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Advancing the Science of Wellness
Rocky Mountain Analytical

Date of Collection: 25-Nov-2013
Sample Received: 28-Nov-2013
Reported Date: 05-Dec-2013
Sample Type: Scalp hair

Hair Element Analysis — Accession #: 400134

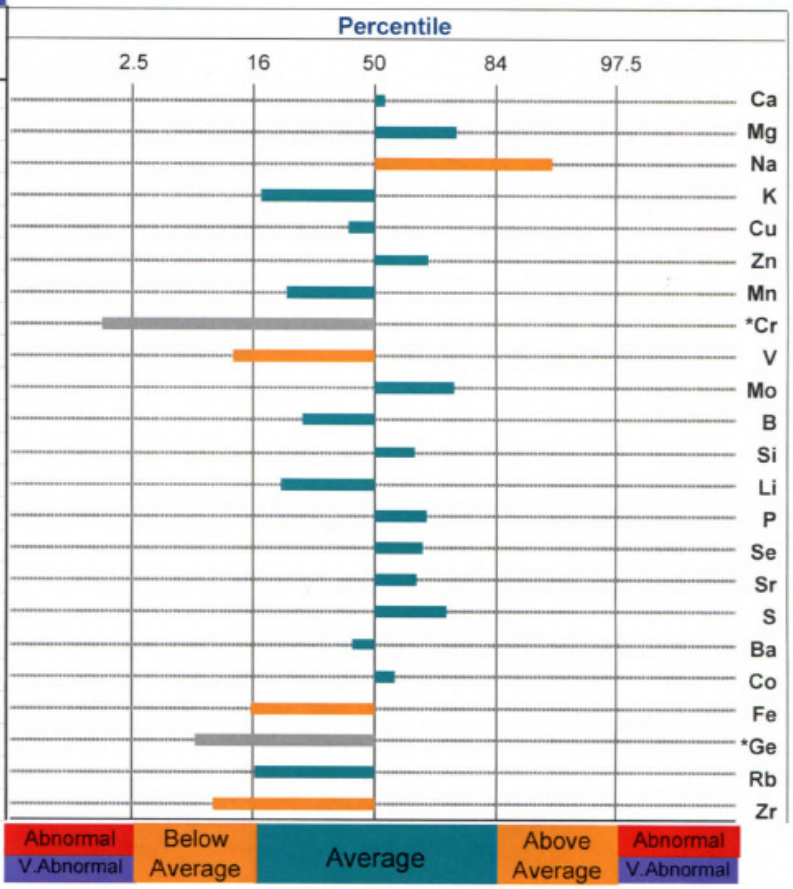
Provider:

Patient:

Gender : F
Date of Birth :
Age: 21

Essential / Non-Toxic Elements

Essential Elements	Results ug/g	Reference Range ug/g
Calcium	770	300 - 1,700
Magnesium	110	26 - 140
Sodium	83	2.5 - 43
Potassium	1.4	1.3 - 21
Copper	18	11 - 36
Zinc	210	150 - 230
Manganese	0.094	0.073 - 0.49
Chromium	< 0.015	0.035 - 0.14
Vanadium	0.0030	0.0035 - 0.022
Molybdenum	0.035	0.019 - 0.040
Boron	0.19	0.12 - 1.0
Silicon	390	270 - 470
Lithium	0.0020	0.0016 - 0.011
Phosphorus	170	120 - 190
Selenium	1.2	0.72 - 1.6
Strontium	2.6	0.73 - 4.8
Sulphur	51,000	43,000 - 53,000
Barium	0.71	0.31 - 2.3
Cobalt	0.013	0.0037 - 0.032
Iron	9.5	9.6 - 18
Germanium	< 0.0020	0.0025 - 0.0064
Rubidium	0.0020	0.0020 - 0.022
Zirconium	0.052	0.080 - 1.1

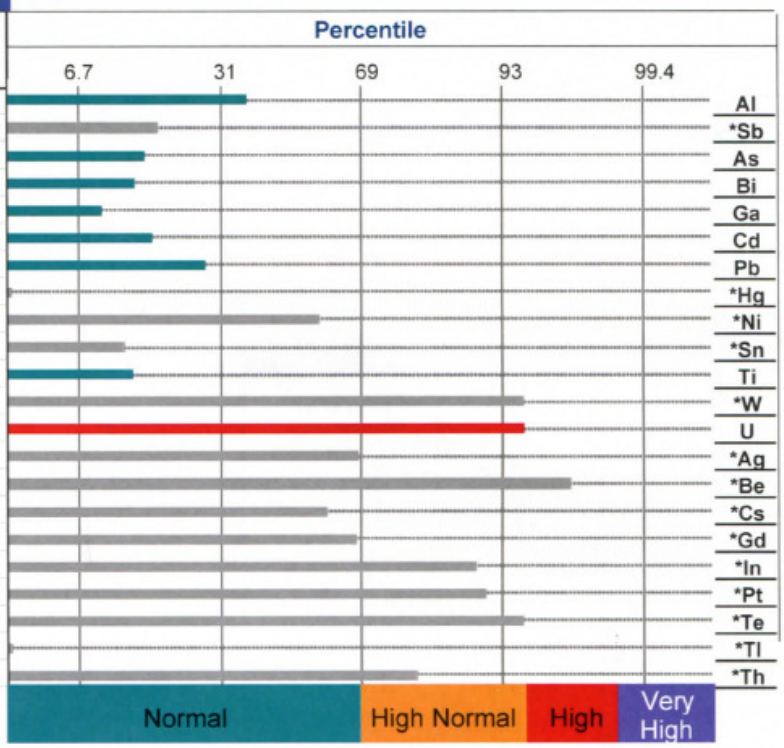


** Result lies below detection limit (DL is at left end of bar)*

NOTE: Our interpretation follows the system developed by Andrew Hall Cutler PhD, which requires consideration of the overall distribution pattern for essential elements as a first step in the interpretation of the results. If the essential element distribution pattern is statistically normal, then both toxic and essential element results can usually be taken at face value. If the essential elements results exhibit a statistically improbable distribution pattern, this suggests heavy metal toxicity or some other interfering process. The interpretation comments starting on page 3 state whether the essential element graph above fits a statistically normal or statistically unlikely distribution pattern.

Toxic / Potentially Toxic Elements

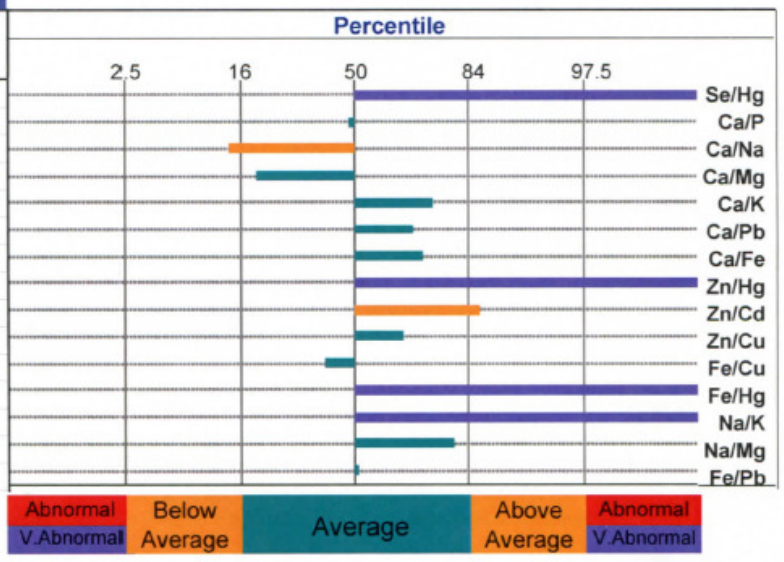
Toxic Elements	Results ug/g	Reference Range ug/g
Aluminum	3.7	<11
Antimony	< 0.0080	<0.13
Arsenic	0.043	<0.28
Bismuth	0.0030	<1.2
Gallium	0.0020	<0.012
Cadmium	0.0040	<0.066
Lead	0.15	<1.1
Mercury	< 0.010	<1.1
Nickel	< 0.15	<0.72
Tin	< 0.050	<1.1
Titanium	0.52	<2.3
Tungsten	< 0.010	<0.010
Uranium	0.14	<0.14
Silver	< 0.15	<1.0
Beryllium	< 0.0070	<0.0055
Cesium	< 0.00050	<0.0018
Gadolinium	< 0.0010	<0.0030
Indium	< 0.00030	<0.00040
Platinum	< 0.0040	<0.0051
Tellurium	< 0.0060	<0.0060
Thallium	< 0.00010	<0.0050
Thorium	< 0.0030	<0.0060



** Result lies below detection limit (DL is at right end of bar)*

Element Ratios

Ratios	Results	Reference
Se/Hg	120	1.5 - 12
Ca/P	4.6	2.0 - 12
Ca/Na	9.3	11 - 460
Ca/Mg	7.2	6.7 - 18
Ca/K	540	26 - 950
Ca/Pb	5,300	840 - 9,500
Ca/Fe	81	24 - 110
Zn/Hg	21,000	350 - 1,700
Zn/Cd	52,000	5,300 - 46,000
Zn/Cu	12	5.0 - 16
Fe/Cu	0.53	0.31 - 1.3
Fe/Hg	950	19 - 130
Na/K	58	1.0 - 4.7
Na/Mg	0.77	0.028 - 0.98
Fe/Pb	66	27 - 160



1. **What are your current symptoms and health history?**

-Extreme fatigue, weakness
-Dizziness
-Insomnia
-Sensitivity to noises, sensitivity to cold
-Cold hands and feet
-Some eye floaters

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

Never had any amalgam fillings. Wisdom teeth removed a few months ago (this was after I was already very sick). Trauma a few years ago resulted in the loss of four maxillary incisors. Two implants were placed but these both failed. I have had two bone grafts in the area as well. I have never had any root canals. I had braces when I was about 14.

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

I have a temporary bridge on the upper anterior. I also have a small lingual wire on my lower anterior teeth to hold them in position after my orthodontics were completed.

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

None.

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

I have received most of the recommended vaccines. All except HPV and the last dose of Hep B. I have never had a flu shot.

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

Calcium, magnesium, potassium, zinc occasionally, multivitamin, b-complex, vit C, vit D, Cod Liver Oil.

7. **What is your age, height and weight?**

21 years old, 5'7'', 135 pounds.

8. **Other information you feel may be relevant?**

I worked as a dental assistant part-time for almost 2 years.

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

Calgary, Alberta, Canada