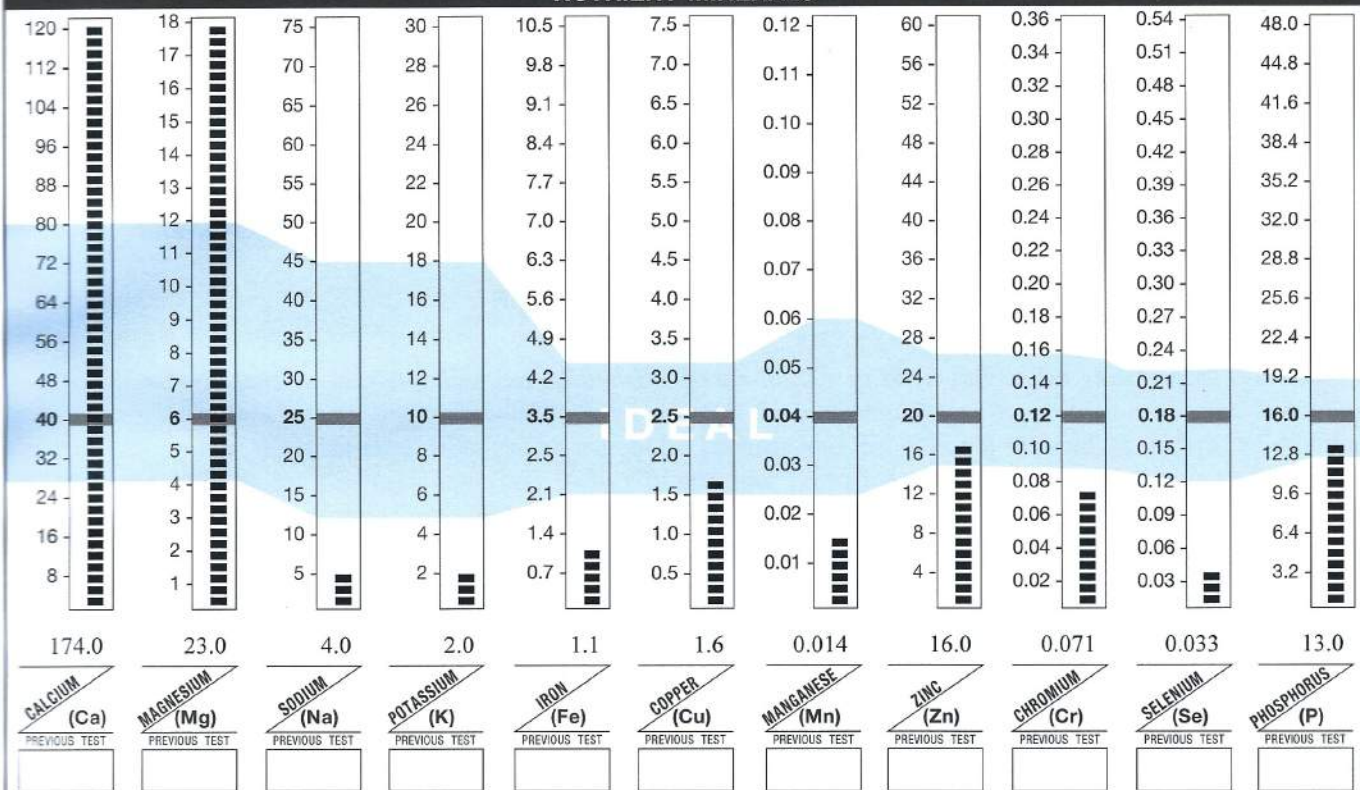
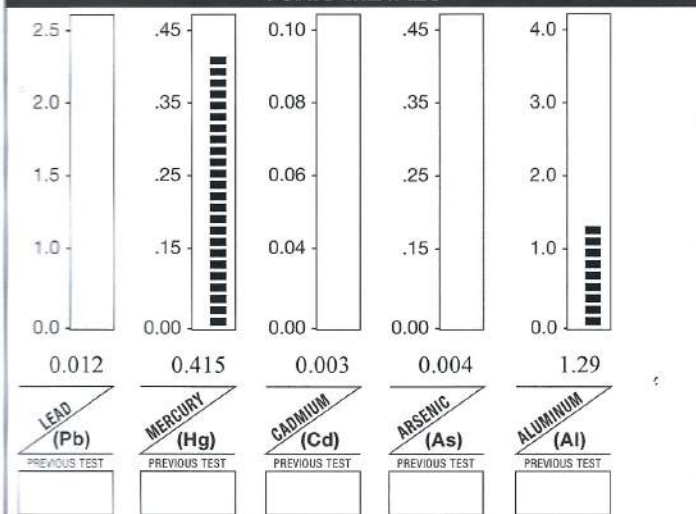


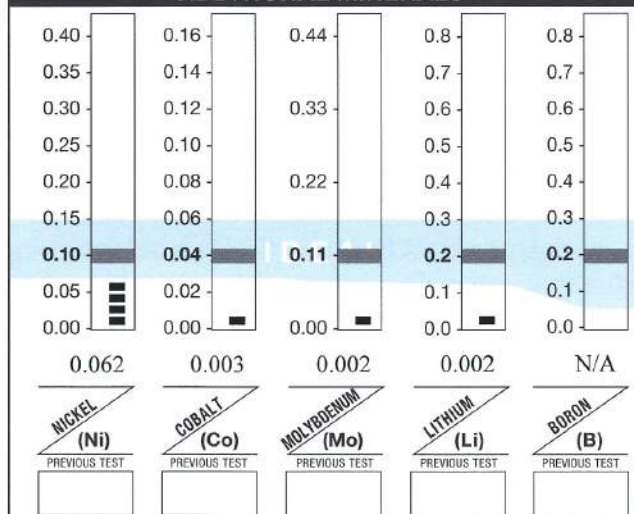
NUTRIENT MINERALS



TOXIC METALS



ADDITIONAL MINERALS



SIGNIFICANT MINERAL RATIOS

MINERAL RATIO	IDEAL RATIO	CURRENT RATIO	% OF IDEAL	PREVIOUS RATIO	LOW			IDEAL	HIGH		
					○	○	○	○	○	○	○
CA/MG	6.67	7.57	113		○	○	○	○	○	○	○
CA/K	4.00	87.00	2175		○	○	○	○	○	○	○
NA/MG	4.17	0.17	4		○						
NA/K	2.50	2.00	80		○	○	○	○	○	○	○
ZN/CU	8.00	10.00	125		○	○	○	○	○	○	○
CA/P	2.50	13.38	535		○	○	○	○	○	○	○

MIXED OXIDIZER

FAST OXIDIZER

SLOW OXIDIZER ***

Toxic & Essential Elements; Hair

TOXIC METALS						
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE			
			68 th		95 th	
Aluminum (Al)	5.9	< 12				
Antimony (Sb)	< 0.01	< 0.060				
Arsenic (As)	0.026	< 0.090				
Barium (Ba)	0.05	< 2.0				
Beryllium (Be)	< 0.01	< 0.020				
Bismuth (Bi)	0.024	< 2.0				
Cadmium (Cd)	< 0.009	< 0.050				
Lead (Pb)	0.14	< 1.0				
Mercury (Hg)	0.66	< 0.80				
Platinum (Pt)	< 0.003	< 0.005				
Thallium (Tl)	< 0.001	< 0.002				
Thorium (Th)	< 0.001	< 0.002				
Uranium (U)	0.021	< 0.060				
Nickel (Ni)	0.14	< 0.40				
Silver (Ag)	0.01	< 0.10				
Tin (Sn)	0.04	< 0.30				
Titanium (Ti)	0.30	< 1.3				
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)	300	475- 1500					
Magnesium (Mg)	62	45- 180					
Sodium (Na)	35	80- 450					
Potassium (K)	39	28- 160					
Copper (Cu)	12	11- 30					
Zinc (Zn)	160	130- 200					
Manganese (Mn)	0.07	0.15- 0.65					
Chromium (Cr)	0.71	0.40- 0.65					
Vanadium (V)	0.11	0.018- 0.065					
Molybdenum (Mo)	0.020	0.040- 0.10					
Boron (B)	0.48	0.40- 4.0					
Iodine (I)	0.14	0.25- 1.8					
Lithium (Li)	0.018	0.008- 0.030					
Phosphorus (P)	209	250- 500					
Selenium (Se)	0.57	0.80- 1.3					
Strontium (Sr)	0.75	1.0- 8.0					
Sulfur (S)	48200	42000- 48000					
Cobalt (Co)	0.009	0.006- 0.035					
Iron (Fe)	4.7	7.0- 16					
Germanium (Ge)	0.027	0.030- 0.040					
Rubidium (Rb)	0.034	0.030- 0.25					
Zirconium (Zr)	0.31	0.040- 1.0					

SPECIMEN DATA		RATIOS		
COMMENTS:		ELEMENTS	RATIOS	RANGE
Date Collected: 02/15/2013	Sample Size: 0.198 g	Ca/Mg	4.84	4- 30
Date Received: 02/19/2013	Sample Type: Pubic	Ca/P	1.44	1- 12
Date Completed: 02/24/2013	Hair Color: Blond	Na/K	0.897	0.5- 10
Methodology: ICP/MS	Treatment:	Zn/Cu	13.3	4- 20
	Shampoo: Dr Bronners	Zn/Cd	> 999	> 800

Toxic & Essential Elements; Hair

TOXIC METALS					
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE		
			68 th	95 th	
Aluminum (Al)	6.1	< 12			
Antimony (Sb)	0.011	< 0.060			
Arsenic (As)	0.037	< 0.090			
Barium (Ba)	0.11	< 2.0			
Beryllium (Be)	< 0.01	< 0.020			
Bismuth (Bi)	0.40	< 2.0			
Cadmium (Cd)	0.012	< 0.050			
Lead (Pb)	0.16	< 1.0			
Mercury (Hg)	1.4	< 0.80			
Platinum (Pt)	< 0.003	< 0.005			
Thallium (Tl)	< 0.001	< 0.002			
Thorium (Th)	< 0.001	< 0.002			
Uranium (U)	0.030	< 0.060			
Nickel (Ni)	0.11	< 0.40			
Silver (Ag)	0.02	< 0.10			
Tin (Sn)	0.06	< 0.30			
Titanium (Ti)	0.33	< 1.3			
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)	456	475– 1500					
Magnesium (Mg)	88	45– 180					
Sodium (Na)	40	80– 450					
Potassium (K)	41	28– 160					
Copper (Cu)	14	11– 30					
Zinc (Zn)	170	130– 200					
Manganese (Mn)	0.07	0.15– 0.65					
Chromium (Cr)	0.37	0.40– 0.65					
Vanadium (V)	0.17	0.018– 0.065					
Molybdenum (Mo)	0.024	0.040– 0.10					
Boron (B)	0.98	0.40– 4.0					
Iodine (I)	0.18	0.25– 1.8					
Lithium (Li)	< 0.004	0.008– 0.030					
Phosphorus (P)	200	250– 500					
Selenium (Se)	0.76	0.80– 1.3					
Strontium (Sr)	1.1	1.0– 8.0					
Sulfur (S)	45100	42000– 48000					
Cobalt (Co)	0.007	0.006– 0.035					
Iron (Fe)	6.3	7.0– 16					
Germanium (Ge)	0.035	0.030– 0.040					
Rubidium (Rb)	0.028	0.030– 0.25					
Zirconium (Zr)	0.024	0.040– 1.0					

SPECIMEN DATA		RATIOS		
COMMENTS:		ELEMENTS	RATIOS	RANGE
Date Collected: 1/10/2012	Sample Size: 0.199 g	Ca/Mg	5.18	4– 30
Date Received: 1/20/2012	Sample Type: Pubic	Ca/P	2.28	1– 12
Date Completed: 1/25/2012	Hair Color:	Na/K	0.976	0.5– 10
Methodology: ICP/MS	Treatment:	Zn/Cu	12.1	4– 20
	Shampoo:	Zn/Cd	> 999	> 800

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

Severely underweight and malnourished (extremely low ferritin, Vit D, Vit A, all amino acids), CFS, MCS, chronic sinusitis, Barrett's esophagus, food sensitivities, extremely painful menses, irritability, history of severe depression + postpartum depression, insomnia, slow healing, heart palpitations, brain fog, poor memory, coated tongue, blurry vision, muscle wasting, back pain, shooting pains, foot neuropathy, neck and shoulder pain. This all began slowly, 15 years ago, prior to which I was very active and healthy. Felt better while pregnant (12 years ago).

2. **Dental history**

No fillings, ever, or any other dental work except for braces for 2+ years as a teen.

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

Mother literally had a mouthful of amalgams.

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

Standard childhood vaccinations, Hep A and Typhoid for travel, and chicken pox when it came out. I also had about 8 annual flu shots, the last 2 of which I felt horrible for 3 months after.

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

Nothing consistently except for probiotics and fish oil.

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

46 year old female, 5'10", 100 lbs.

7. **Other information you feel may be relevant? What is your location – city & country.**

Honolulu, HI. We have vog (volcanic fog) that blows over from the Big Island, which may contain mercury. I spent 1990-1992 at the UH art department, painting and sculpting with clay. 4 of my classmates also have bizarre health problems. My 12 year old son's hair test reads almost exactly like mine.