

HAIR ELEMENTS



PATIENT: Number 74
SEX: Female
AGE: 49

POTENTIALLY TOXIC ELEMENTS				
TOXIC ELEMENTS	RESULT $\mu\text{g/g}$	REFERENCE RANGE	PERCENTILE	
			68 th	95 th
Aluminum	4.2	< 7.0		
Antimony	0.027	< 0.050		
Arsenic	0.016	< 0.060		
Beryllium	< 0.01	< 0.020		
Bismuth	0.21	< 2.0		
Cadmium	0.031	< 0.10		
Lead	0.83	< 1.0		
Mercury	0.59	< 1.1		
Platinum	< 0.003	< 0.005		
Thallium	< 0.001	< 0.010		
Thorium	< 0.001	< 0.005		
Uranium	0.001	< 0.060		
Nickel	0.23	< 0.40		
Silver	0.03	< 0.15		
Tin	0.23	< 0.30		
Titanium	0.17	< 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	1770	300- 1200					
Magnesium	160	35- 120					
Sodium	44	12- 90					
Potassium	24	8- 38					
Copper	36	12- 35					
Zinc	200	140- 220					
Manganese	0.35	0.15- 0.65					
Chromium	0.43	0.20- 0.40					
Vanadium	0.025	0.018- 0.065					
Molybdenum	0.014	0.028- 0.056					
Boron	1.1	0.30- 2.0					
Iodine	1.6	0.25- 1.3					
Lithium	< 0.004	0.007- 0.023					
Phosphorus	164	160- 250					
Selenium	1.2	0.95- 1.7					
Strontium	11	0.50- 7.6					
Sulfur	47200	44500- 52000					
Barium	3.8	0.26- 3.0					
Cobalt	0.015	0.013- 0.050					
Iron	8.0	5.4- 14					
Germanium	0.041	0.045- 0.065					
Rubidium	0.030	0.007- 0.096					
Zirconium	0.088	0.020- 0.42					

SPECIMEN DATA				RATIOS		
COMMENTS:				ELEMENTS	RATIOS	EXPECTED RANGE
Date Collected:	3/21/2007	Sample Size:	0.202 g	Ca/Mg	11.1	4- 30
Date Received:	4/17/2007	Sample Type:	Head	Ca/P	10.8	1- 12
Date Completed:	4/19/2007	Hair Color:	Brown	Na/K	1.83	0.5- 10
		Treatment:		Zn/Cu	5.56	4- 20
Methodology:	ICP-MS	Shampoo:	Neutrogena	Zn/Cd	> 999	> 800

V06.99

Health history for hair test 74

04 May 2007

1) Current symptoms and medical history

Low hormones: thyroid, DHEA, cortisol, estrogen, testosterone, progesterone, pregnenolone; aberrant metabolism of supplemental DHEA

Extremely low energy with corresponding slowed mental function, poor attention & focus

Sleep: Difficulty falling asleep & sleeping sound
Immune system: Loss of immune function when supplement regimen not maintained
Sluggish digestion, prone to severe bouts of intestinal inflammation, malabsorption
Jerkiness of movement & in speech, occasional worsening of coordination

Eye strain/focus problems, 'dry eye' **Multiple chemical sensitivity:** petrochemicals, exhaust, chlorine, formaldehyde, paint & stain fumes, perfumes, etc. Exposures result in severe brain & body fog.

Food sensitivities & airborne allergies

Stress: All symptoms worsen during periods of stress

Medical History:

Numerous, assorted benign growths & tumors beginning with early grade school years; skin rashes/sensitivities since infancy; digestive problems since childhood; severe acne (treated age 14-17 with tetracycline-ended by severe mono/multiple infections & loss of immune function); repeating yeast, fungal, oral, viral, bladder, tonsil, sinus infections; severe menstrual cramping with lengthening during & increased heaviness to 3 weeks long; inability to sustain contractions for childbirth; 3 children/1 miscarriage w/D&C; complete hysterectomy & adhesions at 34; severe IBS; migraines; hip bursitis; multiple chemical sensitivity; allergies; rapid, unexplained weight gain (3 yrs) followed by years of serious weight loss; osteoarthritis; severe, debilitating dementia with onset at 35; diagnosed ADD at 38/39; sleep disturbances; fibromyalgia symptoms; chronic fatigue & infections with low WBC & other immune blood counts; many food sensitivities; candida treatment;

2) Current dental work in place and dental history

Currently have 1 bridge w/non-amalgam metal attachment; 1 gold crown; multiple fillings, crowns, 2-3 root canals.

First fillings age 4, annual thereafter until in 20's with lots of amalgam repairs. First root canals, molar extraction, & crowns during teens. GOLD crown (approx age 18) abscessed, was filled with amalgam approx age 24, abscessed & was extracted-bridge installed age 39, endodontic surgery again for abscess age 47, second gold crown installed year after 1st came out. Struggled with gum bleeding, oral sores, ultimately loosening of teeth. Following years of severe dementia & all-over loss of physical functioning, diagnosed mercury toxic. Amalgams removed at 47: severe dementia left immediately with first quadrant amalgam removal (was due to electrical charge/constant 'firing' in brain), gums have grown very healthy & teeth strong, no metal taste.

3) Supplements; medications and chelating schedule at the time of hair test

Hair test done just prior to starting **frequent dose chelation**, two years after amalgams were removed. Supplements were usually consistent with IAOMT chelation protocols & included chlorella and glutathione on and off. Also took supplements to aid sleep, hormonal support (adrenal & iodoral for thyroid), joint function, omega 3's & 6's, malabsorption, immune support & probiotics, constipation, occasional liver & kidney support. Prescriptions included Cytomel (thyroid), Allora (estrogen), compounded progesterone, low dose Adderall.

4) Recently added supplements and medications after the hair test and date added

Increased amounts of glutamine, taurine, lecithin, C, B's, zinc, selenium, A, molybdenum. Added inositol, regular milk thistle, Isocort, NAC, Acetyl-L-Cysteine, glycine. Dropped glutathione, chlorella. Switched to 7-Keto DHEA instead of DHEA. Exact info can be attached if requested.

5) Other relevant information

Currently doing frequent dosing to improve neuro-endocrine, immune, liver, & digestive functions; overcome fibromyalgia symptoms; & normalize fatigue/energy levels. Hope to drop all need for prescriptions & supplements



Detoxification Profile (Comprehensive)

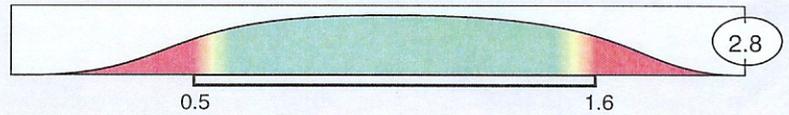
*Catecholamines high, = excess oxidation
 - glutathione low*

Age: 50
 Sex: F

Phase I

Caffeine Clearance

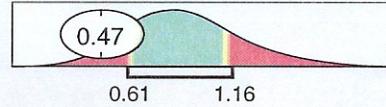
Ref Range
mL/min/kg



Phase II

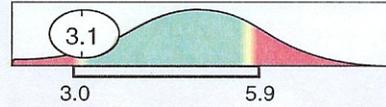
Cysteine

Ref Range
mg/dL



Sulphate

Ref Range
mg/dL



Glutathione Conjugation

Glycine Conjugation

Sulfation

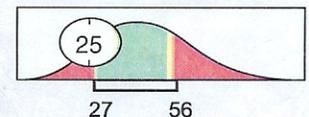
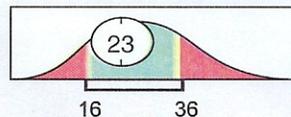
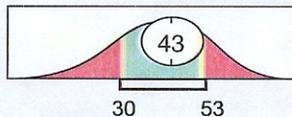
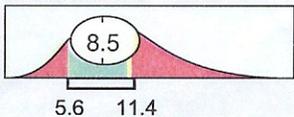
Glucuronidation

Acetaminophen Mercapturate
% Recovery

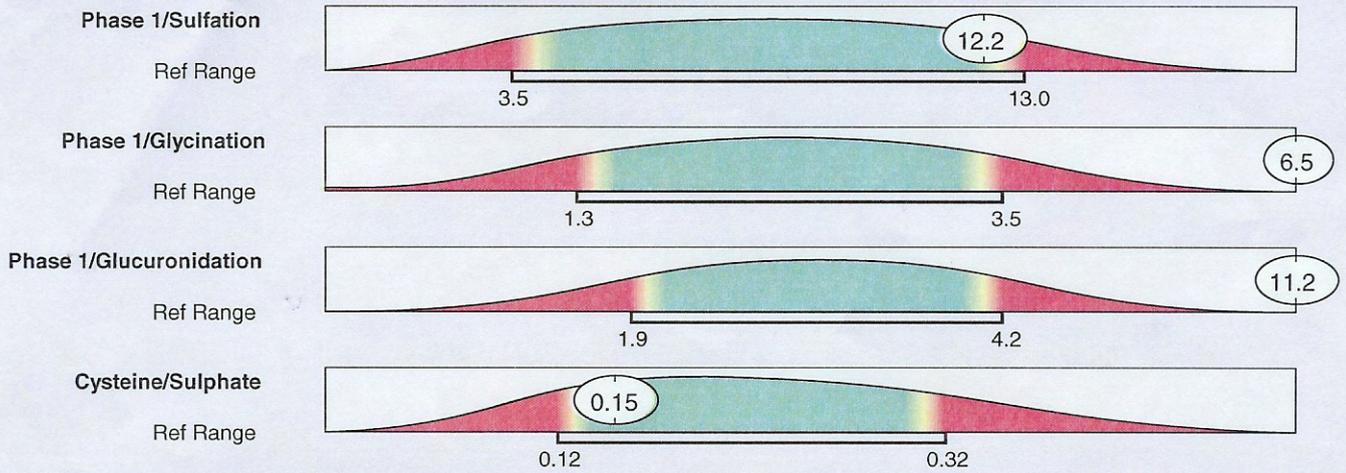
Salicylic Acid
% Recovery

Acetaminophen Sulfate
% Recovery

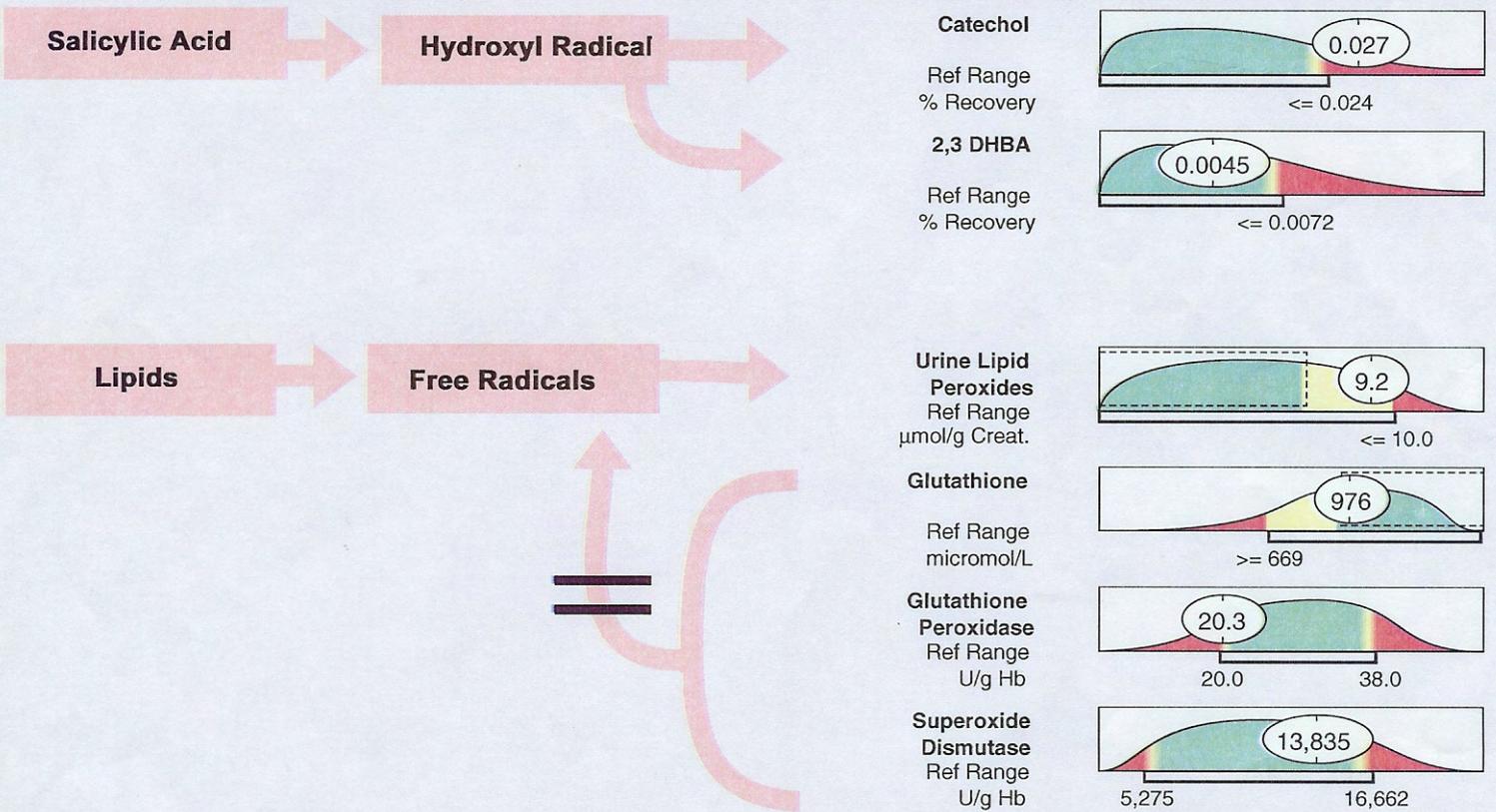
Acetaminophen Glucuronide
% Recovery



Ratios



Free Radical Markers



Total Urine Volume

mL per 10 hours: 500

Commentary

The performance characteristics of all assays have been verified by Genova Diagnostics, Inc. Unless otherwise noted with ♦ as cleared by the U.S. Food and Drug Administration, assays are For Research Use Only.