Α

TOXIC METALS						
		RESULT μg/g	REFERENCE INTERVAL	PERCENTILE 68 th 95 th		
Aluminum	(AI)	3.7	< 7.0			
Antimony	(Sb)	0.011	< 0.050			
Arsenic	(As)	0.044	< 0.060			
Barium	(Ba)	0.21	< 2.0			
Beryllium	(Be)	< 0.01	< 0.020			
Bismuth	(Bi)	0.016	< 2.0	•		
Cadmium	(Cd)	< 0.009	< 0.050			
Lead	(Pb)	0.06	< 0.60			
Mercury	(Hg)	0.27	< 0.80			
Platinum	(Pt)	< 0.003	< 0.005			
Thallium	(TI)	< 0.001	< 0.002			
Thorium	(Th)	< 0.001	< 0.002			
Uranium	(U)	0.001	< 0.060	•		
Nickel	(Ni)	0.03	< 0.30			
Silver	(Ag)	0.03	< 0.15			
Tin	(Sn)	0.13	< 0.30			
Titanium	(Ti)	0.23	< 0.70			
Total Toxic Representat	ion					

ESSENTIAL AND OTHER ELEMENTS									
		RESULT	REFERENCE	PERCENTILE					
		μg/g	INTERVAL	2.5 th 16 th 50 th 84 th 97.5 th					
Calcium	(Ca)	256	300- 1200						
Magnesium	(Mg)	23	35- 120						
Sodium	(Na)	53	20- 250	-					
Potassium	(K)	16	8- 75						
Copper	(Cu)	13	11- 37						
Zinc	(Zn)	180	140- 220	•					
Manganese	(Mn)	0.06	0.08- 0.60						
Chromium	(Cr)	0.47	0.40- 0.65						
Vanadium	(V)	0.049	0.018- 0.065						
Molybdenum	(Mo)	0.034	0.020- 0.050						
Boron	(B)	0.83	0.25- 1.5						
lodine	(I)	0.36	0.25- 1.8						
Lithium	(Li)	< 0.004	0.007- 0.020						
Phosphorus	(P)	213	150- 220						
Selenium	(Se)	0.89	0.55- 1.1						
Strontium	(Sr)	0.20	0.50- 7.6						
Sulfur	(S)	49800	44000- 50000						
Cobalt	(Co)	0.006	0.005- 0.040						
Iron	(Fe)	8.2	7.0- 16						
Germanium	(Ge)	0.032	0.030- 0.040						
Rubidium	(Rb)	0.011	0.007- 0.096						
Zirconium	(Zr)	0.46	0.020- 0.42						

SPECIMEN DATA			RATIOS		
COMMENTS:		ELEMENTS	RATIOS	RANGE	
		Ca/Mg	11.1	4- 30	
Date Collected: 2/19/2012	Sample Size: 0.197 g	Ca/P	1.2	1- 12	
Date Received: 2/24/2012	Sample Type: Head	Na/K	3.31	0.5- 10	
Date Completed: 2/26/2012	Hair Color:	Zn/Cu	13.8	4- 20	
Methodology: ICP/MS	Treatment: Dye	Zn/Cd	> 999	> 800	
	Shampoo: Ji	<u>-</u>			

Health history for hair test 599

What are your current symptoms and health history?

I have been sick since 1989 (at 18 yrs old but I was borderline hypothyroid in 1985). In 1989 I started having a lot of fatigue and pain and was diagnosed with hypothyroidism but didn't feel much better taking medication. I've been diagnosed with CFS/FM. I have some adrenal exhaustion, hypoglycemia, chronic systemic candida that I've had since high school and can't get rid of. I have about 40 symptoms. In 2000 through Analytical Research Labs my hair test showed high copper levels. I didn't do the health plan suggested by Dr. Wilson because I couldn't afford it as I was not working and wasn't sure his plan would work. I also didn't know how serious high copper levels were and how it affects your health. In 2004 I tested my hair again through Body Balance and again high copper levels were seen. I'm surprised to see on this hair test that my Copper levels are normal. All my hair tests showed I had no mercury problems, now I find out the levels could be hidden. I've taken certain supplements to try and detox from heavy metals but haven't felt any better. Not sure what I was taking was adequate though. I'm tired of having chronic pain, fatigue, low energy, persistent candida and my other 40 plus symptoms. I haven't been able to work since 1995. I have tried treating all my health problems with no success realizing that it may be due to copper problems but this test is showing it's normal so now I'm really confused. I've also been steered down the wrong path a couple times as well.

Symptoms (sick 25 years)

- extreme muscle pain and inflammation (muscles spasm, ache, seize up, feel inflamed)
- extreme fatigue
- hypothyroidism
- hair falls out easily
- possible adrenal exhaustion (still tired even when thyroid is in range)
- excessive in take of salt
- dizziness (especially rising from the ground to stand up)
- constipation
- digestive problems (always hungry, acid reflux in lower stomach)
- chronic sinusitis (daily) *systemic candida
- excessive vaginal discharge especially after period (thin, clear)
- chronic mouth ulcers (canker) and cold sores (since a child) *get cold easily, hands and feet sometimes cold
- high copper levels
- heart pain (stabbing pain, tenderness)
- tenderness in chest area, near breast
- body temperature sometimes fluctuates
- easily startled
- · feel wired at night sometimes even though tired
- strep (B) (Naturopath said I had high levels in my system)
- · have had one seizure
- had many fainting spells as a kid and adult
- lethargic
- low to normal blood pressure
- diagnosed with Lichen Planus in mouth years ago (like thrush)
- break out in a sweat easily
- metallic taste in mouth
- memory problems (brain fog)
- sensitive to noise
- · eyes sensitive to sunlight (easily turn red) and bright lights
- dry eyes (can't wear contacts)
- ringing in ears
- thick saliva (could be candida)
- flushed face (red)
- eyelids sometimes twitch

- · dark circles under eyes
- occasional tender lymph nodes under armpits
- legs jolt me awake when sleeping
- · don't seem to dream
- headaches/migraines
- leg cramps
- · sometimes night sweats
- knee, hip, and thumb pain (joints)
- hip dysplasia (wants to dislocate)
- Knee dislocation (twice, had surgery in 1987)
- · borderline anemia
- low vitamin D
- low to normal blood pressure
- lost 3 fingernails that grew back (fungus) (1987)
- dry patch of skin behind ear and on back of earlobe
- dry scalp at lower back of head
- CD4 Lymphopenia (low T helper cells) 600 (I'm HIV negative).
- Boil on chin (1995).

Saliva tests show adrenal exhaustion. Mineral hair analysis shows moderate degree of adrenal insufficiency. (Phase 3 The Exhaustion Stage, final stage). Naturopath and a Medical Intuitive say adrenal exhaustion as well but this doesn't show in standard blood work.

In May 2009 I was diagnosed with UARS. (Upper Airway Resistance Syndrome). This is a precursor to Sleep Apnea. In sleep apnea a person stops breathing many times a night and with UARS their passageway narrows making it hard to get air (like breathing through a coffee straw). During the night my heart rate stays up because I'm working hard to get enough air and therefore I'm not able to go into a deep sleep. Cpap is used for treatment but it didn't help me at all even though my heart rate settled down with use. I have sometimes wonder if I have this sleep disorder or maybe I have it in combination with something else that's making me sick.

Sept. 2010 Waiting for confirmation of Vlcad which is a fatty oxidation disorder.

Feb. 2011 Vlcad final test was negative.

<u>Dad</u> died at 68 of CHF (diagnosed at 58), had his heart shocked a few times for atrial fibrillation and had 2 angioplasties, also had diabetes. His sisters have diabetes, one died from cancer the other suffers from alcoholism.

His Dad died in early 50's from heart attack. Had diabetes and polio.

His Mom died at 86 from a heart attack

Mom died at 58 of Intracerebral Hemorrhage and Sequelae due to or as a consequence of Idiopathic Thrombocytopenic Purpura (Blood test revealed she had only 4 platelets in sample. They think a virus may have caused this but don't really know. They didn't think she had cancer).

Mom's half siblings have cholesterol problems, one diagnosed with mild MS Her Dad died in WW2 of Tuberculosis

Her Mom died at 92 of CHF and kidney failure. Also had dementia, anxiety and depression.

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

I've only had a few mercury fillings when I was a teen.

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

Just composite fillings. I had the mercury ones removed in the late '90's.

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

I don't know really. I'm not sure she had mercury fillings.

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

Just basic vaccinations, no flu or travel shots.

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

135mg natural thyroid medication. (Erfa brand), multi vitamin, 1000 IU Vitamin D, Calcium/Magnesium 333mg/167, Chlorophyll 200mg, I-lysine (to help with cold sores),

What is your age, height and weight?

42, 5 '11, 143 lbs

Other information you feel may be relevant?

See symptom list above.

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

Vancouver, BC Canada. I did grow up in a small town where there was a pulp and paper mill.