

HAIR ELEMENTS



PATIENT: Number 480
SEX: Female
AGE: 37
LOCATION: Penang, Malaysia

POTENTIALLY TOXIC ELEMENTS

TOXIC ELEMENTS	RESULT $\mu\text{g/g}$	REFERENCE RANGE	PERCENTILE	
			68 th	95 th
Aluminum	2.3	< 7.0		
Antimony	0.015	< 0.050		
Arsenic	0.083	< 0.060		
Barium	0.15	< 2.0		
Beryllium	< 0.01	< 0.020		
Bismuth	0.028	< 2.0		
Cadmium	0.015	< 0.050		
Lead	1.8	< 0.60		
Mercury	2.0	< 0.80		
Platinum	< 0.003	< 0.005		
Thallium	0.001	< 0.002		
Thorium	< 0.001	< 0.002		
Uranium	0.002	< 0.060		
Nickel	0.07	< 0.30		
Silver	0.01	< 0.15		
Tin	0.09	< 0.30		
Titanium	0.36	< 0.70		
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	465	300- 1200					
Magnesium	33	35- 120					
Sodium	110	20- 250					
Potassium	120	8- 75					
Copper	11	11- 37					
Zinc	150	140- 220					
Manganese	0.09	0.08- 0.60					
Chromium	0.41	0.40- 0.65					
Vanadium	0.043	0.018- 0.065					
Molybdenum	0.037	0.020- 0.050					
Boron	0.95	0.25- 1.5					
Iodine	0.26	0.25- 1.8					
Lithium	< 0.004	0.007- 0.020					
Phosphorus	186	150- 220					
Selenium	0.89	0.55- 1.1					
Strontium	0.28	0.50- 7.6					
Sulfur	45000	44000- 50000					
Cobalt	0.003	0.005- 0.040					
Iron	5.2	7.0- 16					
Germanium	0.026	0.030- 0.040					
Rubidium	0.22	0.007- 0.096					
Zirconium	0.043	0.020- 0.42					

SPECIMEN DATA

COMMENTS:

Date Collected: 4/21/2011 Sample Size: 0.197 g
 Date Received: 5/14/2011 Sample Type: Head
 Date Completed: 5/15/2011 Hair Color:
 Client Reference: 1276375 Treatment:
 Methodology: ICP-MS Shampoo:

V010.08

RATIOS

ELEMENTS	RATIOS	EXPECTED RANGE
Ca/Mg	14.1	4- 30
Ca/P	2.5	1- 12
Na/K	0.917	0.5- 10
Zn/Cu	13.6	4- 20
Zn/Cd	> 999	> 800

Health history for Hair test 480

1. AIHA, LUPUS ANTICOAGULANT(LA), some small "stone" in gall bladder (caused by AIHA)
2. Extraction "black plaque" from gum (many years ago). First amalgam was in primary school (around 12 ye
3. yearly clean, white filling, 5 amalgams
4. Don't Know
5. BCG (AT BIRTH),DPT/HIB&OPV (2,3&5 MTH),DT(18MTH,7YRS), RUBELLA (12YRS)
6. PREDNISOLONE 10MG per day (3 months recently). Before was 5 mg per day, folic acid 5mg, calcium lactat
7. 37 years, 158 cm, 50kgs.
8. I have amalgams. Photographer. Worked in photo developing for years.
9. Penang, Malaysia