



SEX: Male
AGE: 51

Direct Laboratory Services
4040 Florida St Ste 202
Mandeville, LA 70448 USA

Toxic & Essential Elements; Hair

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 th 95 th
Aluminum (Al)	1.2	< 7.0	
Antimony (Sb)	0.057	< 0.066	
Arsenic (As)	0.044	< 0.080	
Barium (Ba)	0.18	< 1.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	0.016	< 2.0	
Cadmium (Cd)	0.027	< 0.065	
Lead (Pb)	0.33	< 0.80	
Mercury (Hg)	1.1	< 0.80	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	< 0.001	< 0.002	
Thorium (Th)	< 0.001	< 0.002	
Uranium (U)	0.097	< 0.060	
Nickel (Ni)	0.06	< 0.20	
Silver (Ag)	0.01	< 0.08	
Tin (Sn)	0.29	< 0.30	
Titanium (Ti)	0.33	< 0.60	
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)	214	200- 750	
Magnesium (Mg)	22	25- 75	
Sodium (Na)	100	20- 180	
Potassium (K)	110	9- 80	
Copper (Cu)	9.7	11- 30	
Zinc (Zn)	160	130- 200	
Manganese (Mn)	0.05	0.08- 0.50	
Chromium (Cr)	0.40	0.40- 0.70	
Vanadium (V)	0.037	0.018- 0.065	
Molybdenum (Mo)	0.025	0.025- 0.060	
Boron (B)	5.7	0.40- 3.0	
Iodine (I)	7.2	0.25- 1.8	
Lithium (Li)	0.004	0.007- 0.020	
Phosphorus (P)	184	150- 220	
Selenium (Se)	0.69	0.70- 1.2	
Strontium (Sr)	0.46	0.30- 3.5	
Sulfur (S)	47000	44000- 50000	
Cobalt (Co)	0.003	0.004- 0.020	
Iron (Fe)	5.4	7.0- 16	
Germanium (Ge)	0.032	0.030- 0.040	
Rubidium (Rb)	0.15	0.011- 0.12	
Zirconium (Zr)	0.046	0.020- 0.44	

SPECIMEN DATA		RATIOS	
COMMENTS:		ELEMENTS	RATIOS
Date Collected: 6/6/2012	Sample Size: 0.201 g	Ca/Mg	9.73
Date Received: 6/11/2012	Sample Type: Head	Ca/P	1.16
Date Completed: 6/13/2012	Hair Color: Brown	Na/K	0.909
Methodology: ICP/MS	Treatment:	Zn/Cu	16.5
	Shampoo: Dr Bonners Castile	Zn/Cd	> 999
		RANGE	
			4- 30
			0.8- 8
			0.5- 10
			4- 20
			> 800

Health history for hair test 656

- 1. What are your current symptoms and health history?** Always tired, Insulin Resistant, Borderline High BP, loss of memory, can't think as quick as I used to, weighed 278 lbs, but LC diet and am now between 175-200.
- 2. Dental history (Wisdom teeth removed and when? Any other extractions. First root canal placed? Braces? First amalgam etc...)** Wisdom teeth removed earlier this year, one extraction, have one root canal under a bridge, biological dentist says it looks OK. No braces, amalgams in teen years
- 3. What dental work do you currently have in place? What part of the dental clean-up have you completed?** Amalgams all gone, biological fillings used to replace, but may have some already that are not. 1 root canal under bridge, bridgework has metal
- 4. What dentistry did your mother have at any time before or during pregnancy?** Unknown
- 5. What vaccinations have you had and when (including flu and especially travel shots)?** None in the past 10 yrs
- 6. Supplements and medications (including dosages) taken at time of hair test, or for the 3-6 months before the sample was taken?** Supplements listed in email with tests
- 7. What is your age, height and weight?** 51, 5'9" 195
- 8. Other information you feel may be relevant?** I have been chelating using the AC protocol I found on the Autism group after having my amalgams removed, and came across a couple of things I had missed there. First thing was not to use the R-ALA, so when I read that here, I sent all mine back and got the regular ALA. I see here that the starting dose is much lower but I seemed to be fine and now am taking 100 mg DMSA and 100 mg ALA every 3 hrs. I am on about round 15 or so, and recently started my girls on it as well. I have been feeling much more alert mentally, and wonder if my bursitis has also been helped by it too, I am bothered much less by it. I did the counting rules and it showed high in one range plus my mercury seemed high anyway. I don't understand the ranges but I think I do the percentages. That is where I am compared to the general population, right? A couple of things bother/concern me, which is high Uranium. That is strange, where would I have gotten that, or the Boron & Rubidium either? Girls are 2 1/2 and 16 mos old and these appear also in my girls results.

I can't figure out what I am OK in and what is deficient because of the ranges. I am taking Lugol's Iodine (that is immediately obvious from the results) which is why the high results, we all have that, it's great to be sufficient in Iodine (note Thyroid tests fine). Magnesium Citrate 675 mg but upped it to 900 mg after the hair results. Feels like I need more still, have slight cramps in lower legs, feet. I used to take Potassium Citrate also, but stopped it after seeing my results appeared high. Selenium 200mcg/day, but upped that too. Taking Copper 4mg/day since I seem to get plenty of Zinc from my diet. Chromium Pico 1000 mg/day, but wonder if I really need to, Ubiquinol 100mg, Vit D3 5,000 IU until after first hormone test Mar 2011 when I went to 10,000 IU and now that my results show I am much higher, dropped back to 5,000 IU. Turmeric 2 large capsules/day and recently added Lithium Orotate 130 mg from VRP. Was I right to add this and is this the right kind/amount? No problems other than I can feel the Merc causing problems in my gut sometimes, but I take Oxy powder and Probiotics and it always helps. My big problem is low energy levels always, have for years, but am sure that's my insulin resistance and concurs with what ZRT says about my high Cortisol. How

about my CRP? Anything I am missing anything here, and any help figuring this all out would be appreciated very much! I need to apply what I learn on mine to my LO's results.

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

San Diego, CA

Menopausal Status:

Gender: **Male**

Age: **51**

Hormone Test	Current		Units	Range
	03/02/2011	08/27/2012		
Estradiol (saliva)	0.9	0.9	pg/ml	0.5-2.2
Progesterone (saliva)	24	43	pg/ml	12-100
Testosterone (saliva)	72	67	pg/ml	44-148 (Age Dependent)
DHEAS (saliva)	12.1	10.4	ng/ml	2-23 (Age Dependent)
Cortisol Morning (saliva)	8.1	5.9	ng/ml	3.7-9.5
Cortisol Noon (saliva)	2.3	5.5 H	ng/ml	1.2-3.0
Cortisol Evening (saliva)	1	3 H	ng/ml	0.6-1.9
Cortisol Night (saliva)	1.2 H	1.1 H	ng/ml	0.4-1.0
Free T4 (blood spot)	1.4	1.7	ng/dL	0.7-2.5
Free T3 (blood spot)	2.6	3.5	pg/ml	2.5-6.5
TSH (blood spot)	1.4	1.1	uU/ml	0.5-3.0
TPO (blood spot) *	14	29	IU/ml	0-150 (70-150 borderline)
Vitamin D, 25-OH, D2	< 4.0	< 4.0	ng/ml	<4 if not supplementing (< 10 nmol/L)
Vitamin D, 25-OH, D3	29 L	81	ng/ml	32-100 ng/ml (80-250 nmol/L)
Vitamin D, 25-OH, Total	29 L	81	ng/ml	32-100

* for research purposes ONLY