

*Toxic & Essential Elements; Hair*

TOXIC METALS						
		RESULT µg/g	REFERENCE INTERVAL	PERCENTILE		
				68 <sup>th</sup>	95 <sup>th</sup>	
Aluminum	(Al)	5.2	< 8.0			
Antimony	(Sb)	0.036	< 0.066			
Arsenic	(As)	0.056	< 0.080			
Barium	(Ba)	0.15	< 0.50			
Beryllium	(Be)	< 0.01	< 0.020			
Bismuth	(Bi)	0.016	< 2.0			
Cadmium	(Cd)	< 0.009	< 0.070			
Lead	(Pb)	0.66	< 1.0			
Mercury	(Hg)	0.08	< 0.40			
Platinum	(Pt)	< 0.003	< 0.005			
Thallium	(Tl)	< 0.001	< 0.002			
Thorium	(Th)	< 0.001	< 0.002			
Uranium	(U)	0.006	< 0.060			
Nickel	(Ni)	0.19	< 0.20			
Silver	(Ag)	0.02	< 0.20			
Tin	(Sn)	0.08	< 0.30			
Titanium	(Ti)	0.28	< 1.0			
Total Toxic Representation						

ESSENTIAL AND OTHER ELEMENTS						
		RESULT µg/g	REFERENCE INTERVAL	PERCENTILE		
				2.5 <sup>th</sup>	16 <sup>th</sup>	50 <sup>th</sup>
Calcium	(Ca)	270	125- 370			
Magnesium	(Mg)	160	12- 30			
Sodium	(Na)	9	20- 200			
Potassium	(K)	4	12- 200			
Copper	(Cu)	34	11- 18			
Zinc	(Zn)	99	100- 190			
Manganese	(Mn)	0.08	0.10- 0.50			
Chromium	(Cr)	0.31	0.43- 0.80			
Vanadium	(V)	0.020	0.030- 0.10			
Molybdenum	(Mo)	0.020	0.050- 0.13			
Boron	(B)	0.32	0.70- 5.0			
Iodine	(I)	0.27	0.25- 1.3			
Lithium	(Li)	0.005	0.007- 0.020			
Phosphorus	(P)	166	150- 220			
Selenium	(Se)	0.81	0.70- 1.1			
Strontium	(Sr)	0.25	0.16- 1.0			
Sulfur	(S)	50600	45500- 53000			
Cobalt	(Co)	0.011	0.004- 0.020			
Iron	(Fe)	8.1	7.0- 16			
Germanium	(Ge)	0.030	0.030- 0.040			
Rubidium	(Rb)	0.007	0.016- 0.18			
Zirconium	(Zr)	0.027	0.040- 1.0			

SPECIMEN DATA		RATIOS		
<b>COMMENTS:</b>		ELEMENTS	RATIOS	RANGE
Date Collected: 02/26/2014	Sample Size: 0.205 g	Ca/Mg	1.69	4- 30
Date Received: 03/10/2014	Sample Type: Head	Ca/P	1.63	0.8- 8
Date Completed: 03/13/2014	Hair Color:	Na/K	2.25	0.5- 10
Methodology: ICP/MS	Treatment:	Zn/Cu	2.91	4- 20
	Shampoo:	Zn/Cd	> 999	> 800

# Micro Trace Minerals Laboratoire

Laboratoire médecine environnementale

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Analyse Minerale			Les cheveux de l'enfant	
			Numero	
Docteur			Date d'essai	07/03/2014
Nom du client			Sexe	m
l'information clinique			d.d.n.	
			page	1/4
	<b>Zone de référence</b>	<b>Valeur</b>		
<b>Oligoéléments essentiels (ppm = mg/kg = mcg/g)</b>				
Chrome	0,02 --- 0,15	0,05		
Cobalt	< 0,15	0,01		
Cuivre	6,70 --- 37,00	29,28		
Fer	7,70 --- 15,00	5,89	↓	
Iode	0,15 --- 3,50	0,12	↓	
Manganèse	0,07 --- 0,50	0,06	↓	
Molybdène	0,02 --- 1,00	0,02	↓	
Sélénium	0,40 --- 1,40	1,06		
Vanadium	0,01 --- 0,15	0,01		
Zinc	110,00 --- 227,00	81,99	↓	
<b>Eléments essentiels (ppm = mg/kg = mcg/g)</b>				
Calcium	200,00 --- 850,00	331,63		
Magnésium	20,00 --- 115,00	91,38		
<b>Oligoéléments non essentiels (ppm = mg/kg = mcg/g)</b>				
Bore	< 2,00	< 0,25		
Germanium	< 0,50	0,00		
Lithium	< 0,20	0,00		
Strontium	0,11 --- 4,28	0,32		
Tungstène	< 0,02	0,00		
<b>Eléments toxiques (ppm = mg/kg = mcg/g = mcg/g)</b>				
Aluminium	< 8,00	3,29		
Antimoine	< 0,20	0,03		

n.n. = pas détecté

Accreditation: DIN EN ISO 17025; Contrôle de qualité: Dipl. Ing. Friedle, Ing. J. Merz, Dr Rauland PhD; Validation: Dr E. Blaurock-Busch PhD, laboratoire Docteur: Dr med. A. Schönberger

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## Analyse Minerale

## Les cheveux de l'enfant

Nom du client	Numero	page			2/4
	Zone de référence	Valeur			
<b>Eléments toxiques (ppm = mg/kg = mcg/g = mcg/g)</b>					
Argent	< 1,00	0,02			
Arsenic total	< 0,20	0,05			
Baryum	< 2,65	0,16			
Béryllium	< 0,03	< 0,01			
Bismuth	< 0,18	0,02			
Cadmium	< 0,20	0,01			
Cérium	< 0,05	0,00			
Césium	< 0,01	< 0,01			
Dysprosium	< 0,01	< 0,00			
Erbium	< 0,01	< 0,00			
Étain	< 0,93	0,08			
Europium	< 0,01	< 0,00			
Gadolinium	< 0,01	< 0,00			
Gallium	< 0,07	0,01			
Iridium	< 0,01	n.n.			
Lanthane	< 0,02	0,00			
Lutécium	< 0,01	< 0,00			
Mercure	< 0,30	0,08			
Nickel	< 0,85	0,19			
Palladium	< 0,10	< 0,05			
Platine	< 0,07	n.n.			
Plomb	< 3,00	0,72			
Praseodymium	< 0,01	< 0,01			

n.n. = pas détecté

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*Defeat to your doctor*

Toxic & Essential Elements; Hair

TOXIC METALS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68 <sup>th</sup> 95 <sup>th</sup>
Aluminum (Al)	6.2	< 8.0	<i>A1298 cap</i>
Antimony (Sb)	0.022	< 0.066	
Arsenic (As)	0.069	< 0.080	<i>PS/PERC + DHA</i>
Barium (Ba)	0.14	< 0.75	<i>+ All in one</i>
Beryllium (Be)	< 0.01	< 0.020	
Bismuth (Bi)	0.034	< 2.0	
Cadmium (Cd)	0.012	< 0.070	
Lead (Pb)	1.9	< 1.0	<i>Metal Away +</i>
Mercury (Hg)	0.07	< 0.40	<i>ESTASOFT</i>
Platinum (Pt)	< 0.003	< 0.005	
Thallium (Tl)	< 0.001	< 0.002	
Thorium (Th)	< 0.001	< 0.002	<i>UltraSerd +</i>
Uranium (U)	0.24	< 0.060	
Nickel (Ni)	0.11	< 0.20	<i>quocatin</i>
Silver (Ag)	0.06	< 0.14	
Tin (Sn)	0.07	< 0.30	<i>Mbaclain 5 phos</i>
Titanium (Ti)	0.20	< 0.70	<i>ATP</i>
Total Toxic Representation			<i>Mitoforce</i>

ESSENTIAL AND OTHER ELEMENTS			
	RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 2.5 <sup>th</sup> 16 <sup>th</sup> 50 <sup>th</sup> 84 <sup>th</sup> 97.5 <sup>th</sup>
Calcium (Ca)	217	160 - 500	
Magnesium (Mg)	44	12 - 50	
Sodium (Na)	22	20 - 200	
Potassium (K)	160	12 - 140	<i>+ ESTASOFT</i>
Copper (Cu)	59	11 - 32	<i>too high</i>
Zinc (Zn)	77	110 - 190	<i>too low</i>
Manganese (Mn)	0.14	0.08 - 0.50	<i>+ Zinc</i>
Chromium (Cr)	0.53	0.40 - 0.70	<i>large</i>
Vanadium (V)	0.24	0.025 - 0.10	<i>limit chroag</i>
Molybdenum (Mo)	0.092	0.040 - 0.090	<i>limit</i>
Boron (B)	0.72	0.50 - 3.5	<i>baronite</i>
Iodine (I)	1.1	0.25 - 1.3	
Lithium (Li)	0.011	0.007 - 0.020	
Phosphorus (P)	143	150 - 220	<i>ATP + mbaclain 5 phos</i>
Selenium (Se)	1.5	0.70 - 1.1	
Strontium (Sr)	0.32	0.21 - 2.1	
Sulfur (S)	47600	44000 - 51000	
Cobalt (Co)	0.007	0.004 - 0.020	
Iron (Fe)	8.5	7.0 - 16	
Germanium (Ge)	0.030	0.030 - 0.040	
Rubidium (Rb)	0.13	0.008 - 0.080	<i>+ POTASSIUM</i>
Zirconium (Zr)	0.031	0.060 - 0.70	

COMMENTS:	SPECIMEN DATA		RATIOS		
	ELEMENTS	RATIOS	RANGE		
<p><i>okay to use low dose</i></p> <p>Date Collected: 08/20/2015 Date Received: 09/04/2015 Date Completed: 09/10/2015 Methodology: ICP/MS</p> <p>Sample Size: 0.201 g Sample Type: Head Hair Color: Blond Treatment: Shampoo: Egg</p>	Ca/Mg	4.93	4 - 30		
	Ca/P	1.52	0.8 - 8		
	Na/K	0.138	0.5 - 10		
	Zn/Cu	1.31	4 - 20		
	Zn/Cd	> 999	> 800		

*run HMT in 3 months to recheck lithium levels*

*Suggestions for your consideration. As always, work with your Doctor. With love & hope, Dr. Amy*

*DEFEAT to your doctor*

## Hair Test 931 C –September 2015

1. What are your current symptoms and health history? - Autism, dyspraxia, Lyme disease (few symptoms for Lyme), hypotonia, hypoglycemia.
2. Dental history (Wisdom teeth removed and when? Any other extractions. First root canal placed? Braces? First amalgam etc...) - NONE.
3. What dental work do you currently have in place? What part of the dental clean-up have you completed? - NONE.
4. What dentistry did your mother have at any time before or during pregnancy? - 6-8 amalgams from childhood, but none since then.
5. What vaccinations have you had and when (including flu and especially travel shots)? -Vaccinations as per the schedule up until and including the first MMR at 12 months of age, none since.
6. Supplements and medications (including dosages) taken at time of hair test, or for the 3-6 months before the sample was taken? - MB12 injections, selenium, zinc, magnesium, silica, lithium (recent), calcium (+ vitamins, amino acids, oils...)
7. What is your age, height and weight? - 6 years old, 30kg.
8. Other information you feel may be relevant? - Extremely high, above-range serum zinc levels on recent tests. Have completed around 35 rounds of AC chelation (ALA only) in about 18 months since last test.
9. What is your location – city & country (so that we can learn where certain toxins are more prevalent). - France (Rennes).

porphyrines urinaires en nmol/gr Cr

			val. refer (m+/-2ds)
uP	UROPORPHYRINE	14 nmol	12-20
7cXP	HEPTACARBOXYPORPHYRINE	5.0 nmol	2.6-4.4
6cXP	HEXACARBOXYPORPHYRINE	0.7 nmol	0.3-0.9
5cXP	PENTACARBOXYPORPHYRINE	3.7 nmol	2.7-4.5
pcP	PRECOPROPORPHYRINE	15 nmol	6-13
cP	COPROPORPHYRINE	189 nmol	100-200

interprétation

PORPHYRINURIE modérément accrue avec dominance des métabolites terminaux, 5

ratios

			val. refer
pcP/uP	PréCOP / URO ratio	1.05	0.3-0.7
(5cP+pcP) / (uP+7cP)	ratio	0.9	0.3-0.6
pcP/5cP	PreCOP / 5CXP ratio	4.1	1.5-3
pcP/cP	PreCOP / COP ratio	8.1	2-6
cP/uP	URO / COP ratio	13.0	6-9

profil des porphyrines urinaires en nanomoles / l d'urine

métabolites	URO	7CXP	6CXP	5CXP	PRECOPRO	COPRO
nmol/l urine	11.02	3.8	0.5	2.8	11	143

profil des porphyrines urinaires en %age de la fluoresecence totale

métabolites	URO	7CXP	6CXP	5CXP	PRECOPRO	COPRO
% aire fluor	6.3	2.0	0.3	1.6	6.6	83.1

créatinine urinaire 756 mg/l

ratio ac urique / crea 0.66

val. ref.

unités molaires

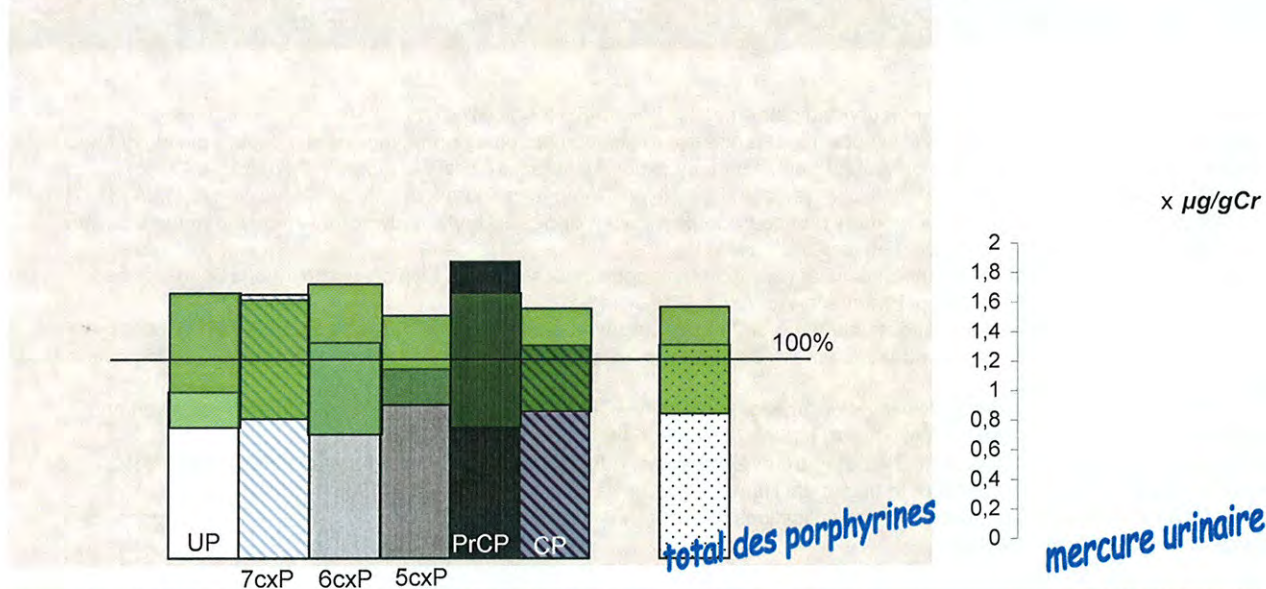
# Profil des porphyrines urinaires

HPLC-UV+Fluorescence (nmol / gCr urinaire)

		nmol / l	nmol/gcr	Val. Ref. <i>m±2ds</i>
<i>Uroporphyrins I &amp; III</i>	UP	11	14,6	12 - 20
<i>Heptacarboxy porphyrin</i>	7cxP	4	5,1	2,6-4,4
<i>Hexacarboxy porphyrin</i>	6cxP	1	0,7	0,3-0,9
<i>Pentacarboxy porphyrin</i>	5cxP	3	3,7	2,7-4,5
<i>Precoproporphyrin</i>	PrCP	11,7	15	6-13
<i>Coproporphyrins I &amp; III</i>	CP	143	190	125-200
<b>Porphyrines total :</b>			<b>229</b>	148-242
<b>creatinine urinaire</b> 756 mg / l	PrCP/UP ratio		1,1	0,2-0,5
	PrCP/CP		8,1	2-6
	CP/UP		13,0	5-9

 Zone de Val. Ref.

## Profil des porphyrines urinaires exprimé en valeurs normalisées



Une modification quantitative ou qualitative des Porphyrines urinaires est associée à de nombreux toxiques environnementaux dont elle traduit l'impact métabolique.

Lui est avantagement associé le 8oxo-désoxyguanosine, marqueur de génotoxicité, dont le taux urinaire est accru par la plupart des toxicités environnementales, métaux & xénobiotiques.

L'élévation des métabolites initiaux, Uroporphyrine &/ou 7cxP est associée aux Xénobiotiques, à l'Arsenic, l'Aluminium.

L'élévation conjointe des métabolites terminaux, 5cxP, Précopro & Coproporphyrine est associée au mercure.

L'augmentation isolée de la Coproporphyrine sans modification des autres composants est associée au Plomb &/ou aux xénobiotiques.

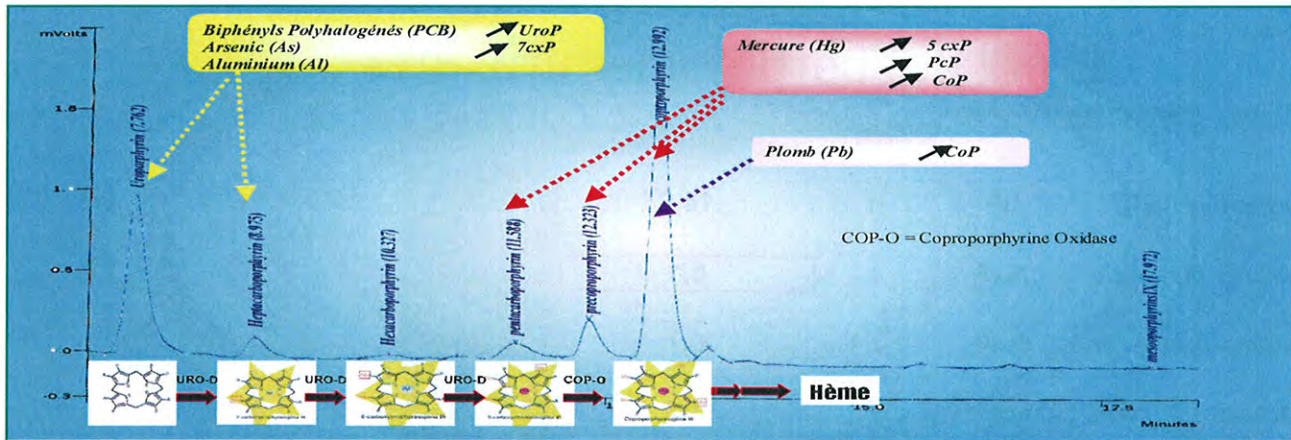
L'augmentation globale de la Porphyrinurie sans modification des proportions relatives des différents métabolites est associée aux xénobiotiques.



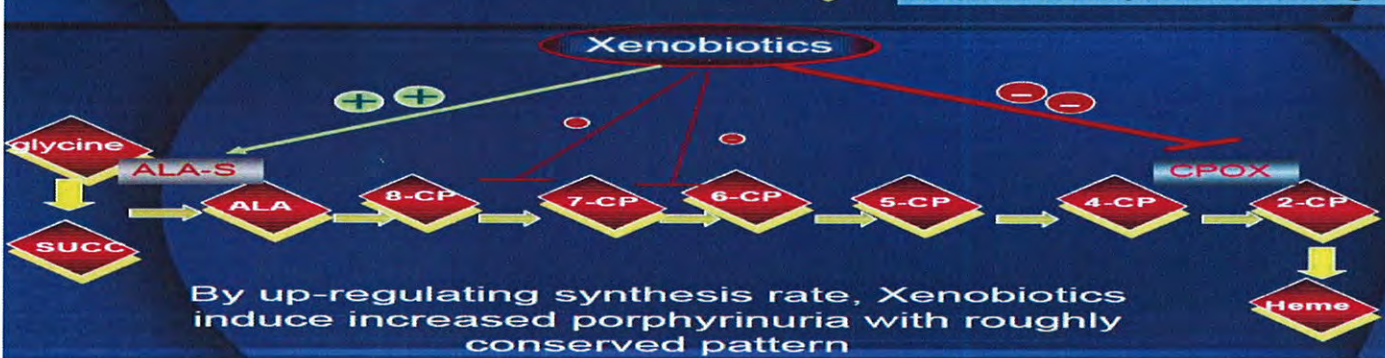
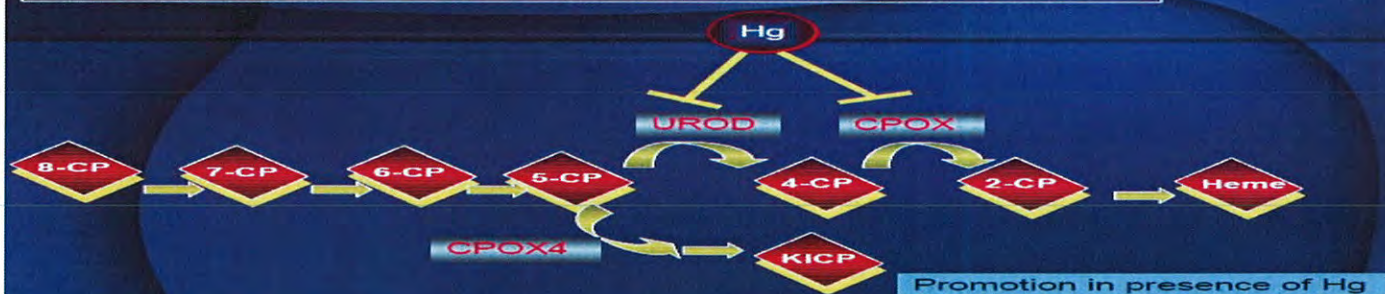
# Profil des porphyrines Urinaires

(Intoxication aux métaux lourds)

Impact des différents toxiques sur un profil de porphyrines



## Mercury targets CPOX and UROD in Heme biosynthetic pathway



### References:

- 1) Fowler BA, Porphyrinurias induced by mercury and other metals, *Toxicol Sci* [05/2001] 61(2):197-8.
- 2) Pingree SD, Simmonds PL, Rummel KT, Woods JS, Quantitative evaluation of urinary porphyrins as a measure of kidney mercury content and mercury body burden during prolonged methylmercury exposure in rats, *Toxicol Sci* [05/2001] 61(2):234-40.
- 3) Apostoli M, Sarnico M, Bavazzano P, Bartoli D, Arsenic and porphyrins, *American Journal of Industrial Medicine* 42:180-187 (2002)
- 4) A cascade analysis of the interaction of mercury and coproporphyrinogen oxidase (CPOX) polymorphism on the heme biosynthetic pathway and porphyrin production., *Toxicol Lett* Oct/2005.
- 5) The association between genetic polymorphisms of coproporphyrinogen oxidase and an atypical porphyrinogenic response to mercury exposure in humans. *Toxicol Appl Pharmacol* Aug/2005 206(2):113-20.
- 6) Validity of spot urine samples as a surrogate measure of 24-hour porphyrin excretion rates. Evaluation of diurnal variations in porphyrin, mercury, and creatinine concentrations among subjects with very low occupational mercury exposure. *J Occup Environ Med* Dec/1999 40(12):1090-101
- 7) The validity of spot urine samples for low-level occupational mercury exposure assessment and relationship to porphyrin and creatinine excretion rates. *J Pharmacol Exp Ther* Apr/1996 277(1):239-44.
- 8) Altered porphyrin metabolism as a biomarker of mercury exposure and toxicity. *Can J Physiol Pharmacol* Feb/1997 74(2):210-5.
- 9) Behavioral effects of low-level exposure to elemental Hg among dentists. *Neurotoxicol Teratol* /1995 17(2):161-8.
- 10) Porphyrinuria in childhood autistic disorders; implications of environmental toxicity. *"Toxicology and Applied Pharmacology"*

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## Analyse Minerale

## Les cheveux de l'enfan

Nom du client	page				3/4
	Zone de référence	Valeur			
<b>Eléments toxiques (ppm = mg/kg = mcg/g = mcg/g)</b>					
Rhénium	< 0,01	< 0,01			
Rhodium	< 0,01	n.n.			
Ruthénium	< 0,32	< 0,00			
Samarium	< 0,01	< 0,00			
Tantale	< 0,01	< 0,00			
Tellurium	< 0,01	< 0,01			
Thallium	< 0,01	< 0,00			
Thorium	< 0,01	n.n.			
Thulium	< 0,01	< 0,00			
Titane	< 0,65	0,12			
Uranium	< 0,10	0,01			
Ytterbium	< 0,01	< 0,00			
Zirconium	< 1,47	< 0,05			

n.n. = pas détecté

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## Health history for hair test 931

1. Diagnosis: mild autism, previously childhood apraxia of speech (now resolved)
2. No dental work in child, but mother (myself) has amalgams.
3. -
4. Mother - no dental work during pregnancy, but amalgams since childhood.
5. All vaccines up until 12 months of age. Last vaccine was the first of the MMR shots (12 months)
6. Calcium and magnesium the only mineral supplements taken.
7. 4yrs and 8months, 116cm, 23 kg.
8. 3-4 initial rounds of chelation 3 months prior to test.
9. Rennes, France.