Micro Trace Minerals Laboratoire

Laboratoire médecine environnementale

Röhrenstrasse 20, 91217 Hersbruck, Germany
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Analyse Minerale — Les cheveux de l'enfant

		Numero		3KH154217	
Docteur				Date d'essai	13/01/2015
Nom du client		Sexe	m	d.d.n.	20/07/2010
l'information clinique				page	1/4

	Zone de référence	Valeur		
Oligoéléments essentiels (ppm = mg/kg = mcg/g)				
Chrome	0,02 --- 0,15	0,19	↑	
Cobalt	< 0,15	0,19	↑	
Cuivre	6,70 --- 37,00	15,86		
Fer	7,70 --- 15,00	6,54	↓	
Iode	0,15 --- 3,50	0,04	↓	
Manganèse	0,07 --- 0,50	0,06	↓	
Molybdène	0,02 --- 1,00	0,03		
Sélénium	0,40 --- 1,40	0,90		
Vanadium	0,01 --- 0,15	0,01	↓	
Zinc	110,00 --- 227,00	144,98		
Eléments essentiels (ppm = mg/kg = mcg/g)				
Calcium	200,00 --- 850,00	622,01		
Magnésium	20,00 --- 115,00	43,63		
Oligoéléments non essentiels(ppm = mg/kg = mcg/g)				
Bore	< 2,00	< 0,25		
Germanium	< 0,50	0,00		
Lithium	< 0,20	0,00		
Strontium	0,11 --- 4,28	1,63		
Tungstène	< 0,02	0,00		
Eléments toxiques (ppm = mg/kg = mcg/g = mcg/g)				
Aluminium	< 8,00	2,71		
Antimoine	< 0,20	0,05		

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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	Zone de référence	Valeur
Eléments toxiques (ppm = mg/kg = mcg/g = mcg/g)		
Argent	< 1,00	< 0,01
Arsenic total	< 0,20	0,02
Baryum	< 2,65	0,32
Béryllium	< 0,03	< 0,01
Bismuth	< 0,18	< 0,01
Cadmium	< 0,20	0,01
Cérium	< 0,05	0,01
Césium	< 0,01	< 0,01
Dysprosium	< 0,01	< 0,00
Erbium	< 0,01	< 0,00
Étain	< 0,93	0,06
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	0,20
Nickel	< 0,85	0,54
Palladium	< 0,10	< 0,05
Platine	< 0,07	n.n.
Plomb	< 3,00	0,43
Praseodymium	< 0,01	< 0,01

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Analyse Minerale — Les cheveux de l'enfant

Nom du client	Numero		3KH154217	page	3/4

	Zone de référence	Valeur
Eléments toxiques (ppm = mg/kg = mcg/g = mcg/g)		
Rhénium	< 0,01	< 0,01
Rhodium	< 0,01	< 0,01
Ruthénium	< 0,32	< 0,00
Samarium	< 0,01	< 0,00
Tantale	< 0,01	< 0,00
Tellurium	< 0,01	n.n.
Thallium	< 0,01	< 0,00
Thorium	< 0,01	n.n.
Thulium	< 0,01	< 0,00
Titane	< 0,65	0,11
Uranium	< 0,10	0,02
Ytterbium	< 0,01	< 0,00
Zirconium	< 1,47	< 0,05

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Analyse Minerale		Les cheveux de l'enfant			
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********* Votre analyse revele les manques et les exces suivants*********

Le taux de cobalt est eleve:on devrait confirmer de haut niveaux de cobalt a l'aide de tests mineraus supplementaires. Le cobalt peut etre de nature toxique et peut contaminer les emissions de "smelter". REFS: UNDERWOOD E.J., TRACE ELEMENTS IN HUMAN AND ANIMAL NUTRITION. ACADEMIC PRESS, NY, 1977.

Le taux de chrome est eleve. L'analyse des cheveux indique de facon tres precise les reserves de chrome dans l'organisme. Bien que rares, des taux eleves de chrome peuvent resulter d'une exposition industrielle prolongee. De tels taux ont ete associes avec la dermatose.

Le taux de fer est bas. Un manque de fer cause une anemie. Un ferritim de serum indique de facon plus precise un manque de fer et l'on devrait l'utiliser pour justifier les resultats mineraux d'une analyse des cheveux.REFS: MILLS, C.F. (1985) ANN. REV. NUTR. 5:173-193 PRASAD, AS. ED. (1976), TRACE ELEMENTS IN HUMAN HEALTH AND DISEASE. ACADEMIC PRESS.

Le taux de manganese est bas. Le manganese est necessaire pour un bon developpement et une calcification de la structure osseuse, et pour le metabolsme de lipoides et de l'alimentation. On a observe un manque de manganese conjointement a un manque de vitamine c, ce qui altere la coagulation sanguine. On a egalement besoin de manganese dans la formation de thyroxine.REFS: UNDERWOOD, E.J. (1972) TRACE ELEMENTS IN HUMAN AND ANIMAL NUTRITION CH. 7 ACADEMIC PRESS, NY, NY. SANER, G.ET AL. (1985) AM.J. CLIN. NUTR. 41:1042-1044

Le taux de vanadium est bas. Un manque de ce metal n'as pas ete etabli. Bonnes sources de vanadium sont les grains.

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Health history for hair test 1041

My nearly 4.5 ASD son was tested with a german hair testing in 2013, it is not specifically adapted to apply Cutler's counting rules, but I hope you can have a look at it, please. If you need some translation for the items, it was sent in French (FER = IRON, CUIVRE=COPPER, ARGENT=SILVER….. just tell me most are quite close visually)

1) What are your current symptoms and health history? Simon was diagnosed with ASD at age 2,5

2) Dental history (wisdom teeth removed? First root canal placed? Braces? First amalgam etc…) not concerned

3) What dental work do you currently have in place? What part of the dental cleanup have you completed?not concerned

4) What dentistry did your mother have at any time before or during pregnancy? a very long time before pregnancy, 20 years ago , replacement of amalgams (probably toxic fillings)

5) What vaccinations have you had and when (including flu and especially travel shots)? too many vaccinations: BCG vaccine, MMR, hepatitis b, tuberculosis, tetanos, dyphtery, Poliomyelitis, pneumocoque, …..

.

6) Supplements and medications (including dosages) taken at time of hair test, or for the 3-6 months before the sample was taken. he had a one month or so course of ATX (flagyl) 2 months before the test, between middle october 2014 and December 2014. Multi vitamines, probiotiques

7) Other information you feel may be relevant? My son arises from a gift(donation) of embryos in Madrid

8) What is your location - city & country (so that we can learn where certain toxins are more prevalent). I live in South of France, in a little town, 100kms North of Marseille

LABORATOIRE DE BIOLOGIE MEDICALE

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HORAIRES D'OUVERTURE
Lundi-Vendredi : 7h30 à 18h30
Samedi : 8h00 à 13h00
Prélèvement à domicile sur rendez-vous

Site internet : www.labbio.net / Mail : contact@labbio.net

Réf : 04/02/15-B-0007 - - Vendredi 6 Février 2015

m a r q u e u r s

(hplc fluo-uv detection)

porphyrines urinaires en nmol/gr Cr

				val. refer (m+/-2ds)
				val. n
uP	UROPORPHYRINE	17	nmol	12-20
7cxP	HEPTACARBOXYPORPHYRINE	3.8	nmol	2.6-4.4
6cxP	HEXACARBOXYPORPHYRINE	0.8	nmol	0.3-0.9
5cxP	PENTACARBOXYPORPHYRINE	3.5	nmol	2.7-4.5
pcP	PRECOPROPORPHYRINE	10	nmol	6-13
cP	COPROPORPHYRINE	152	nmol	100-200

interprétation

average total PORPHYRINURIA with mild/relative increase in COPROPORPHYRIN.

ratios

			val. refer
pcP/uP	PréCOP / URO ratio	0.61	0.3-0.7
(5cP+pcP) / (uP+7cP)	ratio	0.6	0.3-0.6
pcP/5cP	PreCOP / 5CXP ratio	2.9	1.5-3
pcP/cP	PreCOP / COP ratio	6.8	2-6
cP/uP	URO / COP ratio	8.9	6-9

S. DANSOKO
Biologiste

1/...

profil des porphyrines urinaires en nanomoles / l d'urine

métabolites	URO	7CXP	6CXP	5CXP	PRECOPRO	COPRO
nmol/l urine	12.47	2.8	0.6	2.6	7	111

profil des porphyrines urinaires en %age de la fluoresecence totale

métabolites	URO	7CXP	6CXP	5CXP	PRECOPRO	COPRO
% aire fluor	8.9	1.9	0.5	1.8	5.4	81.5

		val. ref.	unités molaires
créatinine urinaire	**733** mg/l		
ratio ac urique / crea	0.49		

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Urinary porphyrins

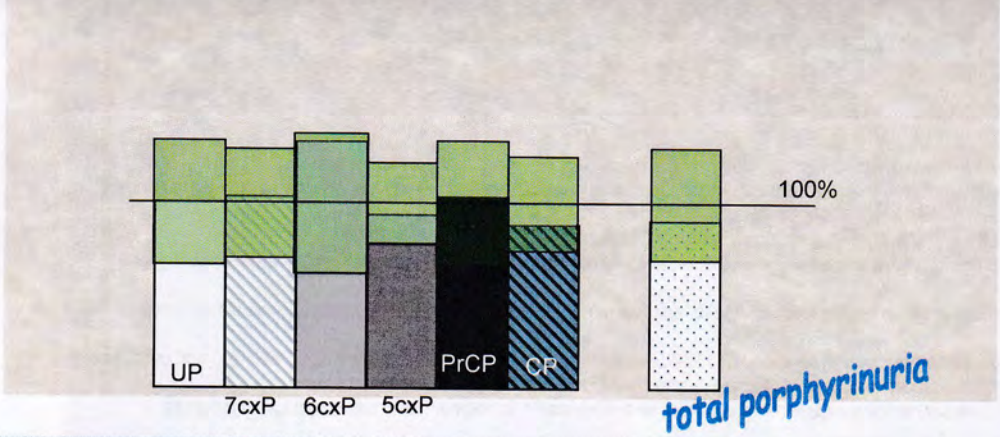
HPLC-UV+Fluorescence (nmol / l)

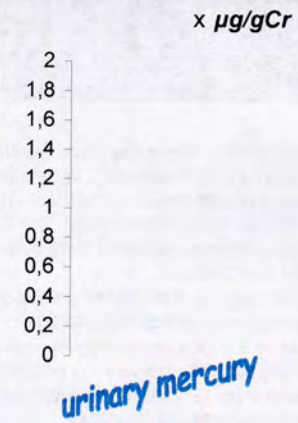
		nmol/l	nmol/gcr	Ref. Val. m±2sd
Uroporphyrins I &III	**UP**	*12*	**17**	*12 - 20*
Heptacarboxy porphyrin	**7cxP**	*2,8*	**3,8**	*2,6-4,4*
Hexacarboxy porphyrin	**6cxP**	*0,62*	**0,9**	*0,3-0,9*
Pentacarboxy porphyrin	**5cxP**	*2,6*	**3,6**	*2,7-4,5*
Precoproporphyrin	**PrCP**	*7,6*	**10**	*6-13*
Coproporphyrins I & III	**CP**	*112*	**152**	*125-200*
	Total porphyrinuria		**188**	*148-242*
	PrCP/Up ratio		0,6	*0,2-0,6*
	PrCP/Cp		6,8	*2-6*
	Cp/Up		9,0	*5-8*

urinary creatinin
733 mg / l

Urinary Porphyrin profile expressed in normalized values

Area of Ref. Val.



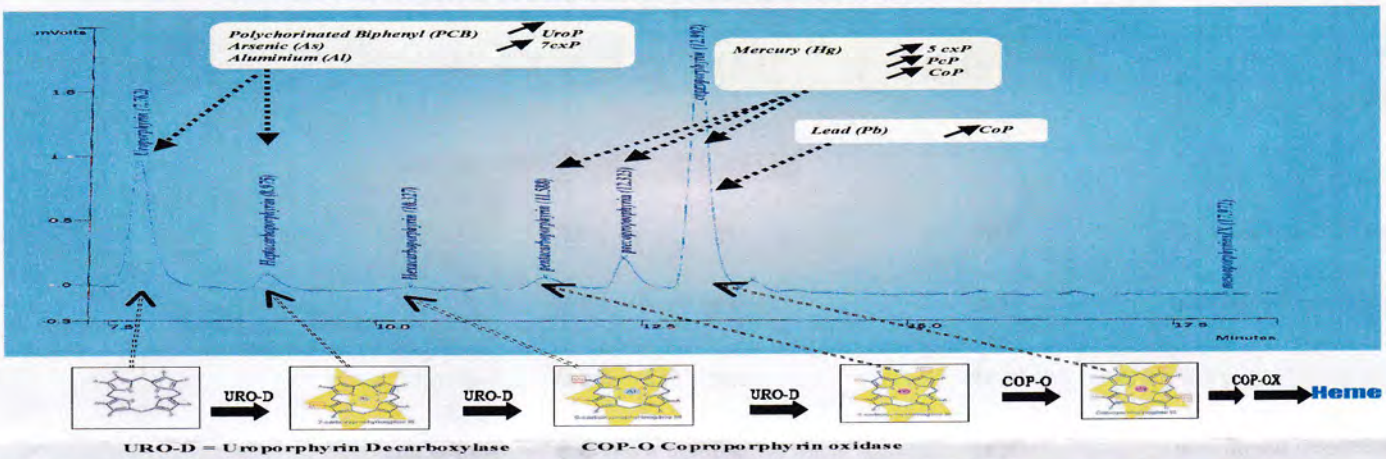


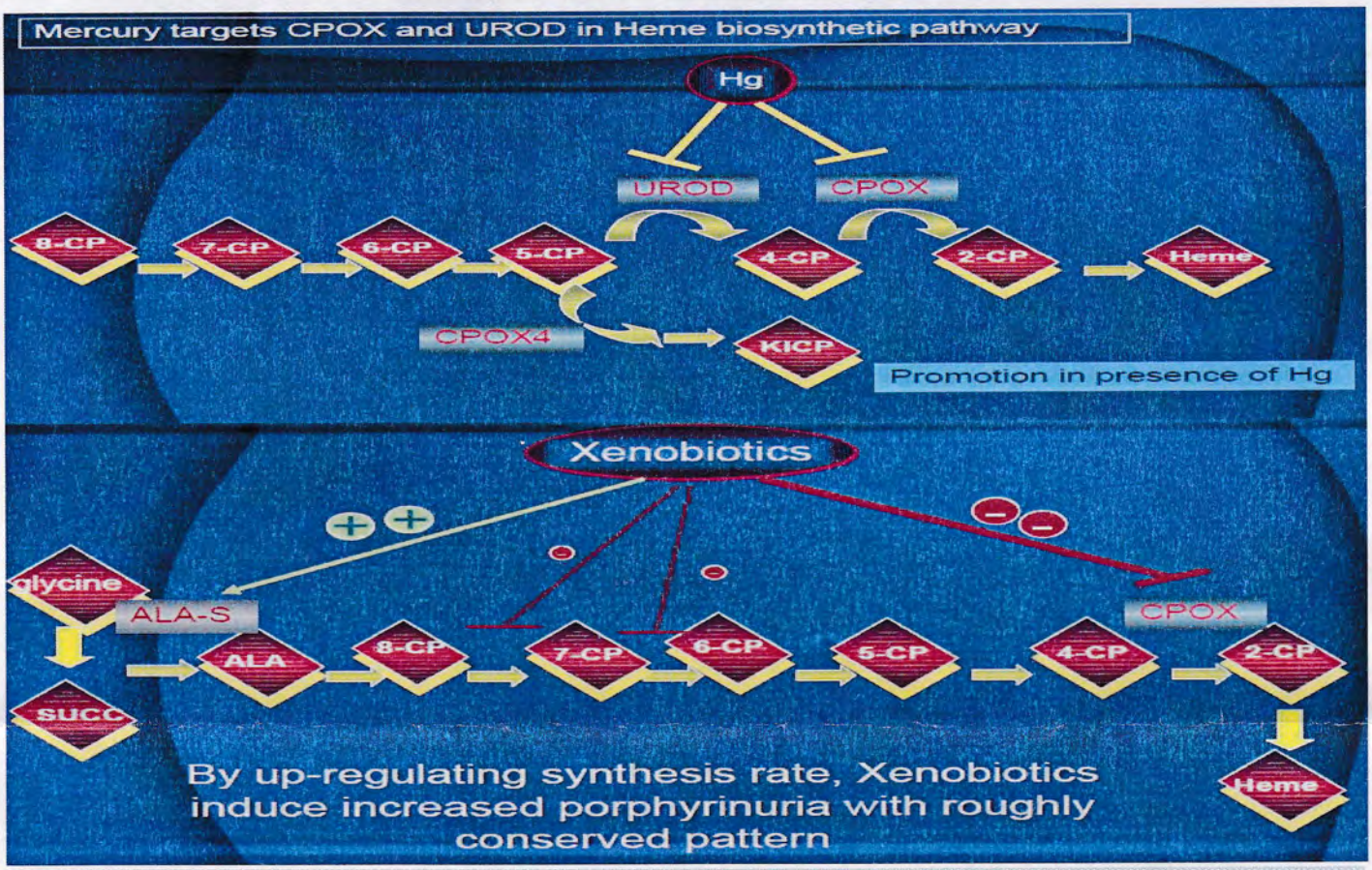
A quantitative or qualitative changes in urinary porphyrins is associated with many environmental toxicants that it reflects the metabolic impact
Is advantageously associated with the urinary Porphyrin Profile, the determination of urinary 8oxo-deoxyguanosine, reflecting a genotoxicity, enhanced by the majority of environmental toxicants., metals, organic compounds.
Increased initial metabolites, uroporphyrin & / or 7cxP, is associated with Xenobiotics, arsenic, aluminum.
Associated increase in terminal metabolites, 5cxP, Precopro & coproporphyrin is related to mercury.
The isolated increase of coproporphyrin without changing any other component is associated with lead & / or xenobiotics.
The overall increase in porphyrinuria without changing the relative proportions of different metabolites is associated with xenobiotics.

S. DANSOKO
Biologiste

Urinary porphyrins
(Heavy Metals Intoxication)

Toxic sensitivity of different porphyrins





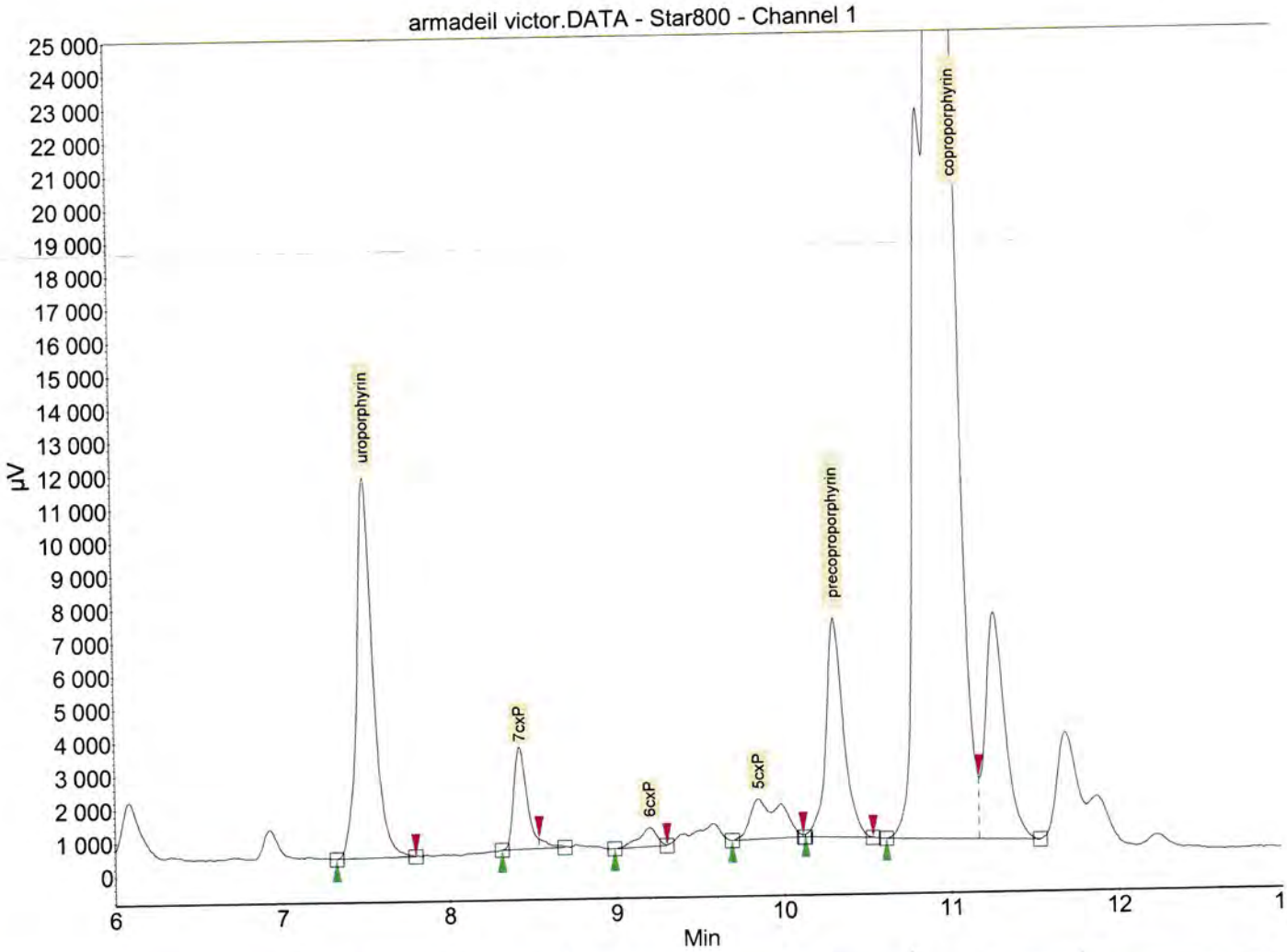
References:
1) Fowler BA, Porphyrinurias induced by mercury and other metals, Toxicol Sci [05/2001] 61(2):197-8.
2) Pingree SD, Simmonds PL, Rummel KT, Woods JS, Quantitative evaluation of urinary porphyrins as a measure of kidney mercury content and mercury body burden during prolonged methylmercury 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 ofr environnemental toxicity.
"Toxicology and Applied Pharmacology"

LABORATOIRE de BIOLOGIE MEDICALE

Urinary Porphyrin Chromatogram (nmol/l urine)

System : HPLC_FLUO
Method : porphyrines 140312 Varian 6
Sample set : Por 150204

Acquired : 04/02/2015 17:44:07
Processed : 05/02/2015 09:41:50



	Name	Quantity [nmol/l]	Quantity /gr Cr [nmol/gr]	Area % [%]	Time [Min]
	uroporphyrin	12,47	17,02	8,9	7,51
	7cxP	2,82	3,84	1,9	8,42
	6cxP	0,62	0,85	0,5	9,19
	5cxP	2,63	3,58	1,8	9,85
	precoproporphyrin	7,64	10,42	5,4	10,31
	coproporphyrin	111,61	152,26	81,5	10,98
Total		137,78	187,97	100,0	

Reference (nmol/gr Cr)
UP : 8 - 20
7cxP : 2,5 - 4,5
6cxP : 0,5 - 1,5
5 cxP : 2 - 4
PrCP : 5 - 9
CP : 100 - 200 (child)
CP : 70 - 140 (adult)

Ratios :		Reference Range :
PrCP / UP	0,61	0,2 - 0,5
5cxP+PrCP / UP+7cxP	0,67	0,2 - 0,6
PrCP / 5cxP	2,91	1,5 - 3,0
PrCP / CP	6,8	2 - 6 %
5cxP/7cxP	0,93	< 1,0
CP / UP	8,9	5 - 9

urinary creatinin
733 mg/l

S. DANSOKO
Biologiste

My nearly 4.5 ASD son was tested with a Urinary porphyrins testing in February 2015, it is not specifically adapted to apply Cutler's counting rules, but I hope you can have a look at it, please. You have the first hair test in January 2015 , number 1041.

1) What are your current symptoms and health history? He was diagnosed with ASD at age 2,5. Disturb selectivity and sensory food, not appetites, numerous belches, vomitings, food intolerances, unbalanced intestinal flora

2) Dental history (wisdom teeth removed? First root canal placed? Braces? First amalgam etc...) not concerned

3) What dental work do you currently have in place? What part of the dental cleanup have you completed?not concerned

4) What dentistry did your mother have at any time before or during pregnancy? a very long time before pregnancy, 20 years ago , replacement of amalgams (probably toxic fillings)

5) What vaccinations have you had and when (including flu and especially travel shots)? too many vaccinations: BCG vaccine, MMR, hepatitis b, tuberculosis, tetanos, dyphtery, Poliomyelitis, pneumocoque, …..

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