HAIR ELEMENTS



PATIENT: Number 189 SEX: Male AGE: 4

LOCATION: Sydney, AUS

		DOTENTIA	ALLY TOXIC ELEMENTS			
ΤΟΧΙΟ			ALLY TOXIC ELEMIENTS		LE.	
	RESULT	REFERENCE	68	PERCENTI	95 th	
ELEMENTS	μg/g	RANGE	00		95	
Aluminum	15	< 8.0 < 0.066				
Antimony	0.11	< 0.080				
Arsenic	0.083	< 0.50			••••••	
Barium	0.60	< 0.020		-		
Beryllium	< 0.01	< 2.0				
Bismuth Cadmium	0.033	< 0.070				
Lead	1.6	< 1.0		_		
Mercury	0.21	< 0.40			••••••	
Platinum	< 0.003	< 0.005			••••••	
Thallium	< 0.003	< 0.002				
Thorium	< 0.001	< 0.002				
Uranium	0.005	< 0.060				
Nickel	0.41	< 0.20				
Silver	0.51	< 0.20			••••••	
Tin	0.40	< 0.30				
Titanium	0.82	< 1.0				
Total Toxic Represent						
		ESSENTIAL	AND OTHER ELEMENT	s		
	RESULT	REFERENCE		PERCENTI	l F	
ELEMENTS	μg/g	RANGE	2.5 th 16 th	50 th		4 th 97.5 th
Calcium	326	125- 370				
Magnesium	140	12- 30				
Sodium	260	20- 200				—
Potassium	310	12- 200				
Copper	38	11- 18				
Zinc	190	100- 190				
Manganese	0.20	0.10- 0.50		•		
Chromium	0.46	0.43- 0.80				
Vanadium	0.056	0.030- 0.10		-		
Molybdenum	0.12	0.050- 0.13				
Boron	1.1	0.70- 5.0				
Iodine	0.97	0.25- 1.3		_		
Lithium	0.008	0.007- 0.020				
Phosphorus	265	150- 220				
Selenium	0.83	0.70- 1.1				
Strontium	1.3	0.16- 1.0				•
Sulfur	52700	45500- 53000				
Cobalt	0.13	0.004- 0.020				
Iron	12	7.0- 16				
Germanium	0.038	0.030- 0.040				
Rubidium	0.39	0.016- 0.18				
Zirconium	0.095	0.040- 1.0	_			_
	SI	PECIMEN DATA			RATIOS	
COMMENTS:		~			DATION	EXPECTED
Date Collected: 11/24/2008		Sample Size:	0.195 g	ELEMENTS	RATIOS	RANGE
	/1/2008	Sample Type:	Head	Ca/Mg	2.33	4- 30
Date Completed: 12	/10/2008	Hair Color:	Brown	Ca/P	1.23	0.8-8
Client Reference:		Treatment:	<u> </u>	Na/K	0.839	0.5-10
Methodology: IC	P-MS	Shampoo:	Avalon Organic	Zn/Cu	5	4-20
1			V010.08	Zn/Cd	792	> 800

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Details for Hair Test 189

1/ Currant symptoms / health history? My son is 4 ½ years old. He's had digestive issues his whole life. As a breastfed baby he 'failed to thrive' and was tested for coeliac disease (many times – always negative). He was diagnosed with reflux as a baby. He always suffered shocking constipation, bloating and stomach pains. He was diagnosed as 2 ½ with a 'severe speech delay' with autistic traits. I then tried him on a gluten and casein free diet – and it appeared many of his problems came from food intolerances. His speech is improving, however he has developed a stutter. He had also had issues with Candida, and antibiotics don't agree with him. This is his first hair analysis

2/ Dental History? None

3/ Dental Work? None

4/ Mother's Dentistry?? None during pregnancy. Has a couple of fillings in the years before (including 6 in baby teeth, which have all since fallen out). Regular fluoride treatment

5/ Vaccinations? Up to 18months: Diphtheria x3, Tetanus x3, Pertussis x3, Hep B x3, Hib x3, Polio x3, Pneumococcal x2, (MMR) (12months), Meningococcal C, Varicella

6/ Supplements and medications? DAILY: 1 capsule Primer Undermethylating, 1 digestive enzyme, 1ml zinc. ¼ teasp calcium, ¼ teasp magnesium, 5ml Cod Liver Oil, ½ teasp Probiotic, ½ teasp colon cleanse, sometimes ½ teasp Vit C, (sometimes asthma puffer)

7/ Other information? His language development halted after first dose of antibiotics at 21months. Antibiotics also bring on thrush in the mouth.

8/ From? Sydney, Australia

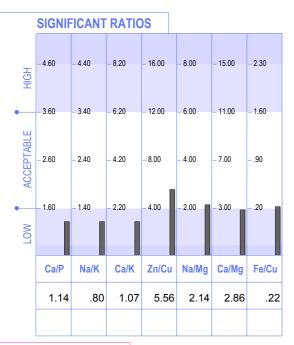
InterClinical Laboratories Pty Limited ABN 89 076 386 475 PO Box 6474, Alexandria NSW 2015 Australia	LABORATORY N	0.:	894458		
Ph:02 9693 2888 Fax:02 9693 1888 Email lab@interclinical.com.au	PROFILE NO .:	2	SAMPLE TYPE: SCA		
PATIENT: Number 189 Age: 4 Sex: Male	AGE:	SEX:	METABOLIC TYPE:		
REQUESTED BY: 24/06/2008	ACCOUNT NO.:		DATE:		

	RITIO	NAL E	LEME	NTS											ΤΟΧΙΟ	ELE	MEN	rs 🛛				
- 172	- 20.0	- 68	- 46	-6.9	- 32	- 29	- 2.7	250	-0.14	- 0.33	- 1.80	005	013	- 7126	025	0595	070	0035	- 0.63	049	- 1.05	- 6.3
- 135	- 15.5	- 52	- 35	-5.4	-27	-25	-2.2	190	-0.11	-0.26	- 1.36	004	011	- 6231	021	0510	060	0030	- 0.54	042	- 0.90	-5.4
															018	0425	050	0025	-0.45	035	- 0.75	- 4.5
97	- 11.0	- 36	-24	- 3.9	-21	-20	- 1.6	130	- 0.08	-0.18	- 0.91	003	008 –	- 5336	014	0340	040	0020	- 0.36	028	- 0.60	- 3.6
															011	0255	030	0015	-0.27	021	-0.45	-2.7
- 22	-2.0	-4	-2	- 0.9	- 10	- 11	- 0.5	010	- 0.02	- 0.03	- 0.02	001	003	- 3546	007	0170	020	0010	-0.18	014	- 0.30	- 1.8
					-5	-7						000	001	- 2651				<<			_	
Ca	Mg	Na	K	Cu	Zn	Р	Fe	Mn	Cr	Se	В	Со	Мо	S	Sb	U	As	Be	Hg	Cd	Pb	AI
Calcium	n Magnesiu	m Sodium	Potassium	Copper	Zinc	Phosphorus	Iron	Manganese	Chromium	Selenium	Boron	Cobalt	Molybdeum	Sulfur	Antimony	Uranium	Arsenic	Beryllium	Mercury	Cadmium	Lead	Aluminum

ADDITIONAL ELEMENTS

011 - 0.260390190006100020060014 - 0.5003020011 - 0.09																"<<": Below Calibration Limit; Value Given Is Calibration Limit
011 0.26 0.39 0.190 0.06 0.02 0.01 0.50 0.30 0.20 0.01 0.09 1 0.09 1 1 1 1 1 0.09 1 0.09 1 1 1 1 0 0 0 1 0.09 1 1 1 1 1 0 1 0.09 1 1 1 1 1 0 1 0.09 1 1 1 1 1 1 1 1 1 0.09 1 </td <td>HOH014</td> <td>14 –</td> <td>0.39</td> <td>059</td> <td>0285</td> <td>009</td> <td>15</td> <td>003</td> <td>0090</td> <td>020</td> <td>- 0.74</td> <td>045</td> <td>30</td> <td>017</td> <td>- 0.14</td> <td>"QNS": Sample Size Was Inadequate For Analysis.</td>	HOH014	14 –	0.39	059	0285	009	15	003	0090	020	- 0.74	045	30	017	- 0.14	"QNS": Sample Size Was Inadequate For Analysis.
Mark																"N/A": Currently Not Available
Mark	01 [·]	1 _	0.26	039	0190	006	10	002	0060	014	- 0.50	030	20	011	- 0.09	Ideal Levels And Interpretation Have Reen Based On
A B																Hair Samples Obtained From The Mid-Parietal To The
O O	RAN															
Op A		06 –	0.00	000	0000	001	00	000	0000	002	-0.03 -	000	00	000	- 0.00	
Ge Ba Bi Rb Li Ni Pt TI V Sr Sn Ti W Zr Germanium Barium Rubidum Lithium Nicket Platinum Trailium Strontium Tin Titanium Tungsten Zirconium .008 0.03 .002 .023 .001 .001 .0005 .008 0.03 .050 .11 .001 0.01 24/06/2008																
Germanium Barium Bismuth Rubidium Lithium Nickel Platinum Thallium Strontium Tin Titanium Tungsten Zirconium Company Company				<<		<<		<<	<<					<<		
.008 0.03 .002 .0239 .001 .01 .0005 .008 0.03 .050 .11 .001 0.01 24/06/2008	G	ie	Ba	Bi	Rb	Li	Ni	Pt	TI	V	Sr	Sn	Ti	W	Zr	
24/00/2008	Germa	anium	Barium	Bismuth	Rubidium	Lithium	Nickel	Platinum	Thallium	Vanadium	Strontium	Tin	Titanium	Tungsten	Zirconium	
CURRENT TEST RESULTS	.0	800	0.03	.002	.0239	.001	.01	.001	.0005	.008	0.03	.050	.11	.001	0.01	
																CURRENT TEST RESULTS

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TOXIC RATIOS

щ	- 168.0	- 8.8	- 44.0	- 1.6	- 1000.0	- 400.0	- 56900	- 142251	- 11380
ACCEPTABLE	- 126.0	- 6.6	- 33.0	- 1.2	- 750.0	- 300.0	- 42675	- 106688	- 8535
•	- 84.0	- 4.4	- 22.0	- 0.8	- 500.0	- 200.0	- 28450	- 71126	- 5690
LOW	- 42.0	- 2.2	- 11.0	- 0.4	- 250.0	- 100.0	- 14225	- 35563	- 2845
	Ca/Pb	Fe/Pb	Fe/Hg	Se/Hg	Zn/Cd	Zn/Hg	S/Hg	S/Cd	S/Pb
	160.0	4.0	40.0	2.0	2500.0	1000.0	393500	983750	39350

ADDITIONAL RATIOS

	Current	Previous	
Ca/Sr	533.33		131/1
Cr/V	6.25		13/1
Cu/Mo	225.00		625/1
Fe/Co	200.00		440/1
K/Co	7500.00		2000/1
K/Li	15000.00		2500/1
Mg/B	1.22		40/1
S/Cu	2186.11		1138/1
Se/TI	40.00		37/1
Se/Sn	.40		0.67/1
Zn/Sn	200.00		167/1

LEVELS

All mineral levels are reported in milligrams percent (milligrams per one-hundred grams of hair). One milligram percent (mg%) is equal to ten parts per million (ppm).

NUTRITIONAL ELEMENTS

Extensively studied, the nutrient elements have been well defined and are considered essential for many biological functions in the human body. They play key roles in such metabolic processes as muscular activity, endocrine function, reproduction, skeletal integrity and overall development.

TOXIC ELEMENTS

The toxic elements or "heavy metals" are well-known for their interference upon normal biochemical function. They are commonly found in the environment and therefore are present to some degree, in all biological systems. However, these metals clearly pose a concern for toxicity when accumulation occurs to excess.

ADDITIONAL ELEMENTS

These elements are considered as possibly essential by the human body. Additional studies are being conducted to better define their requirements and amounts needed.

RATIOS

A calculated comparison of two elements to each other is called a ratio. To calculate a ratio value, the first mineral level is divided by the second mineral level.

EXAMPLE: A sodium (Na) test level of 24 mg% divided by a potassium (K) level of 10 mg% equals a Na/K ratio of 2.4 to 1.

SIGNIFICANT RATIOS

If the synergistic relationship (or ratio) between certain minerals in the body is disturbed, studies show that normal biological functions and metabolic activity can be adversely affected. Even at extremely low concentrations, the synergistic and/or antagonistic relationships between minerals still exist, which can indirectly affect metabolism.

TOXIC RATIOS

It is important to note that individuals with elevated toxic levels may not always exhibit clinical symptoms associated with those particular toxic minerals. However, research has shown that toxic minerals can also produce an antagonistic effect on various essential minerals eventually leading to disturbances in their metabolic utilization.

ADDITIONAL RATIOS

These ratios are being reported solely for the purpose of gathering research data. This information will then be used to help the attending health-care professional in evaluating their impact upon health.

REFERENCE RANGES

Generally, reference ranges should be considered as guidelines for comparison with the reported test values. These reference ranges have been statistically established from studying an international population of "healthy" individuals.

Important Note: The reference ranges should not be considered as absolute limits for determining deficiency, toxicity or acceptance.