

HAIR ELEMENTS



PATIENT: Number 416
SEX: Male
AGE: 56
LOCATION: Bangkok Thailand

POTENTIALLY TOXIC ELEMENTS				
TOXIC ELEMENTS	RESULT $\mu\text{g/g}$	REFERENCE RANGE	PERCENTILE	
			68 th	95 th
Aluminum	15	< 7.0		
Antimony	0.089	< 0.066		
Arsenic	0.30	< 0.080		
Barium	0.45	< 1.0		
Beryllium	< 0.01	< 0.020		
Bismuth	0.023	< 2.0		
Cadmium	0.15	< 0.065		
Lead	2.5	< 0.80		
Mercury	0.98	< 0.80		
Platinum	< 0.003	< 0.005		
Thallium	0.001	< 0.002		
Thorium	0.001	< 0.002		
Uranium	0.032	< 0.060		
Nickel	0.53	< 0.20		
Silver	0.14	< 0.08		
Tin	0.26	< 0.30		
Titanium	0.92	< 0.60		
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	281	200- 750					
Magnesium	30	25- 75					
Sodium	100	20- 180					
Potassium	130	9- 80					
Copper	12	11- 30					
Zinc	150	130- 200					
Manganese	0.13	0.08- 0.50					
Chromium	0.72	0.40- 0.70					
Vanadium	0.17	0.018- 0.065					
Molybdenum	0.040	0.025- 0.060					
Boron	4.4	0.40- 3.0					
Iodine	3.8	0.25- 1.8					
Lithium	0.006	0.007- 0.020					
Phosphorus	159	150- 220					
Selenium	1.1	0.70- 1.2					
Strontium	0.52	0.30- 3.5					
Sulfur	49500	44000- 50000					
Cobalt	0.008	0.004- 0.020					
Iron	14	7.0- 16					
Germanium	0.033	0.030- 0.040					
Rubidium	0.29	0.011- 0.12					
Zirconium	0.18	0.020- 0.44					

SPECIMEN DATA			RATIOS		
COMMENTS:			ELEMENTS	RATIOS	EXPECTED RANGE
Date Collected: 9/3/2010	Sample Size: 0.2 g		Ca/Mg	9.37	4- 30
Date Received: 9/17/2010	Sample Type: Head		Ca/P	1.77	0.8- 8
Date Completed: 9/18/2010	Hair Color: Brown		Na/K	0.769	0.5- 10
Client Reference: 1237539	Treatment:		Zn/Cu	12.5	4- 20
Methodology: ICP-MS	Shampoo:		Zn/Cd	> 999	> 800

V010.08



PATIENT: Number 461 2nd Hair Test
 SEX: Male
 AGE: 57

Toxic & Essential Elements; Hair

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 th 95 th
Aluminum (Al)	8.3	< 7.0	
Antimony (Sb)	0.060	< 0.066	
Arsenic (As)	0.15	< 0.080	
Barium (Ba)	0.41	< 1.0	
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	0.044	< 2.0	
Cadmium (Cd)	0.067	< 0.065	
Lead (Pb)	2.4	< 0.80	
Mercury (Hg)	0.77	< 0.80	
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	0.001	< 0.002	
Thorium (Th)	0.001	< 0.002	
Uranium (U)	0.022	< 0.060	
Nickel (Ni)	3.8	< 0.20	
Silver (Ag)	0.10	< 0.08	
Tin (Sn)	0.22	< 0.30	
Titanium (Ti)	0.62	< 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)	350	200- 750			
Magnesium (Mg)	50	25- 75			
Sodium (Na)	130	20- 180			
Potassium (K)	110	9- 80			
Copper (Cu)	13	11- 30			
Zinc (Zn)	280	130- 200			
Manganese (Mn)	0.23	0.08- 0.50			
Chromium (Cr)	0.56	0.40- 0.70			
Vanadium (V)	0.090	0.018- 0.065			
Molybdenum (Mo)	0.036	0.025- 0.060			
Boron (B)	5.6	0.40- 3.0			
Iodine (I)	2.6	0.25- 1.8			
Lithium (Li)	0.47	0.007- 0.020			
Phosphorus (P)	165	150- 220			
Selenium (Se)	1.2	0.70- 1.2			
Strontium (Sr)	1.1	0.30- 3.5			
Sulfur (S)	48600	44000- 50000			
Cobalt (Co)	0.012	0.004- 0.020			
Iron (Fe)	15	7.0- 16			
Germanium (Ge)	0.036	0.030- 0.040			
Rubidium (Rb)	0.21	0.011- 0.12			
Zirconium (Zr)	0.055	0.020- 0.44			

SPECIMEN DATA		RATIOS	
COMMENTS: Results checked.		ELEMENTS	RATIOS
Date Collected: 11/15/2011	Sample Size: 0.131 g	Ca/Mg	7
Date Received: 11/29/2011	Sample Type: Head	Ca/P	2.12
Date Completed: 12/2/2011	Hair Color: Brown	Na/K	1.18
Methodology: ICP/MS	Treatment:	Zn/Cu	21.5
	Shampoo: Coconut Oil	Zn/Cd	> 999
		RANGE	
			4- 30
			0.8- 8
			0.5- 10
			4- 20
			> 800

Hair Test 416 follow-up history

I started chelating almost one and a half years ago. After 14 months I was taking 125mg DMSA and 100mg ALA every three hours. I switched to DMPS and over the next three months I worked up to 100mg DMPS every 4 hours and 50mg ALA.

My symptoms have improved greatly over this period. I have much more energy and a better mood most of the time. My balance seems normal now, and my level of thirst has decreased a lot and I need to urinate less. Sleep is better, though I still wake frequently, I often feel reasonably refreshed when I wake in the morning. I rarely have any sinus problems now, instead I developed chronic inflammation and earaches, which I can generally control now if I don't eat dairy. Bowels have also improved and I rarely have diarrhea.

Supplements Selenium 300mcg/day Vitamin E 800mg Vitamin B 100mg X 2, Vitamin C 2g (4g when chelating) Vit D 5000IU, Vit A 20,000IU, Silymarin 600mg (when chelating) Probiotics - 10 billion organisms, Cod liver oil - 20ml/day, Ca 2g, iron 40mg, iodine 300mcg, Mg 1000mg, Zn 45 mg, Copper 2mg, Mg 10mg, Cr 200mcg, Mo 100mcg, B 6mg, Vanadium 100mcg.

For about 6 weeks prior to the hair test I was taking lithium orotate, 240mg/day.

I also take 25mg hydrocortisone and 50 mg cytomel.

Health history for hair test 416

1. Current symptoms and health history.

1978 Working in steel factory in area where molten steel was poured. One day at work I felt extreme fatigue and sat down in a corner in the factory and went to sleep. Felt terrible when I woke up. Next day I woke up with a dozen painful ulcers in my mouth and throat and diarrhea - 12 bowel movements per day.

Also insomnia, burning soles of feet, pain/inflammation armpits, groin, fatigue, metallic taste in mouth.

Over the years, symptoms improved very gradually and I would have periodic bouts of ulcers (once every month), bowels almost always loose and still frequent. Frequent urination at night and extreme thirst. Frequent urination exacerbated by alcohol, cabbage juice and seaweed (thiols)

Last several years, headaches, tight shoulders, frequent urination, insomnia, chronic sinusitis. Frequent diarrhea.

2 Dental history

20+ amalgams as a kid. Removed all in 1987. Didn't notice any difference.

3 Composites and gold crowns now in place.

4 Mother had dentures when I was a kid. I think she had them before I was born.

5 All the usual vaccinations when I was a kid. Since then Hepatitis A, Tetanus, Rabies X 2, Hepatitis B,

6 Supplements at time of hair test - zinc 100mg (just started), mg 200mg, Multi B - 50 mg of all Bs, Silymarin 600mg, glutamine, 2000mg, adrenal cortex 300mg, had done about 8 rounds of chelation at time of test, now up to ALA 37.5, DMSA 37.5mg X 8 daily, vitamin C 2000mg.

7 56 years old, 184 cm, 68kg.

8 Worked with pesticides periodically for a few months 15 years ago.(wore protective clothing and gloves)

9 Past 12 years living in Bangkok Thailand. Previously lived in cities in Australia.