinations up to the age of two, then we stopped. We did also give him the flu shot his first year of life, but have not gotten one since.

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

Cod Liver Oil

Probiotics

Kirman Multi-vitamins

Zyme Prime, ZFP and No Phenol enzymes

Biotin

Calcium/Magnesium Citrate

Vitamin C

Vitamin A

Zinc

No medications

7) What is your age, height and weight?

3.75 years, about 56 inches and 34 pounds

8) Other information you feel may be relevant?

We bought Andy Cutlers book and started gearing up for chelation, adding in Milk Thistle, Molybdenum, DMG and Taurine, but he was not tolerating something and had major yeast build-up that we could not keep up with so we stopped all of his supplements with the exception of the Cod Liver Oil, Cal/Mag, probiotics, biotin and enzymes and he is doing magnificently. We fight yeast considerably less now, maybe two or three times a day rather than constantly. His moods are more level, he is happy, focused, speaks well, stims are at a minimum....but it's obvious that the yeast isn't going away, his body just isn't able to fight it on it's own even with two doses of probiotics a day. He has a diet with practically no sugar (with the exception of some very occasional pear juice and slices of pears, watermelon or strawberries as a snack), and the only carbs are sweet potatoes once in a while, since his food allergies include rice, potatoes and wheat. He eats a lot of millet, buckwheat, quinoa, amaranth, and sorghum flours, since it's what provides us with pancakes and muffins (with no sweeteners), it allows him to still eat some "kid" foods. He's a champ though, he gladly eats what we put in front of him, a big stretch from the self-limiting diet he had when we first started all of this!

9) What is your location - city & country (so that we can learn where certain toxins are more prevalent). Allentown, PA - USA