

# Foundational Protocol for Autistic Spectrum Disorders

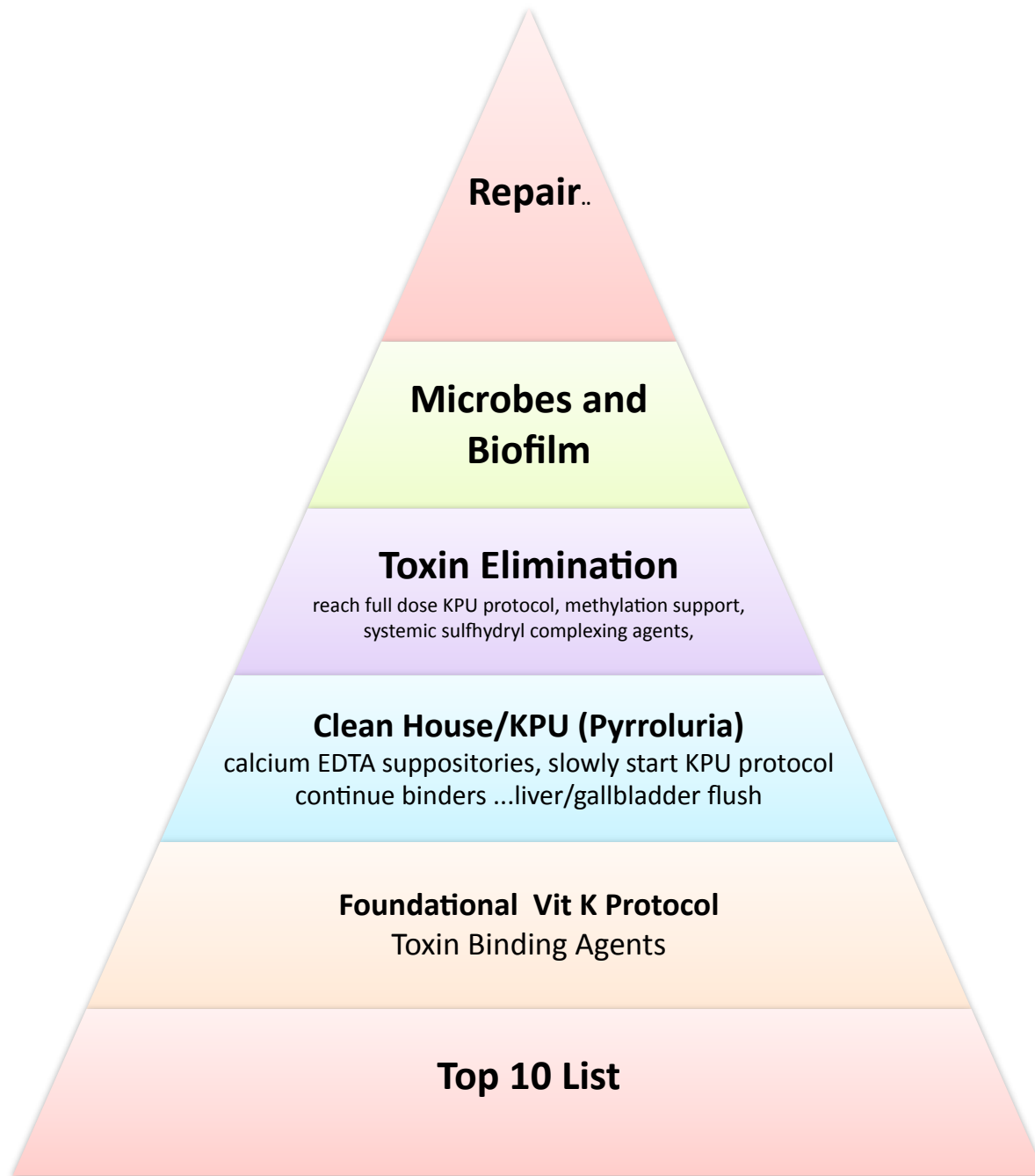
Dietrich Klinghardt MD,PhD and the Dana Gorman  
[www.Thriiive.com](http://www.Thriiive.com) Summit and Think Tank

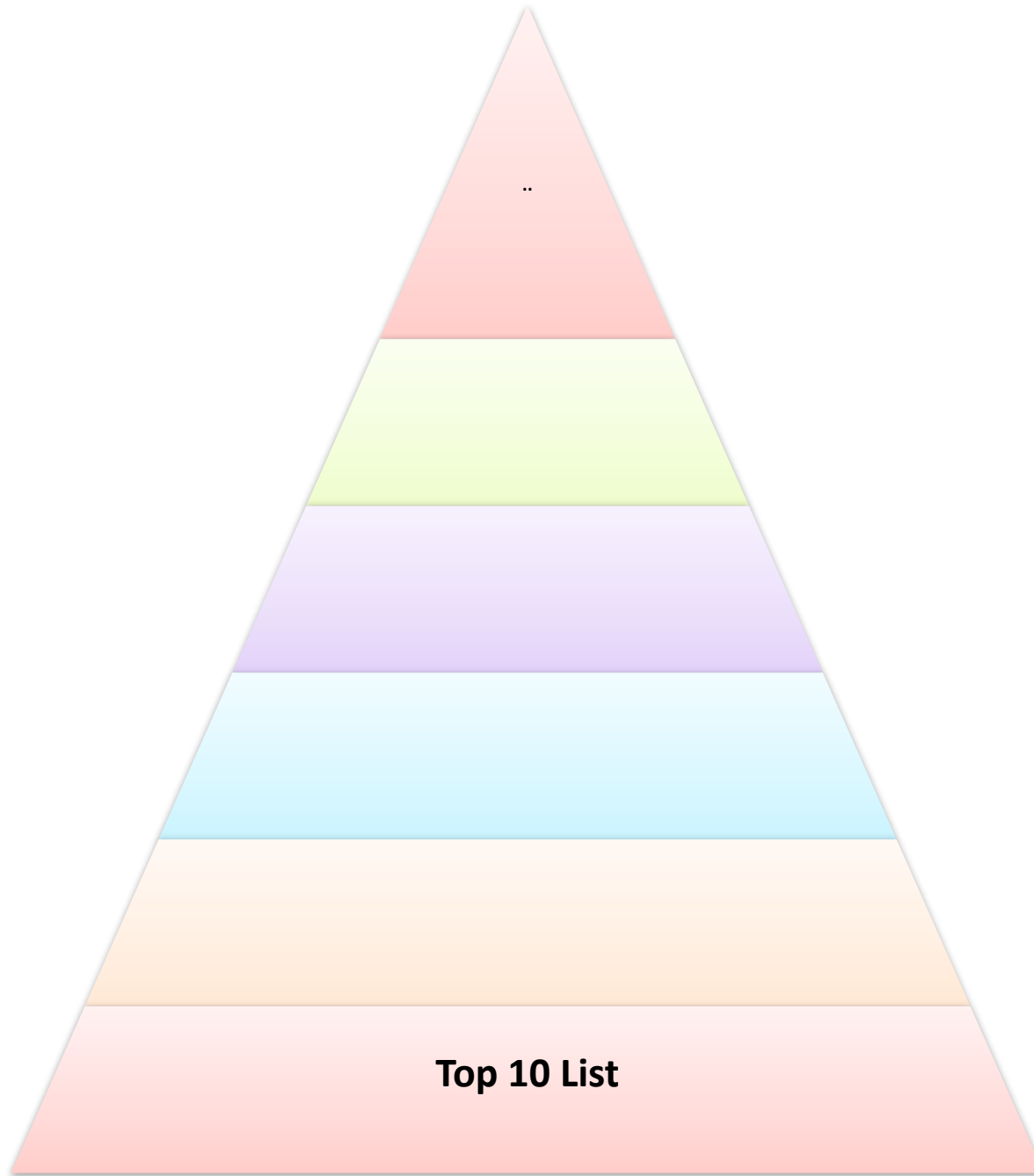
September 2009

*Special thanks for their contribution to Amy Derksen ND, Anju Usman  
MD and Catherine Tamaro*

- **Bridging from Cells to Cognition in Autism Pathophysiology: Biological Pathways to Defective Brain Function and Plasticity**
- American Journal of Biochemistry and Biotechnology 4 (2): 167-176, 2008  
Matthew P. Anderson, Brian S. Hooker and Martha R. Herbert
- Abstract: We review evidence to support a model where the disease process underlying autism may begin when an in utero or early postnatal environmental, infectious, seizure, or autoimmune insult triggers an immune response that increases reactive oxygen species (ROS) production in the brain that leads to DNA damage (nuclear and mitochondrial) and metabolic enzyme blockade and that these inflammatory and oxidative stressors persist beyond early development (with potential further exacerbations), producing ongoing functional consequences. In organs with a high metabolic demand such as the central nervous system, the continued use of mitochondria with damaged DNA and impaired metabolic enzyme function may generate additional ROS which will cause persistent activation of the innate immune system leading to more ROS production. Such a mechanism would self-sustain and possibly progressively worsen.

- "Additionally, brain changes of various types have been documented to exist during postnatal period, including increasing brain volume, persistent immune activation, and diminution of cell size, with the latter two continuing substantially into the lifespan.
- The mitochondrial dysfunction and altered redox signal transduction pathways found in autism would conspire to activate both astroglia and microglia. These activated cells can then initiate a broad-spectrum proinflammatory gene response. Beyond the direct effects of ROS on neuronal function, receptors on neurons that bind the inflammatory mediators may serve to inhibit neuronal signaling to protect them from excitotoxic damage during various pathologic insults (e.g., infection). In autism, over-zealous neuroinflammatory responses could not only influence neural developmental processes, but may more significantly impair neural signaling involved in cognition in an ongoing fashion. This model makes specific predictions in patients and experimental animal models and suggests a number of targets sites of intervention. Our model of potentially reversible pathophysiological mechanisms in autism motivates our hope that effective therapies may soon appear on the horizon.





**Top 10 List**

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# Thriive.com top 10 list

helpful life-style choices for both parents and children

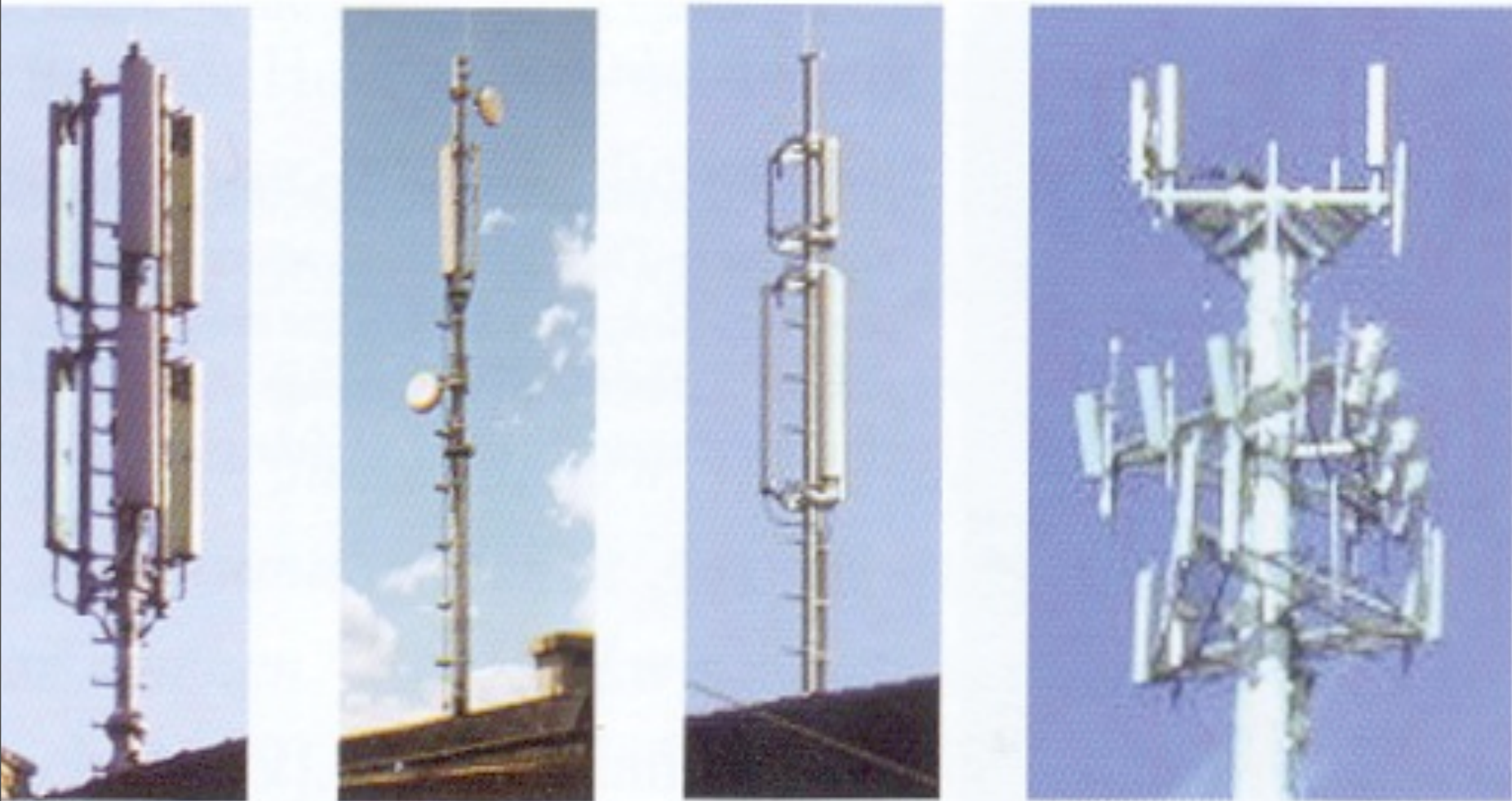
- 1- **Life**- add pleasure, reduce stress
- 2- **Energy**- add sunshine and nature, reduce EMF's at night
- 3- **Water**- add purity and structure, reduce contaminants
- 4- **Food**- go organic and choose real food
- 5- **Exercise**- get moving: 30 min just for you, more for the child
- 6- **Tests**- utilize more energetic testing, less blood draws/lab
- 7- **Emotions**- decrease negative self talk, allow yourself to feel
- 8- **Body**- treat and eliminate focal lesions (scars, dental, organs)
- 9- **Supplements**- add minerals, decrease : multi-vitamins (sensitize towards food allergies) , calcium (biofilm)
- 10- **Detox**- open windows, no carpets, no shoes inside, wash hands, no chemicals in home or garden, cups: no soap residues

## 2. Energy: easy ways to reduce EMR

- Use battery clocks near the bed
  - Turn off electrical circuit within 3 feet of the bed
  - Use beds without metal
  - Get rid of cordless phones (over 900 MHz)
  - Open the windows 10 minutes daily to balance positive and negative ions in the house
  - Wear natural fibers
  - Unplug computers, video games and other electronics when not in use
  - No fluorescent lights or compact energy efficient lights (they are linked to neurological disorders and contain mercury)
  - \*Night time: switch off fuses for the entire home
- Silver coated netting over the bed (sleep sanctuary)

- *When you create and write up your child's protocol, look for this symbol \* in the following pages. It\* indicates, that this item or issue is part of the core protocol*

# Microwave-EMR





# Sleep Sanctuary



### 3. Drinking Water

- \*Step 1: start with clean drinking water. If you live in chlorinated area: charcoal filter is good enough. If you live in fluoridated area: only a 5 stage reverse osmosis system will do
- \*Step 2: add electrolytes. Best: Matrix Electrolyte from BioPure. Put RO-water in large glass jar, add 2 tbsp Electrolyte per liter water.
- Step 3: add structure. Best: M-water (BioPure) 1 capful per liter
- Step 4: add light. Best: bubble Valkion singlet oxygen energy enriched air into the water for 30 minutes

# Activating the detoxification systems with inhaled singlet oxygen



## 4. Food: \*good food choices

- Sugar options: agave, organic maple syrup, honey, xylitol, stevia
- Drink clean water. If you live in fluoridated area, only reverse osmosis will do
- High ORAC foods (good antioxidants)
- Organic, non-GMO ( CRY toxin, neurotransmitter inhibitor)
- Fermented foods
- Fresh vegetables and fruits
- Limited dyes and preservatives
- Grass-fed meats without hormones/antibiotics
- Seek out food (not junk) to replace gluten and casein
- Ghee, coconut butter
- Good fats (avocado, olive oil, flax...)
- If possible, eat what is in season. Use ART frequently to re-assess what is best and best tolerated
- Avoid any food that triggers odd behavior – even if it appears essential

## 7. \*Stress

- Get a support system
- Explain to people around you that your child has a biological and not a behavioral or psychological condition.
- Know in your heart, that the child's illness is and always was the product of a society that has become too toxic for the healthy development of a sensitive child. It is not you that has failed – it is society that has failed your child (and many many others).
- You do the necessary work anyway –with dignity and without blame, guilt or anger. Don't loose your love in the struggle. If you are at the end of your strength, break down, but then pick yourself up and keep seeking and finding the answers
- The government may help to take care of your child – it will not help you to heal it
- Communicate with your spouse
- Communicate with your child's teachers/educators/childminders /counselors – and doctors
- Breathe/meditate/journal/tap/exercise
- Envision your child improving. Use the AID method (**A**ntidote for energetic and mental **I**mprints and **D**issociated parts of the soul)
- Create a special time for yourself
- Positive thinking– there is an affordable solution also for your child. It is for you to find and implement the right strategies. Don't ever give up. Don't hand over the care to someone else. You are the healer. Use the internet and your intuition.
- Accept what is. Trust that your experience is the right one for you at this time and that you – only you – can change it in time. And you are already doing it.

## 7. Stress: \*decrease **visual** sensory overload

- Visual: no bright lights, honor the day/night biorhythm, avoid too many colors in child's room
- light at night: battery operated red light in bedroom – does not harm melatonin production in the brain
- Clean up clutter in the bedroom and play areas: make the child's room a zen-retreat: 1 toy visible at a time, 1 dominant color (tan is good), 1 light, 1 chair, 1 picture on the wall.
- Keep to one project or task at a time
- Use simple visual cues to indicate needs
- Look for fluorescent lighting and get rid of it. Use incandescent lighting or full spectrum fluorescent (replace tubes every 8 months)

## 7. Stress: \*Decrease **olfactory** sensory overload

- Smells: carpets, clothes, kitchen and bathroom, perfumes, cut flowers, etc.
- No fragrance in the home (perfume, room sprays, plug-ins, candles, dryer sheets and detergent, soaps...)
- No smoking near your child
- allow fresh air into the home regularly
- Change air filters on heaters/AC
- Ask company/visitors/school to respect the “no perfume” rule

## 7. Stress: \*decrease sensory overload: **Touch and the DVD player**

- Sense of touch: clothing materials on skin, eliminate labels, bedding (look out for preferences of materials), etc.
- Offer extended time of skin to skin contact (holding therapy)
- No carpet – cork floors are best
- video games: if well enough to play, limit the time (less than 1 hr/day)
- TV/DVD/computer: less than 1 hr/day. Turn down contrast and sound



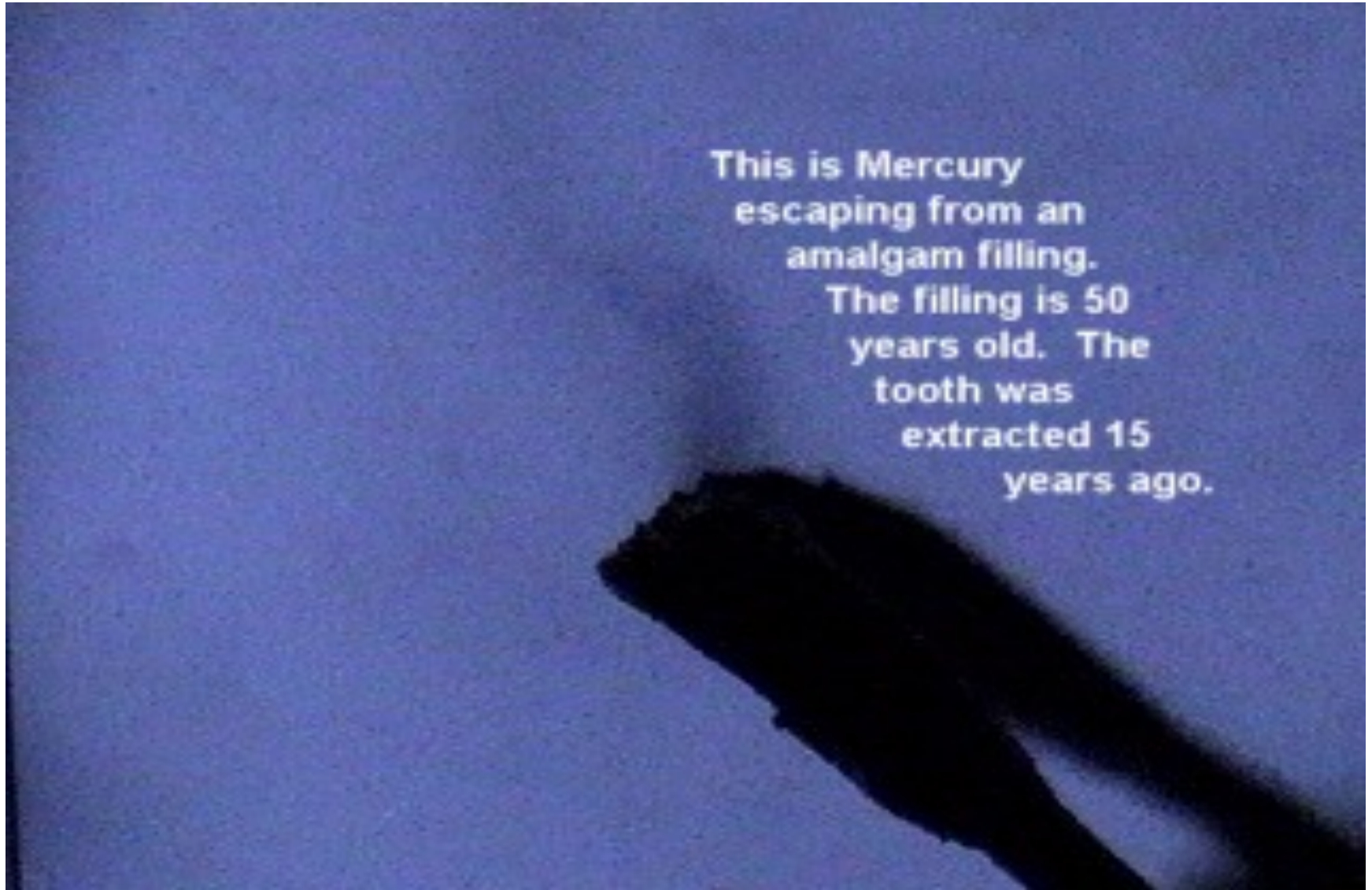
## 7. Stress: \*decrease sensory overload: **sound/auditory** overload

- No TV or radio at night or in the background
- Listen for odd noises in the sleeping area (try to get it quiet in the bedroom): refrigerator, near-by traffic, heating system/air conditioning, ticking clocks, etc.
- Be clear when you speak
- Keep a quiet time for doing school or therapy work to help focus
- Use classical music or choir music, but never “just as a background”. Play it with intention and loud enough to fill the home at that time – and at that time only. Avoid most other music. Use the walkman for yourself.
- Limit the music time in the home. Have scheduled quiet time
- Watch TV quietly when children are sleeping

## 8. Body: \*dental issues and suggestions

- Tooth decay in children is most often a sign of
  - a. HPU
  - b. lead toxicity
  - c. Vit K deficiency (see Vit K protocol)
- Children should never have amalgams or root fillings placed - ask for composite fillings
- Find a biological dentist who is already aware that mercury-containing amalgams outgas mercury and mercury is a potent neurotoxin (no matter how much politicians have distorted the science)
- [www.IAOMT.com](http://www.IAOMT.com) - International Academy of Oral Medicine (next meeting in UK: Feb. 6/7 Royal Society of Medicine, London)
- [www.IABDM.org](http://www.IABDM.org) - International Academy of Biological Dentistry and Medicine)
- Find a dentist who understands the occlusion (he would work closely with an osteopath) – often a different dentist than the tooth decay person. London: Dr. Mew, [www.nonextractiondentistry.com](http://www.nonextractiondentistry.com)
- Use non-fluoride toothpaste (better options contain xylitol)
- Sterilize the toothbrush (UV-chamber, hydrogen peroxide and water)
- Use a tongue scraper
- Teach and/or apply good dental hygiene from the beginning
- Be cautious with enzymes and flavored vitamins sitting in the mouth – enamel erosion
- Read booklet: AL Fonder “Dental Distress Syndrome”

Mercury outgases from amalgam fillings for a long, long time. Up to 80% end up in the CNS



This is Mercury  
escaping from an  
amalgam filling.  
The filling is 50  
years old. The  
tooth was  
extracted 15  
years ago.

# HAIR ELEMENTS



LAB# H030908-2522-1  
 PATIE: harov  
 ID: ISSACHAROV-N-09901  
 SEX: Male  
 AGE: 71

CLIENT#: 33958  
 DOCTOR: Noam Issacharov, BSC  
Dr. Hoxha (750 mg); Cholesta;  
20 Bayar St  
Tel Aviv, 69127 ISRAEL  
No Cilantaxo

## POTENTIALLY TOXIC ELEMENTS

TOXIC ELEMENTS	RESULT $\mu\text{g/g}$	REFERENCE RANGE	PERCENTILE	
			65 <sup>th</sup>	95 <sup>th</sup>
Aluminum	7.3	< 7.0		
Antimony	0.044	< 0.300		
Arsenic	0.15	< 0.300		
Bismuth	0.24	< 1.0		
Boron	0.011	< 0.500		
Barium	0.017	< 2.0		
Cadmium	0.23	< 0.005		
Lead	2.8	< 0.80		
Magnesium	0.57	< 0.80		
Fluorine	0.053	< 0.905		
Thallium	0.051	< 0.902		
Thorium	< 0.001	< 0.902		
Vanadium	0.041	< 0.900		
Nickel	0.27	< 0.20		
Silver	1.2	< 0.08		
Tin	0.32	< 0.20		
Titanium	0.29	< 0.20		

## ESSENTIAL AND OTHER ELEMENTS

ELEMENTS	RESULT $\mu\text{g/g}$	REFERENCE RANGE	PERCENTILE				
			2.5 <sup>th</sup>	16 <sup>th</sup>	50 <sup>th</sup>	84 <sup>th</sup>	97.5 <sup>th</sup>
Calcium	286	200-750					
Magnesium	54	25-95					
Sodium	210	20-80					
Potassium	390	9-80					
Copper	7.6	11-30					
Zinc	68	120-200					
Manganese	0.12	0.08-0.50					
Chromium	0.77	0.40-0.70					
Vanadium	0.14	0.018-0.065					
Molybdenum	0.039	0.005-0.005					
Boron	4.6	0.40-3.0					
Iron	1.3	0.40-1.8					
Lithium	0.027	0.001-0.020					
Fluoride	149	100-220					
Selenium	1.3	0.20-1.2					
Silver	0.95	0.10-1.5					
Sulfur	50500	44000-25000					
Cobalt	0.007	0.004-0.020					
Iron	9.2	1.0-11					
Gallium	0.030	0.010-0.040					
Rubidium	0.37	0.030-0.12					
Platinum	0.84	0.020-0.14					

### SPECIMEN DATA

### RATIO

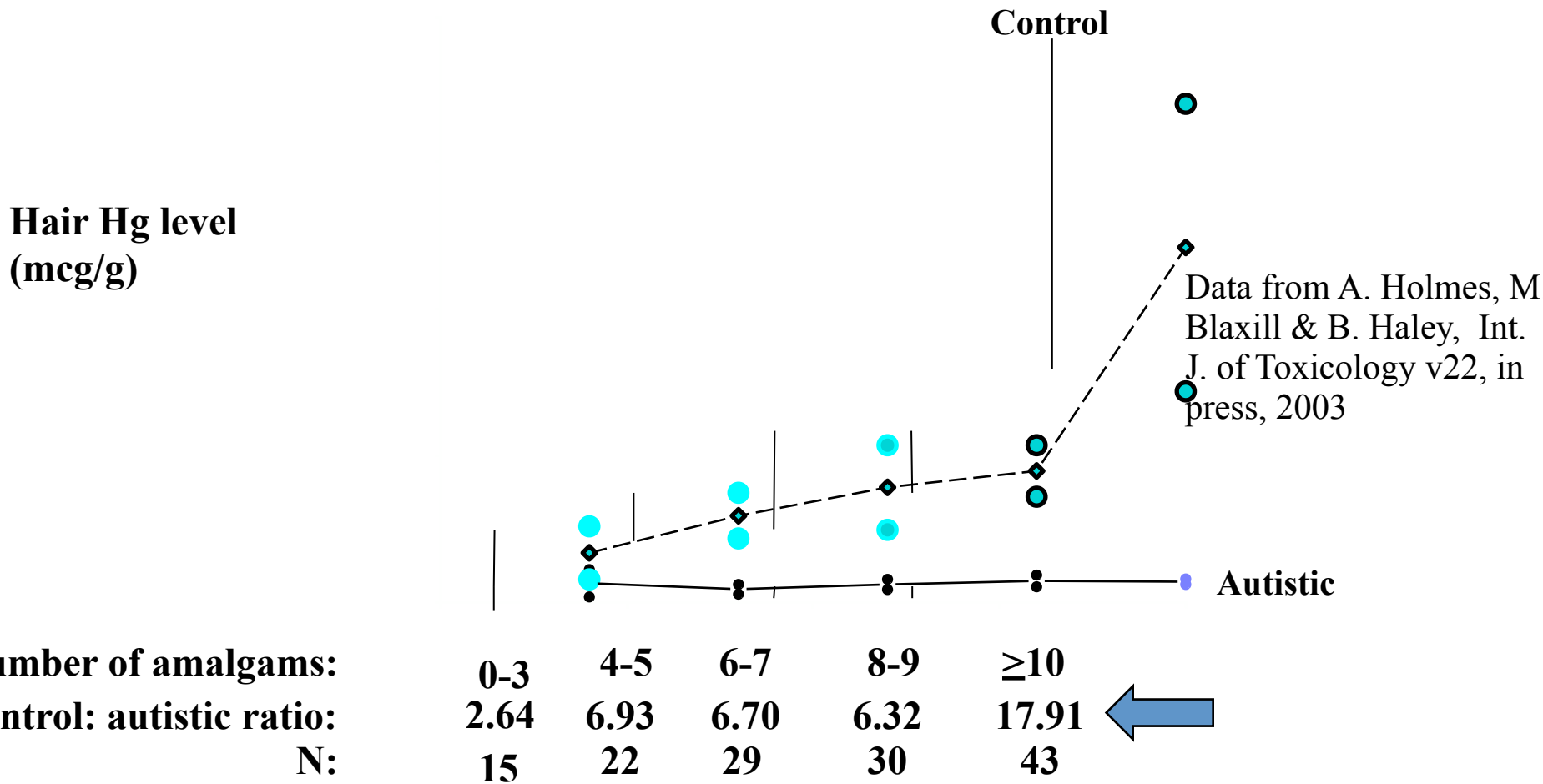
COMMENTS:				ELEMENTS		
Date Collected: 8/25/2009	Sample Size: 0.128 g			RATIOS		EXPECTED RANGE
Date Received: 9/8/2009	Sample Type: Head			Ca/Mg	5.3	0-20
Date Completed: 9/10/2009	Hair Color: Gray			Ca/P	1.92	0.4-2
Client Reference:	Treatment:			Ni/K	0.538	0.5-1.0
Methodology: ICP-MS	Shampoo: Head Shoulders			Zn/Cu	8.95	0-20
	WIGS			Zn/Cd	296	0-500

DOCTORS DATA, INC. • ADDRESS: 3728 Brook Avenue, St. Charles, IL 60170-7475 • CLIA ID NO: 14D0648478 • MEDICARE PROVIDER NO: 18462

\* HPO test: Positive (1.39  $\mu\text{M/L}$ )  
 Low Zn & Copper Catastrophic for Aorta Aneurysm going on!  
 Why Copper is also Low? Zn due to HPL Complex...

# Autistic children fail to excrete Mercury

## Mercury Birth Hair Levels Vs. Amalgam Fillings In Autistic And Control Groups



# Mercury induces inflammatory mediator release from human mast cells

Kempuraj D, Asadi S, Zhang B, Manola A, Hogan J, Peterson E, Theoharides TC.

J Neuroinflammation. 2010 Mar 11;7(1):20.

- Mercury is known to be neurotoxic, but its effects on the immune system are less well known. Mast cells are involved in allergic reactions, but also in innate and acquired immunity, as well as in inflammation. Many patients with Autism Spectrum Disorders (ASD) have "allergic" symptoms; moreover, the prevalence of ASD in patients with mastocytosis, characterized by numerous hyperactive mast cells in most tissues, is 10-fold higher than the general population suggesting mast cell involvement. We, therefore, investigated the effect of mercuric chloride (HgCl<sub>2</sub>) on human mast cell activation.

## METHODS:

Human leukemic cultured LAD2 mast cells and normal human umbilical cord blood-derived cultured mast cells (hCBMCs) were stimulated by HgCl<sub>2</sub> (0.1-10 microM) for either 10 min for beta-hexosaminidase release or 24 h for measuring vascular endothelial growth factor (VEGF) and IL-6 release by ELISA.

- RESULTS:

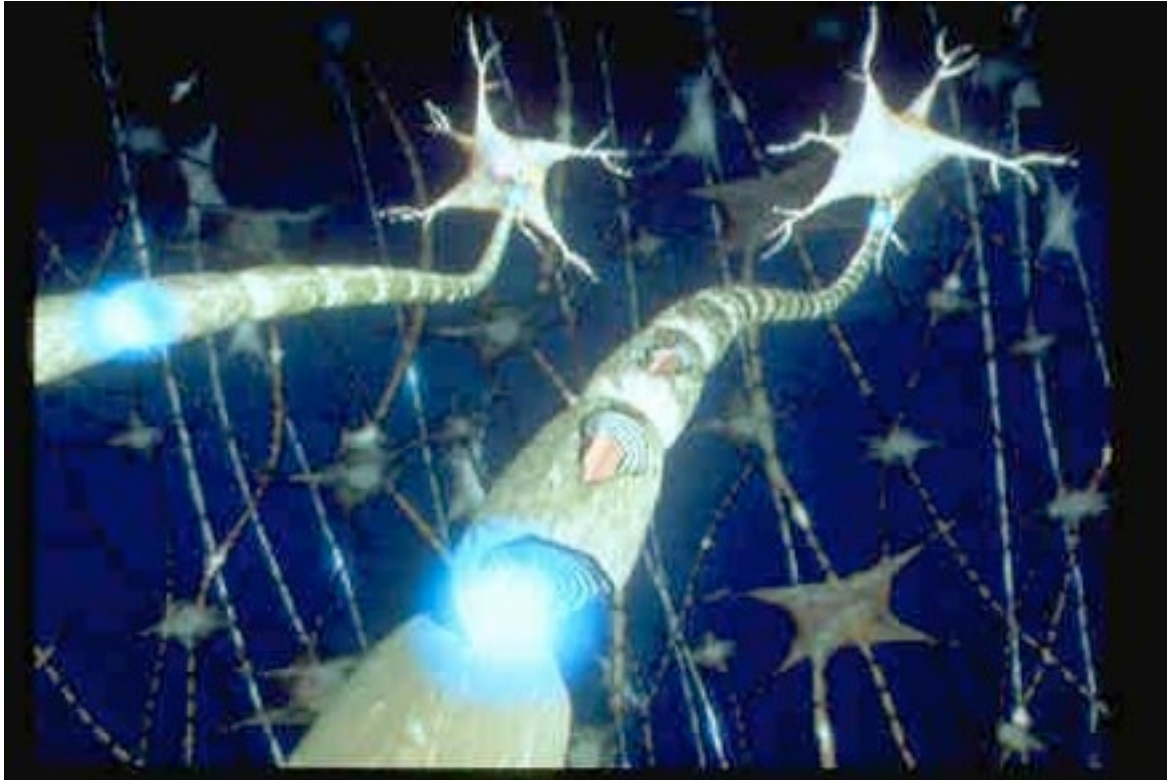
HgCl<sub>2</sub> induced a 2-fold increase in beta-hexosaminidase release, and also significant VEGF release at 0.1 and 1 microM (311+/-32 pg/10\*6 cells and 443+/-143 pg/10\*6 cells, respectively) from LAD2 mast cells compared to control cells (227+/-17 pg/10\*6 cells, n=5, p<0.05). Addition of HgCl<sub>2</sub> (0.1 microM) to the proinflammatory neuropeptide substance P (SP, 0.1 microM) had synergistic action in inducing VEGF from LAD2 mast cells. HgCl<sub>2</sub> also stimulated significant VEGF release (360 +/- 100 pg/10\*6 cells at 1 microM, n=5, p<0.05) from hCBMCs compared to control cells (182 +/-57 pg/10\*6 cells), and IL-6 release (466+/-57 pg/10\*6 cells at 0.1 microM) compared to untreated cells (13+/-25 pg/10\*6 cells, n=5, p<0.05). Addition of HgCl<sub>2</sub> (0.1 microM) to SP (5 microM) further increased IL-6 release.

CONCLUSIONS:

HgCl<sub>2</sub> stimulates VEGF and IL-6 release from human mast cells. This phenomenon could disrupt the blood-brain-barrier and permit brain inflammation. **As a result, the findings of the present study provide a biological mechanism for how even low levels of mercury may contribute to ASD pathogenesis.**

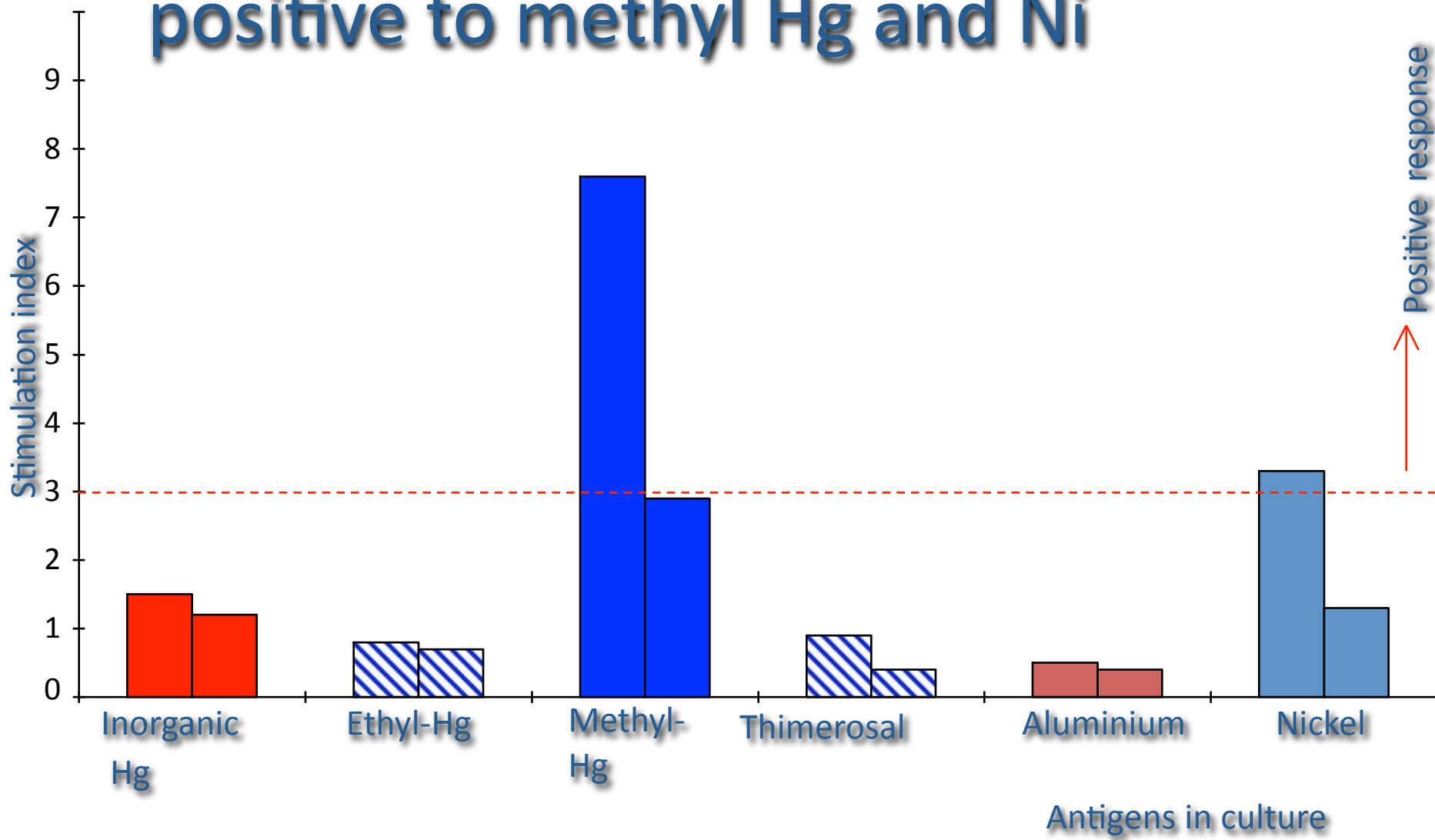
<http://www.ncbi.nlm.nih.gov/pubmed/20222982>

# Myelin sheets bind heavy metals

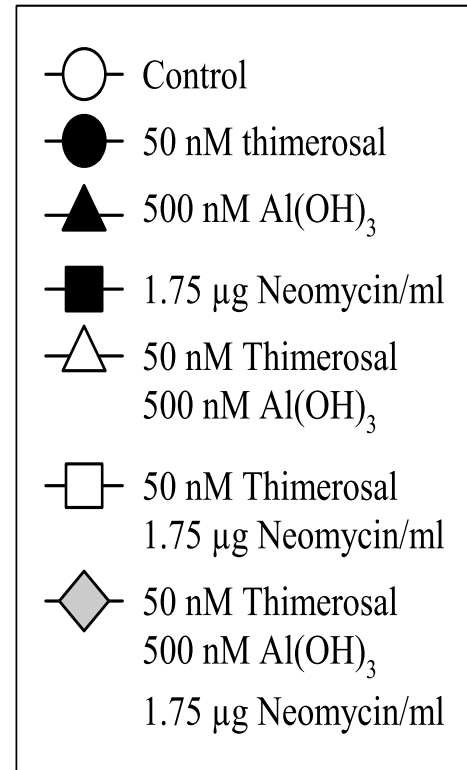
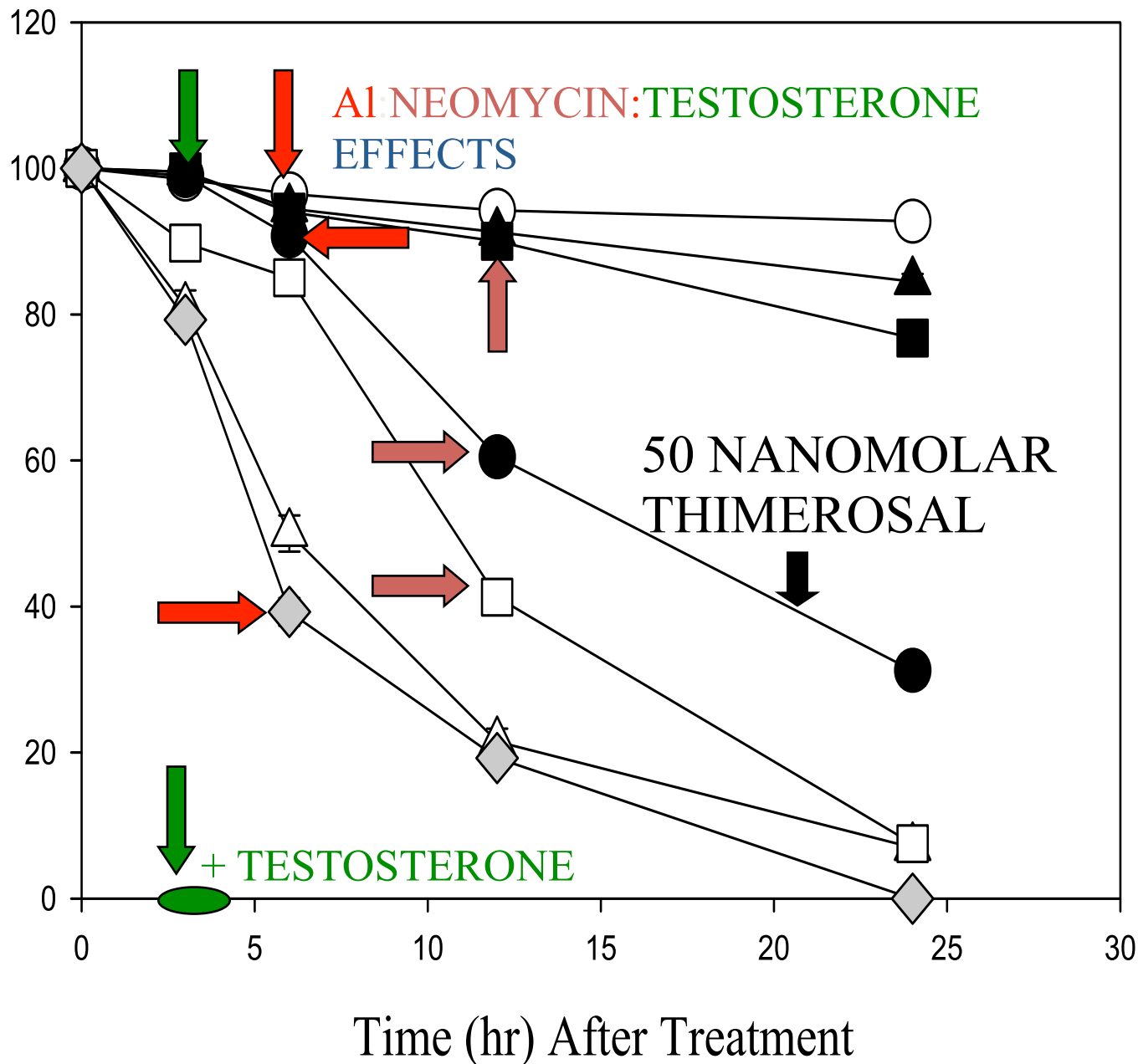




# Kevin D, autistic boy positive to methyl Hg and Ni

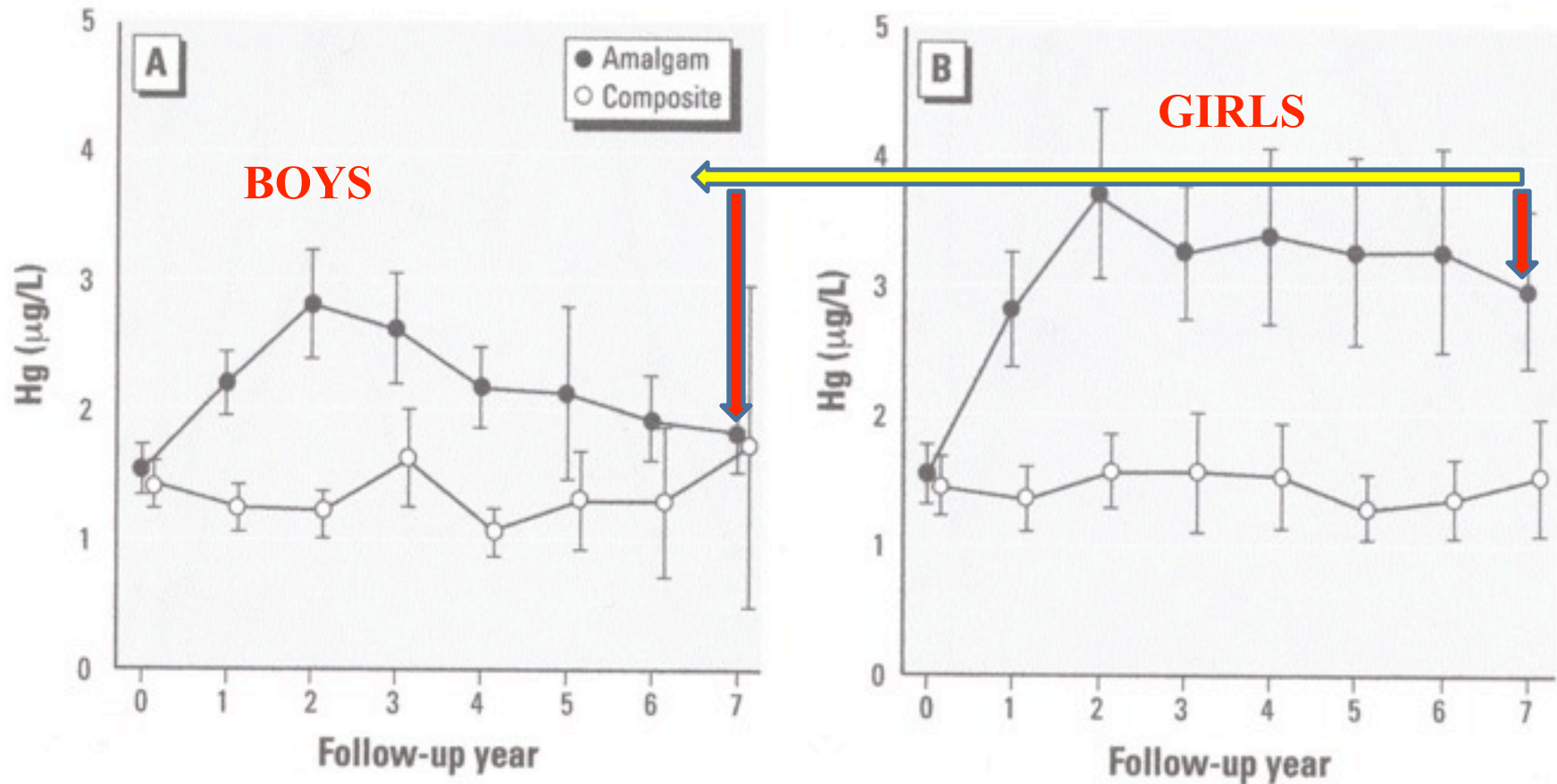


# SYNERGISTIC TOXICITIES



DR. MARK LOVELL  
COLLABORATOR

From a study funded by NIH done on orphans in Lisbon, Portugal.



**Figure 3.** Mean urinary mercury concentrations for the amalgam group and composite group separately for male (A) and female (B) participants. Error bars show 95% confidence intervals for the group means. Differences between males and females in the amalgam group were statistically significant ( $p < 0.05$ ) at all follow-up years except follow-up year 3. The sex comparisons were not altered significantly by adjustment for creatinine (results not shown).

J. Woods, et al., *Environmental Health Perspectives* (2007) 115;10, 1527-1531.

## 10. Detox: \*some ways to reduce toxins in the home

- Fragrance-free
- Don't cook in plastic
- Water filter for the bath
- Healthier cleaning products (vinegar is best for molds)
- Clutter-free
- Vacuum daily or remove carpets
- Good quality air filter (Austin Air, Eye Q Air)- Use with circulation of a fan
- No ozone air purifiers
- Do not use VOC paints (paints that outgas volatile organic compounds)
- Hidden areas of mold: stuffed toys and any porous materials you can't physically wash
- Use BioPure propolis vaporizer to eliminate mold spores and microbes in air
- Keep humidity in the house less than 50% (dust mites and mold grow in higher humidity)
- Bedding should be aired out since it retains significant humidity
- Exposing 1 hour of sunlight to porous materials reduces dust mites by 80%
- Stainless steel or ceramic coated cast-iron pans



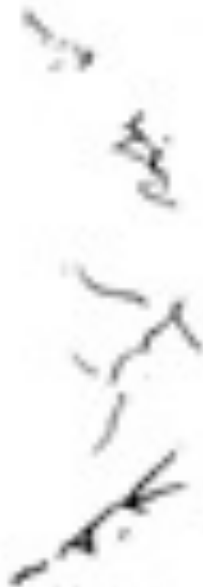
# Drawings of a Person

4-year-old girls

5-year-old boys



Little pesticide exposure



Heavy pesticide exposure



Little pesticide exposure



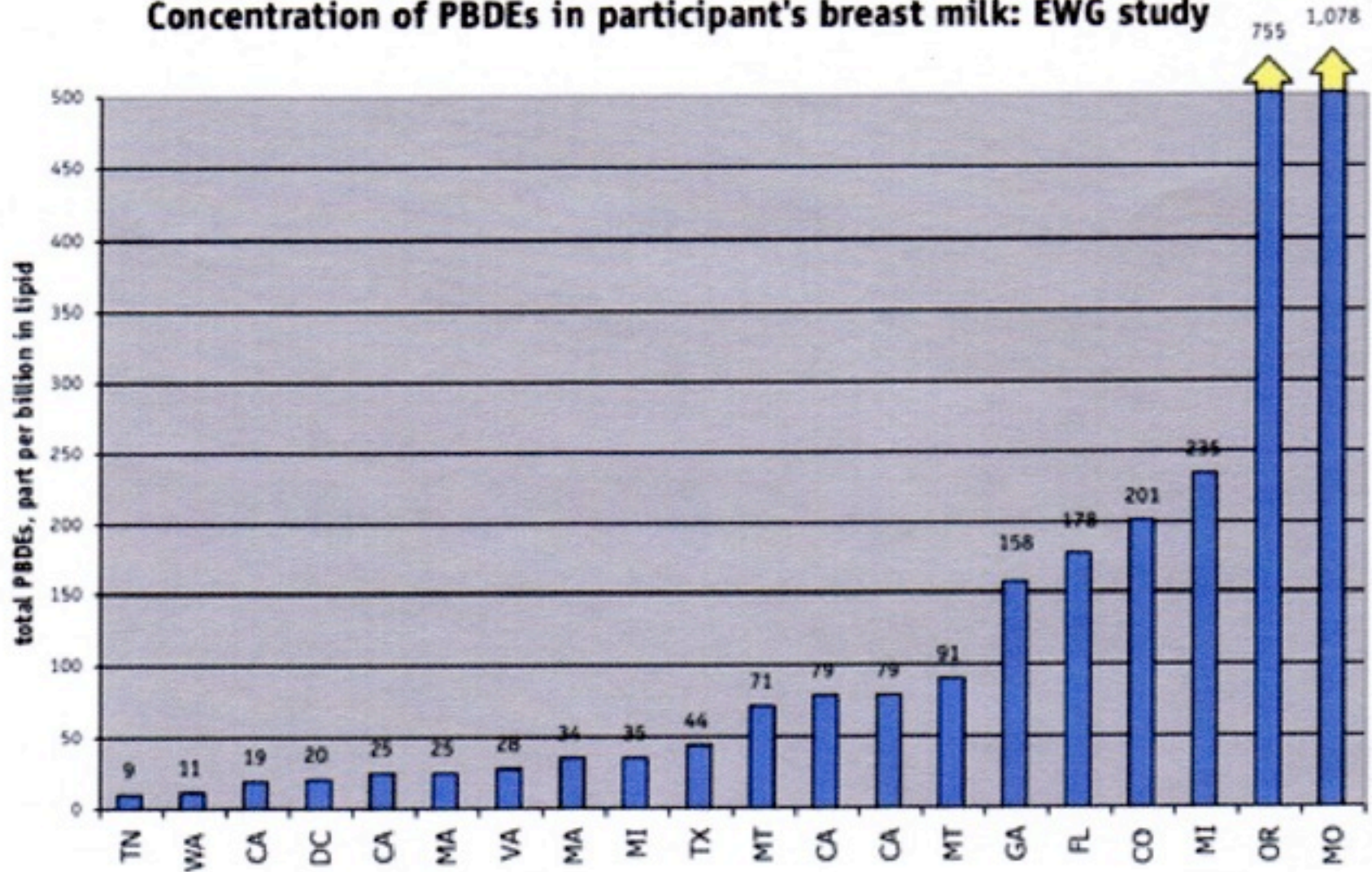
Heavy pesticide exposure

## 10. Detox: \*environmental toxin reduction

- choose organic foods. Suspect that even organic grains may contain high levels of cadmium
- cookware: avoid aluminum. Cups, plates and especially colored glass may contain and give off lead
- filter drinking and bath/shower water
- Laptop computers/DVD players outgass PBDEs (flame retardants) and heavy metals (beryllium, mercury, lead, etc.). Use separate keyboard to get distance
- check for nearby coal plants or crematoriums and the prevailing wind direction
- look in your child's play areas (treated wood has arsenic, sand boxes often have several contaminants, imported toys can have lead...)
- vacuum regularly (check filter!) and use a good quality air filter in the bedroom during the daytime, while electricity is on
- near-by traffic causes high level of cadmium in home
- No drinking or eating from plastic (phthalates)
- No fluoride toothpaste
- Reduce mycotoxin exposure: moist walls or ceilings (check!!) . Use propolis vaporizer (BioPure). Use mold culture-plates to make absolutely sure

# Mother-to-child toxin transfer in breast milk

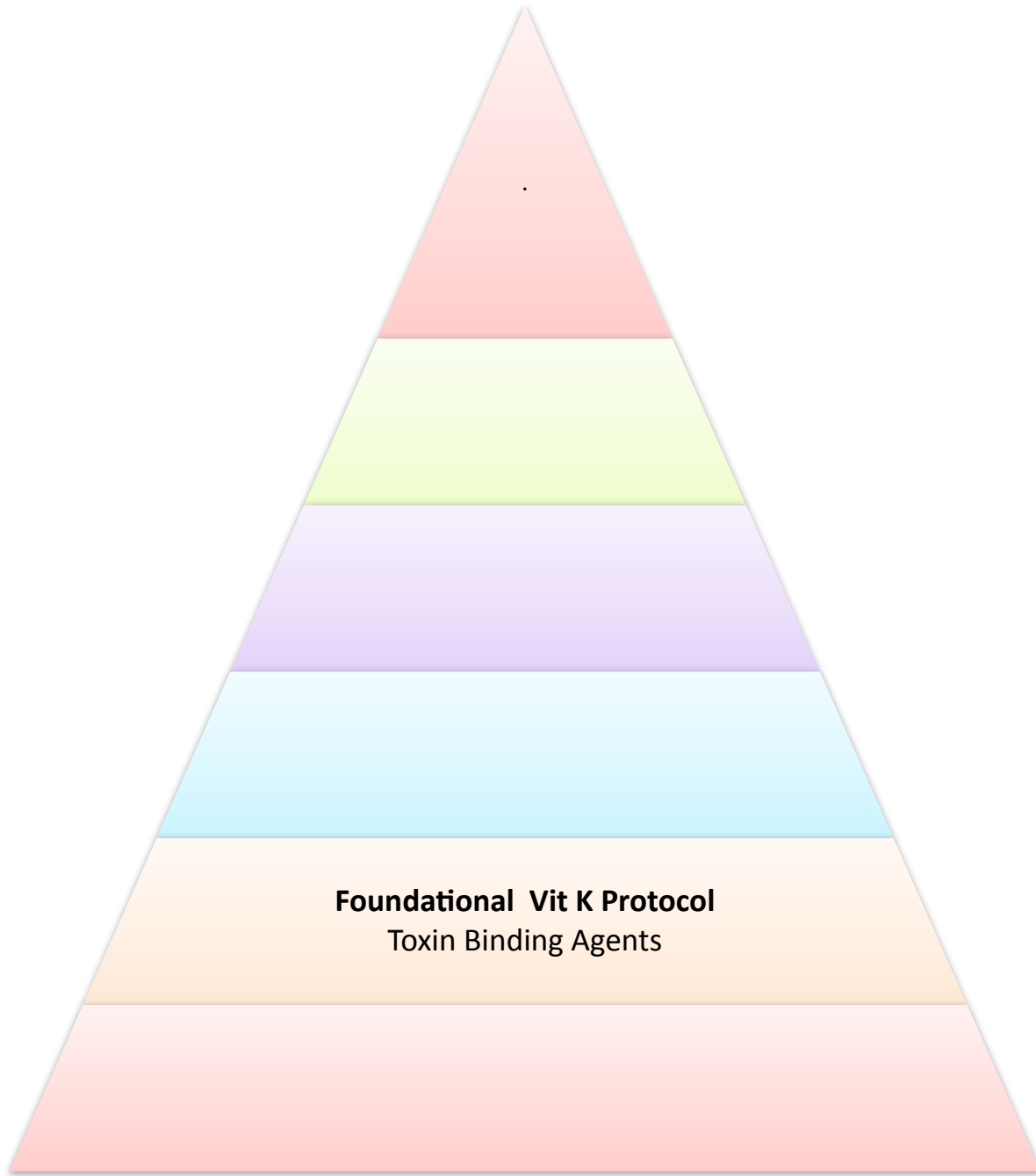
Concentration of PBDEs in participant's breast milk: EWG study



## 10. Detox: reducing toxic burden from vaccine adjuvants

- Never give Tylenol as preparation, or for a fever after (it reduces glutathione production and makes thimerosal more difficult to clear from the body)
- Never vaccinate while your child is ill (runny nose, fever, diarrhea, hay fever)
- Try not to give more than one vaccine at a time
- The MMR can be given in individual components
- \*Double check that vaccines are Thimerosal-free
- No flu shots if possible (all contain ethyl-mercury)
- Fever support: cool bath, homeopathics (Aconitum 6X at beginning of fever, Belladonna 30 C later), high dose Vit A (up to 400 000 i.u per day while ill) – use Biotics Research Ae-Mulsion forte (12500 i.u per drop), if child well enough, use also Vit C to bowel tolerance every hour. Children that take regular Vit C and zinc rarely get seriously ill (look at Polio research)
- \*The younger a child is, the more vulnerable his/her neurologic system is to the adjuvants. If possible, wait till after the 2<sup>nd</sup> birthday (at this time the TH-1 part of the immune system is developed and stable)
- \*try to give/get i.v glutathione ASAP after the injection (minimizes adjuvant toxicity without lessening the immune entrainment (10 -20 mg/kg). At minimum, give NAC 10 mg/kg 3-4 times per day for 1 week before and 2 weeks after
- Resources (US):
  - Stephanie Cave's vaccine book
  - [www.mercola.com](http://www.mercola.com) (has a link for state-by state vaccine requirements in the US)
  - We are trying to filter through several websites and vaccine schedules to post some good links on [www.THRiiiVE.com](http://www.THRiiiVE.com)
  - Find a DAN! Doctor or a pediatrician you trust who can have an open conversation with you about your options





# The modified foundational Catherine Tamaro protocol (aka “Vit K Protocol”)

- Please note that as patients get started on this protocol, the body increases the ability to mobilize toxins and the cells start dumping ...
- Step 1: It is important to have some toxin binding agents on board, ready to “mop” up the fall-out and manage the symptoms of “reverse toxicity” (metals and other toxins detach from their binding sites and move towards the exits – liver and kidney - in their often more toxic activated free radical form):
  - \*BioPure MicroSilica (SH-enhanced silica spheres) – 100 mcg per 10 kg/weight per day during the time of detox crisis (or with the first signs of it)
  - Chlorella – BioPure: 2 tbl /kg during days of crisis, 1 tbl/kg always
  - Green clay and/or zeolite: 1/3<sup>rd</sup> – ½ tsp twice daily
  - Charcoal for acute reactions
  - Beta Sitosterol
  - Alginate or apple pectin for mild reactions

- Helps to alkalize the body to help reduce most acute symptoms (this includes seizures)
- \*You can use these every day or alternate every few baths with Epsom salt (Magnesium Sulfate) baths: transdermal uptake of magnesium to turn on many metabolic enzymes and body systems and to increase parasympathetic tone (decrease tension/stress, increase sleep and ensure good bowel movements, turn on detoxification pathways)
- Baking soda: use 8 cups per bath
- Large bags are available at Costco (US only)

## Step 3: \*the Rehydration Cocktail

Rehydrate the cells - to restore and expand cell membrane structure, intracellular scaffolding ,and function of all intracellular processes and membrane channel activity and efficiency

- \*BioPure Matrix Electrolytes:  
2 tablespoon per 6oz cup. Use 2/3<sup>rd</sup> water, 1/3<sup>rd</sup> milk or milk-substitute: goat milk, nut milk, soy milk, protein powder drink. This helps the trans-membrane traffic of water. Add source of glucose for electrolyte transport across cell membrane - to make nice tasting drink. Add 1/4tsp baking soda. 2 cups/day
- Recent experience shows that potassium-based salts and adding a source of glucose and aminoacids helps the cells actually get hydrated . This expands the inner scaffolding of microtubuli - everything works better
- The phosphorus in Matrix-Electrolyte helps the coupling of toxins to acids in the kidney, which then can be shuttled successfully out in the urine
- If following the less costly (and somewhat less effective) recipes below to make your own, start with ½ cup daily and increase gradually
- The electrolyte drink alone often gets the blocked detoxification process going and can stimulate a welcome related reaction and short lived aggrevation of symptoms (high dose Vit E and freeze dried garlic are amongst the antidotes. Using the binding agents is accelerating the process and minimizes detox reactions

### 3. Electrolyte Recipes

#### If using Honey:

- 2 tablespoons honey
- 1 quart water
- ¼ teaspoon baking soda (sodium bicarbonate)
- ¼ teaspoon NOW Foods® Potassium Chloride\*

or

- 2 tablespoons honey
- 1 quart water
- 2-3 capsules Klaire Labs™ Bi-Carb Formula
- ¼ teaspoon Morton Lite Salt®

### 3. Electrolyte Recipes

#### If using Grape Juice:

- $\frac{2}{3}$  cup pure grape juice
- 3- $\frac{1}{3}$  cups water (to make one quart liquid)
- $\frac{1}{4}$  teaspoon baking soda (sodium bicarbonate)
- $\frac{1}{4}$  teaspoon NOW Foods<sup>®</sup> Potassium Chloride\*

or

- $\frac{2}{3}$  cup pure grape juice
- 3- $\frac{1}{3}$  cups water (to make one quart liquid)
- 2-3 capsules Klaire Labs<sup>™</sup> Bi-Carb Formula
- $\frac{1}{4}$  teaspoon Morton Lite Salt<sup>®</sup>

### 3. Electrolyte Recipes

#### If using young/green coconut water:

- 2 cups young coconut water
- 2 cups water (to make one quart liquid)
- ¼ teaspoon baking soda (sodium bicarbonate)
- ¼ teaspoon salt

\*NOW Foods® Potassium Chloride\* is available from a number of online vendors including [www.iherb.com](http://www.iherb.com). Klaire Labs™ Bi-Carb Formula is available online from sources including [www.professionalsupplementcenter](http://www.professionalsupplementcenter)

## *Step 4. a. Basic Ingredients*

### **\*Magnesium**

- Minimum 200m up to 800mg or more
- Helps move the bowels and support muscle and connective tissue
- This gets very deficient in KPU cases and in most chronic illness
- \*Magnesium Glycinate is the most commonly tolerated and useful (children tolerate higher doses before getting diarrhea)
- Use whatever form works and is tolerated...MUSCLE TEST!
- Magnesium Citrate is often not as good...more of a bowel effect and not so much for systemic issues



## 4. b. Basic Ingredients

### \*Phosphorus

- Phosphorus is proving to be extremely important!
- ASD children often have low kidney lab markers (BUN, GFR) that just would not improve...phosphorus may be the key
- Phosphorus often quickly reduce the needs for high doses of B6 (in HPU/KPU, seizure disorders, sleep, etc.). Phosphorus is needed for the conversion of B6 to P-5-P - taken orally it is reduced to B6 by a phosphatase in the gut and still requires Phosphorus to create the active form. Phosphorus is also needed for ATP production in the mitochondria
- Products:
  - \*BioPure Matrix Electrolyte as taken in the rehydration cocktail fullfills all Phosphorus needs
  - “Angstrom Minerals Liquid Phosphorus”
    - Child 5 and under- work up to 1 tsp 3 times daily
    - Over 5- work up to 2 tsp 3 times daily or 2 tabs 3 times daily
    - Helps the kidney clear out the acid-coupled toxins
    - essential to help the kidneys repair)

## 4 .c. Basic Ingredients

### ATP

- ATP Provides fuel for all metabolic processes in the body
- Start slow and be on the electrolyte drink BEFORE starting this
- The Valkion singlet oxygen energy producing instrument is often miraculous. Swedish studies suggest a non-biochemical energy pathway that restores ATP reserves in the mitochondria (integrative biophysics). Start drinking the energized water 2 oz/day, slowly increase until all water is pre-treated. Then also start the inhalation: 20 min /day
- Supplementation: the total dose of ATP from all brands should be 50-450 mg/day depending on age/size. ATP should be given on an empty stomach
- Start with only 10-20 mg for the first few days and increase the dose slowly over time. It is not clear to this author, if the oral supplementation really works biochemically or if the observed effect is purely energetic
- Products:
  - Beyond a Century (you mix your own)
  - Progressive Labs (premixed with D-ribose)

#### *4. d. Basic Ingredients: Fat Soluble Vitamins*

### \*Vitamin D3 (it's a hormone) – give at bedtime

- 75 IU/pound of body weight daily
- Anti-inflammatory, supports bones, teeth and facial development, anti-viral and anti-bacterial (TB, etc.)
- Important for many functions of the immune system
- [www.mercola.com](http://www.mercola.com)
- Goal is to get blood levels to 80 or more (25-OH form of D3)
- Products:
  - Any brand seems fine
  - \*Carlsons and Biotics Research (Bio-D-mulsion Forte =2000i.u.per drop) both work very well and are available in drops

#### *4. e. Basic Ingredients: Fat Soluble Vitamins*

### **\*Vitamin K2 (menatetrenone)**

- Work up to 1mg/10 pounds body weight dosed at least twice daily due to short half life of MK-4 complex (start 1-3 mg)
- Controls the calcium to put it into bones where it belongs
- Stops synthesis of oxalates in the liver (which are neurotoxic)
- helps with myelin formation
- K2 decreases the integrity of pathogenic biofilm
- Side effects: insomnia if you work up too fast and maybe some kidney pain
- Common to see improvements in the teeth (stops decay, better jaw development)
- transports Vit A and thyroid hormone to the brain
- Products:
  - \*Thorne K2 drops (1mg/drop) – high in MK 4 complex
  - Carlsons K2 capsules

## 4. f. Basic Ingredients: Fat Soluble Vitamins

- Must be fish or liver source
- Children up to 2 years: 2,500- 5,000 IU daily.
- Children 2 to 10 years: 5,000 -11,000 IU daily. Children over 10 years and adults: between 5,000 and 16,000 IU daily.
- Pregnant & nursing: 10,000- 20,000 IU daily
- Note that needs may go up to 250,000 IU daily during biofilm treatments
- Note that toxicity with the natural sources of vit A has 1/10<sup>th</sup> the toxicity of water soluble sources
- You want Blood serum retinol > 80 ug/dL - shows the most immune improvement
- anti-viral, helps thyroid, helps control inflammation, needed for vit D and K2 receptors, nerve growth, cholesterol formation, formation of bile salts
- Activates all hormone receptors (except for testosterone)
- Represses testosterone receptor: use instead of Lupron or Spironolactone to decrease signs of increased androgen expression (Mark and David Geier): precocious puberty, aggression, increased masturbation, positive lab work in ASD children (testosterone, DHEA, androstendione increased)

## 4. *f. Basic Ingredients*

### Vit A Sources

- Eat liver twice a week
- Follow Weston Price guidelines [www.WestonAPrice.org](http://www.WestonAPrice.org)
- \*Green Pasture's Blue Ice Fermented Cod Liver Oil in non-gelatin capsules (VitD, Vit A, EPA/DHA, Quinones, Omega 3, 6, 7, 9, cranberry seed oil)  
Vit A 875 i.u/capsule      Vit D 180 i.u/capsule  
[www.greenpasture.org](http://www.greenpasture.org), [www.Red23.com](http://www.Red23.com)
- Radiant Life [www.radiantlifecatalog.com](http://www.radiantlifecatalog.com)
- Pure Encapsulations Vitamin A gelcaps (25,000 IU/cap from fish liver)
- Vit A from fish liver at local health food store: small capsules with good taste

#### *4. f. Basic Ingredients*

## Nuclear Receptors Which Require Vit A (RXR) Activation for Signalling

- Retinoic Acid Receptors
- Thyroid receptor (especially in the brain!)
- Vit D receptor
- PPAR Receptors/Inflammation
- Nerve Growth Factor
- ROR/Purkinje Cells
- Nurr-1/Dopamine
- Rev-Erb/Dopamine
- Liver X Receptor/Cholesterol
- Steroid X Receptor/Vit K2....involved in activated calcium binding proteins to bind ionized calcium (most kids have high ionized calcium)...this helps the body manage calcium (total serum is normal but ionized is high)
- FXR/bile salts, small intestines defense
- CAR/detoxification, bilirubin

#### 4. f. Basic Ingredients

## Nuclear Receptors Which Repress Vitamin A Activation (mutually repressive)

- Androgen Receptor/Testosterone (if it is signaling it silences the vit A receptor)
  - Testosterone is naturally high around birth both prenatally/ postnatally and again in puberty
  - Vit A will help to silence testosterone and high testosterone will suppress Vit A
  - Vit A is a safe first choice for lowering elevated testosterone. The next steps would be:
    - A. high potency homeopathic testosterone (BioPure)
    - B. Spironolactone: oral or transdermal prescription medication
    - C. Lupron – daily injections/Geier protocol



#### *4. g. Basic Ingredients*

### \*DHA

- ½-2gm daily
- Great for brain function and inflammation
- Products:
  - Any brand works
  - Easy to find: Carlsons, Nordic Naturals
  - Neuromins is a vegetarian source

#### 4. h. Basic Ingredients:

## Probiotics

- Whatever works best! Use energetic testing...
- Work up to very high doses (450 billion or more)...expect digestive die-off symptoms
- [\\*www.VSL3.com](http://www.VSL3.com) seems to be best if there are yeast concerns (as in most ASD children)
- Other favorites:
  - Klaire Detox Support or Therbiotic Complete
  - Custom Probiotics
  - BioImmersion Supernatant
  - Florastor kids : yeast against yeast (works very well – do not use adult version – has titanium dioxide)

**\*Use the Houston enzymes with each meal!**

#### 4. i. Basic Ingredients

### \*Potassium Iodide

(Saturated Solution of Potassium Iodide- SSKI)

- Start at 1000mcg even in young kids (1/18<sup>th</sup> drop) at least
- Anti-microbial, anti-yeast, normalizes breast tissue, helps the thyroid
- \* The metallic taste will resolve after a while (we think it is the body releasing metals)
- Products:
  - Tri-Quench by Scientific Botanicals (it must be SSKI and NOT Lugols Iodine solution)
  - Biotics Liquid Iodine is a low dose option

- Iodine Dosing. The thyroid gland requires iodide in order to synthesize the thyroid hormones thyroxin (T4) and triiodothyronine (T3). Thus when supplemental iodine is added to the child's supplements, the form should be a potassium iodide solution.
- SSKI (=saturated solution of potassium iodide) can be compounded by most pharmacists. Tri-Quench by Scientific Botanicals is a potassium iodide solution of high potency (=SSKI). Biotics Research offers very low potency Liquid Iodine or Liquid Iodine Forte potassium iodide solutions. World Organics also offers a very low potency Liquid Potassium Iodide.
- Do not use Lugol's Solution or Iodoral tablets – the elemental iodine in these products will iodinate T3, turning it back into T4.
- Do not use a kelp or a seaweed product because the form of iodine is unknown.
- SSKI/Tri-Quench is highly concentrated and should be diluted, which is simple and can be done with an empty dropper bottle. Mix drops of water and drops of iodide to achieve the desired dilution. Sample dilutions are as follows:
- Full strength: one drop Tri-Quench = 19,000 mcg iodide
- 1:1 dilution: one drop Tri-Quench for one drop water = 9,500 mcg iodide/drop
- 1:2 dilution: one drop Tri-Quench for two drops water = 6,333 mcg iodide/drop
- 1:3 dilution: one drop Tri-Quench for three drops water = 4,750 mcg iodide/drop
- 1:9 dilution: one drop Tri-Quench for nine drops water = 1,900 mcg iodide/drop
- 1:18 dilution: one drop Tri-Quench for 18 drops water = 1,000 mcg iodide/drop
- 1:37 dilution: one drop Tri-Quench for 37 drops water = 500 mcg iodide/drop

## 4. i. *Basic Ingredients*

# Iodide

- The concept of a high loading dose followed after several months by a lower maintenance dose is based on the work of Dr. David Brownstein (see references). The high loading dose supplies iodide to non-thyroidal tissues and organs that utilize iodide; once those tissues are replete, the iodide dose is reduced to a maintenance level.
- The daily loading dose should be 1 to 3 full, undiluted drops of Tri-Quench per day, depending on age/size. After approximately two months, the loading dose should be reduced slowly in order to achieve a maintenance dose of 1,000-8,000 mcg iodide daily, depending on age/size. For very small or very sensitive children, a more dilute loading dose might be necessary. Older children, teens, or adults may do well with an initial loading dose of more than 3 drops of Tri-Quench. It can be extremely helpful to find someone who does autonomic response testing (“muscle-testing”), as the appropriate dose of iodide can often be determined faster than it can with trial-and-error observation. Chiropractors and naturopaths are usually trained in autonomic response testing; cranial therapists and massage therapists often understand the technique also.

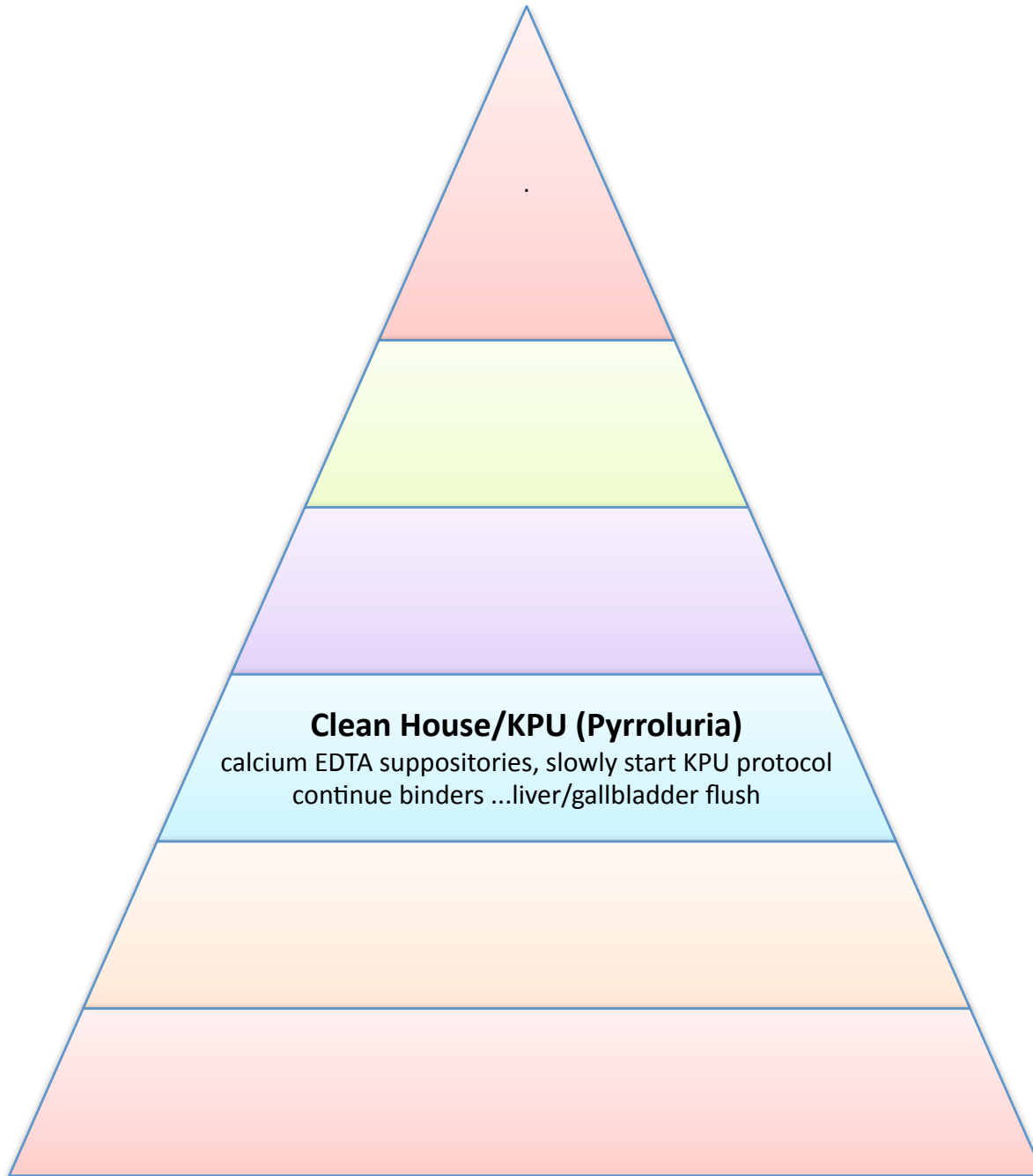
## 4. j. Basic Ingredients:

# Optional Foundational Support:

- **Phosphatidyl Choline-**
  - 3000-10,000mg daily
  - Helps membrane fluidity, supports the liver
  - Upregulates PPAR receptors to help manage inflammation
- **Phosphatidyl Serine**
  - 100-1500mg daily
  - Helps membrane fluidity, supports adrenals, helps with hyperactivity
  - Upregulates PPAR receptors to help manage inflammation
- **Phospholipid Exchange (BioPure)**
  - contains both lipids plus EDTA, Alpha Lipoic acid and Magnesium
  - Daily dose: 1 tsp (4 ml) per year of life until 7 – then 7 tsp/day in divided doses
  - Increases the uptake of any nutrient
- **\*Melatonin-**
  - 2-10mg at night for kids...adults up to 30mg
  - Anti-inflammatory, immune modulator, anti-oxidant for the brain, main agent for brain detox

Plant based melatonin : [www.DennisTheChemist.com](http://www.DennisTheChemist.com)

**Now you are ready to move forward.  
Only now!**





## After Initiating the Foundational Protocol: **1. HPU and Methylation**

**HPU** (HemoPyrrolLactamUria) testing and slowly easing into the full protocol: “Depyrrol Kind” , for a 4 year old start ½ cap every other day, slowly ease to 1 cap/day (source: BioPure/INK). Add silica (BioSil), lithium orotate or aspartate (1 mg/pound of bodyweight), molybdenum, Taurine

The science is given in a separate lecture (see our web-site).

**Methylation block:** leads to DNA demethylation and viral outbreaks, decreased production of glutathion, neurotransmitters, peroxinitrite (intracellular oxidation and microglial activation). Most common is a block of the MS-enzyme (methionine synthase) by lead or vaccine related mercury. To resolve the resulting issues, either short medical trials or good energetic testing are required.

- Methyl B12 vs Hydroxy B12
- Folic vs Folinic vs methylated folic acid
- Pyridoxal vs P-5-P
- L-Glycine vs Di- or Trimethyl glycine
- Taurine
- Minerals: zinc, selenium, manganese, magnesium
- Creatine
- Glutathione (NAC, glutamine, glycine)



# Common Biochemical Findings in ASD

James et al. 2005

Table 1	Control Children n=33	Autistic Children n=20	p value
Methionine ( $\mu\text{mol/L}$ )	$30.6 \pm 6.5$	$19.3 \pm 9.7$	0.001
SAM (nmol/L)	$90.0 \pm 16.2$	$75.8 \pm 16.2$	0.01
SAH (nmol/L)	$20.1 \pm 4.3$	$26.1 \pm 5.4$	0.001
Homocysteine ( $\mu\text{mol/L}$ )	$6.3 \pm 1.2$	$5.4 \pm 0.9$	0.01
Adenosine ( $\mu\text{mol/L}$ )	$0.28 \pm 0.16$	$0.39 \pm 0.19$	0.05
Cysteine ( $\mu\text{mol/L}$ )	$210 \pm 18.5$	$163 \pm 14.6$	0.001
Total glutathione ( $\mu\text{mol/L}$ )	$7.9 \pm 1.8$	$4.1 \pm 0.5$	0.001
Oxidized Glutathione (nmol/L)	$0.3 \pm 0.1$	$0.55 \pm 0.2$	0.001
GSH/GSSG Ratio	$25.5 \pm 8.9$	$8.6 \pm 3.5$	0.001

# Parental assessment on behavioral improvement of autistic children

46% responded to vit. B6, Mg & Zn

36% responded to Sulphate

68% responded to Essential Fatty Acid (statistics from Tapan Audhya PhD)

## Vitamin B-6

- ◇ Gastro-intestinal Symptoms
- ◇ Sociability
- ◇ Sleeping Pattern

## Sulphate

- ◇ Repetitive Behavior Pattern
- ◇ Hyperactivity
- ◇ Expressive Language
- ◇ Gastrointestinal Symptoms

## Fatty Acids

- ◇ Sociability
- ◇ Eye Contact
- ◇ Sleeping Pattern
- ◇ Cognition/Thinking

# Activating the detoxification systems with inhaled singlet oxygen



Health Light: LED diodes with unique properties: pain relief, anti-inflammatory, unblocking of energy cysts, increase of intracellular ATP and glutathione, NADPH. Many other uses: to enhance phase I liver detox and metabolic activity, kidney drainage and kidney health, to eliminate seizure focus, medication uptake enhancement, constipation relief, detoxification of tissues



**Jae Laser:** self-moving low level green laser scanner. Can be used for biophoton field restructuring, elimination of specific toxins, nutrient delivery and uptake enhancement, food allergy desensitization and with anti-inflammatory effects on the brain and CNS

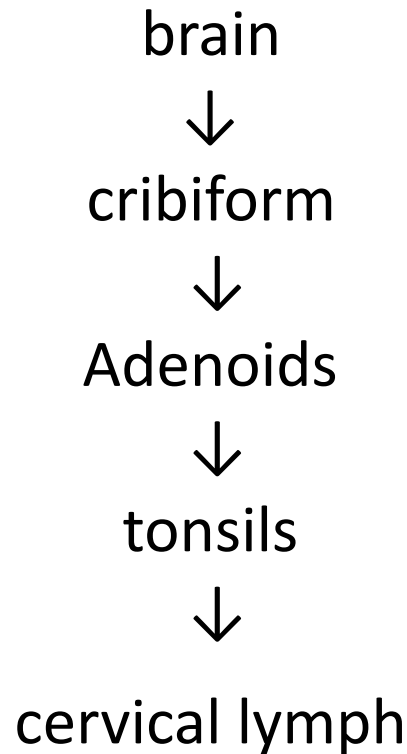
## 2. *Clearing the exit routes*

### A. The tonsils and adenoids

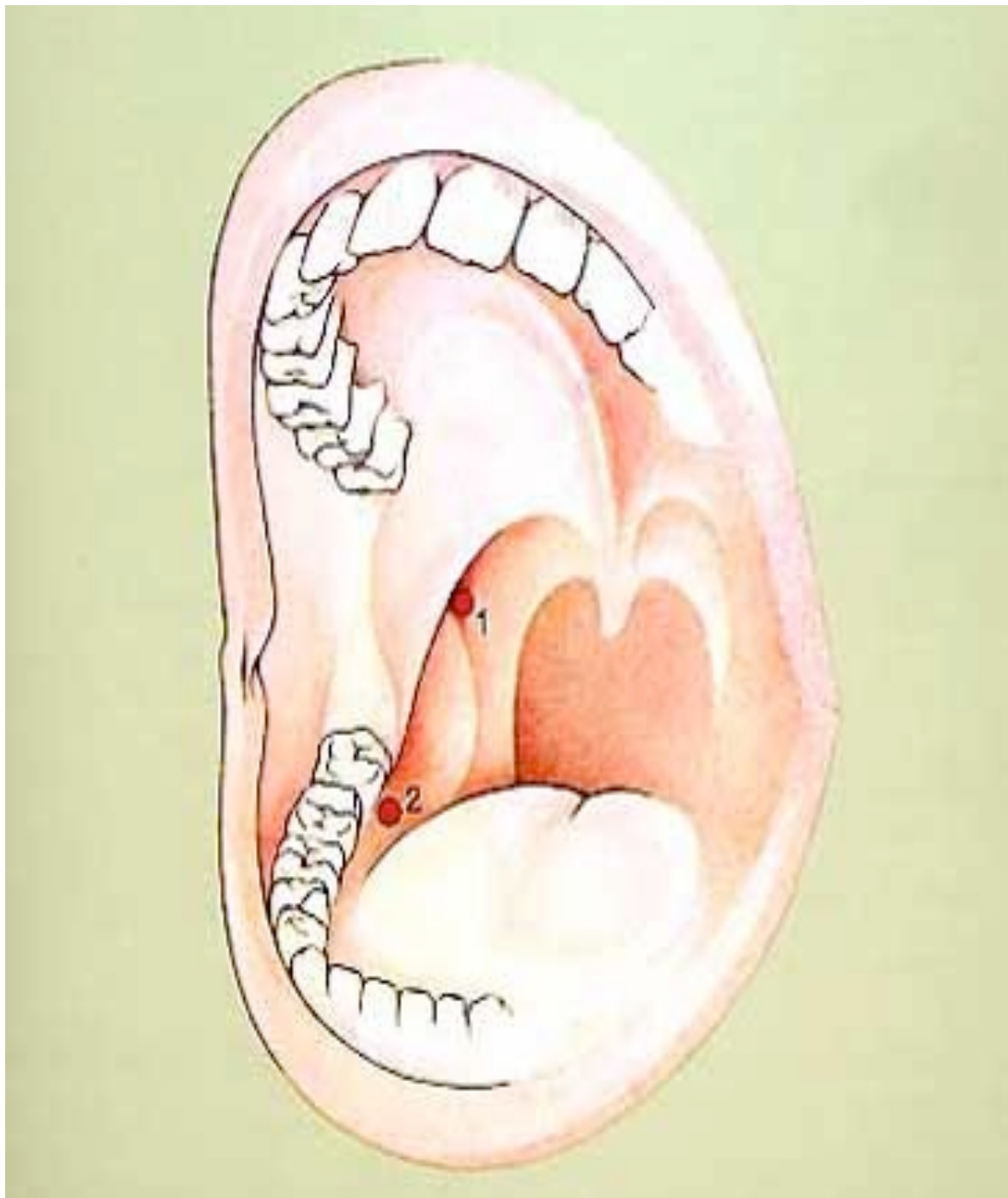
- Chronically infected **tonsils** are often a major contributing problem in brain inflammation/autism/autoimmunity
- The anatomic position of the adenoids and tonsils (directly in the lymph waterways leading out of the brain) gives them a powerful role. They often are infected or scarred up and create a bottleneck with back-up into the brain
- Degenerated tonsils often house multiple bacterial and viral colonies and produce potent brain neurotoxins
- PANDAS: Strep related brain autoimmunity symptoms in autism: verbal stims, repetitive, ritualistic, obsessive-compulsive
- Be prepared that currently ENT doctors often do not believe that tonsil infections are problematic - and resist performing a tonsillectomy

## 2. The Tonsils

**Congestion in this area due to chronic infection is common and leads to back-up of lymph flow and detox out of the brain**







## 2. Treating the tonsils

*(these are also treatments for chronic strep, but need to be done at least 6 months to change the immune response in the brain)*

- **Tonsil Immunotherapy: Notakehl, Sanukehl Strep and Sanukehl Pseu**  
(5 drops TID for 6 weeks to treat acute infection, followed with **Sancombi** for up to 1 year)
- Reduce **food allergens**, especially dairy, sometimes nightshades
- **\*Lymph drainage** remedies: BioPure Quintessence : 1 dropperfull for each year of life twice daily. Use Weleda Argentum Nitricum D4 eyedrops: 2 -3 drops into each nostril in reclining position twice daily (shrinks tonsils and adenoids)  
Other less effective options: Heel's Lymphomyosot (homeopathic), Nestmann's Lymphonest
- **Tonsil regenerative cryotherapy** ([www.kryopraxis.de](http://www.kryopraxis.de)) – this procedure has made a very big positive difference in many ASD children
- Manual Lymph drainage (a simple and very effective thing mom or dad can learn to do on the child) or a **rebounder**

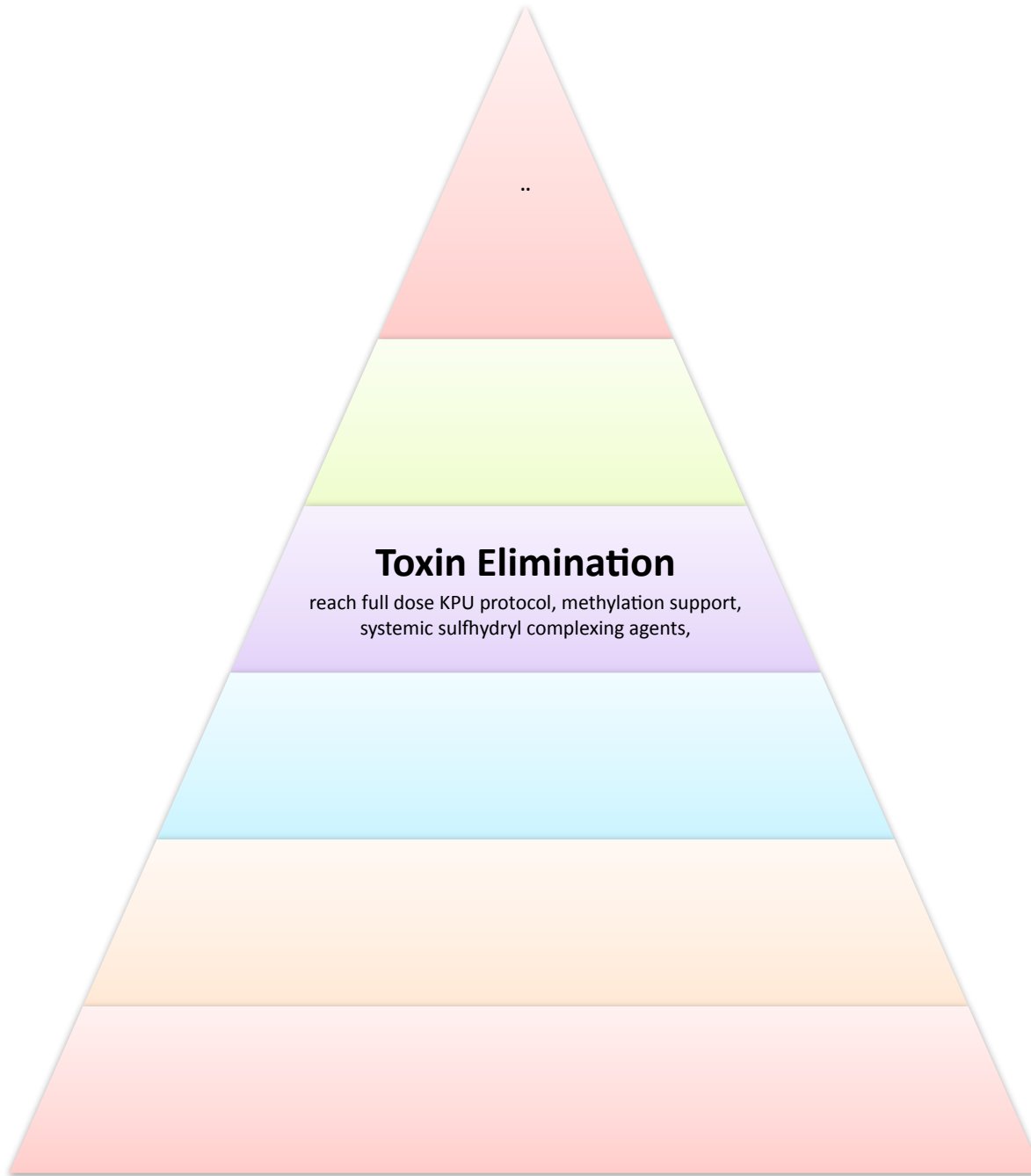
## 2. Treating the tonsils

- **Laser** treatments to stimulate lymph drainage
- Get an **air filter**, **wash bedding** and **vacuum** the bedroom
- **BioPure Rizol Gamma** topically to the submandibular area
- Dental hygiene/Tongue scraper
- Sterilize the toothbrush (UV every night is best)
- Heel **tonsilla compositum**- 1 vial orally 1-2 times each week for 1 year or more (only available in Holland)
- If persistent ear infections or sore throats occur, do not delay in having an EENT evaluation for consideration of **tonsillectomy**
- Salt water gargle or Neti pot
- It may also be necessary to have the bite evaluated for **occlusal problems** disrupting lymph flow (easy first step is a night guard or braces)
- Zithromax 500 mg once weekly for 6 months (very effective)

### 3. *The exit routes*

#### liver and colon, kidneys and skin

- **Kidneys:** often need help. They become easily infected and/or stuck with unprocessed toxins and significant oxidative damage to the renal tubuli. Use the electrolyte drink/rehydration cocktail regularly!!! Add homeopathic kidney drainage remedies if needed (Berberis, Apis, Unda 243)
- **Liver/Gallbladder: in a healthy person** biotoxins are eliminated via this route, not via the kidneys. Often the detox pathways in the liver get stuck. MicroSilica in combination with chlorella has been the most reliable prevention and treatment. Beyond that, consider:  
Liver/gallbladder flush, coffee enemas, castor oil packs, herbal and homeopathic liver and kidney drainage remedies
- Skin: consider dry brushing and sauna therapy – depends on the child
- Colon hydrotherapy or regular enemas (can be used to install nutrients, rizols, probiotics, mother's microflora)
- Exercise, if possible
- To get ready for the next level, consider starting low doses of **biofilm enzymes** (*\*Interfase* from Klaire Labs/div of ProThera Inc, Reno,NV)





# Urinary Porphyrin Chromatogram

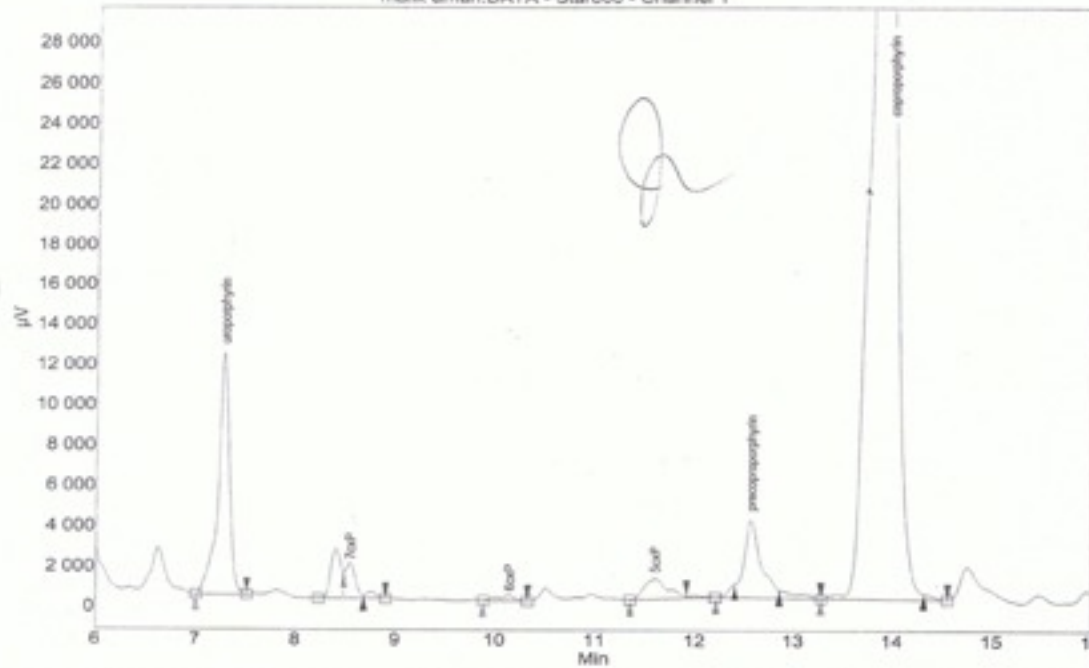
(nmol/l urine)

4 years

COPY FOR YOUR INFORMATION

System : HPLC\_FLUO  
 Method : porphyrines 071108 Varian 8  
 Sample set : por 071113  
 Acquired : 14/11/2007 22:36:42  
 Processed : 16/11/2007 08:46:42

malik aman.DATA - Star600 - Channel 1



Name	Quantity [nmol/l]	Quantity /gr Cr [nmol/gr]	Area % [%]	Time [Min]
uroporphyrin	37,04	33,07	8,2	7,28
7cxP	4,24	3,78	1,1	8,54
6cxP	1,26	1,13	0,3	10,14
5cxP	5,78	5,16	1,5	11,60
precoporphyrin	17,95	16,03	4,1	12,56
coproporphyrin	405,40	361,96	83,8	13,91
<b>Total</b>	<b>471,67</b>	<b>421,13</b>	<b>100,0</b>	

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 :

PrCP / UP	0,48
5cxP+PrCP / UP+7cxP	0,58
PrCP / 5cxP	3,11
PrCP / CP	4,4
5cxP/7cxP	1,36
CP / UP	10,9

Reference Range :

0,2 - 0,5
0,2 - 0,6
1,5 - 3,0
2 - 6 %
< 1,0
5 - 9

urinary creatinin  
1120 mg/l

07/11/2007

## Urinary porphyrins

HPLC-UV+Fluorescence

	nmol/l	nmol/gCr	%	reference nmol/gCr	Interpretation
Uroporphyrins I & III (UP)	37	33	7.9%	8-20	Increased rate
Heptacarboxy porphyrin (7cxP)	4,2	3,8	0,9%	2,5-4,5	Average Rate
Hexacarboxy porphyrin (6cxP)	1,3	1,1	0,3%	0,5-1,5	Average Rate
Pentacarboxy porphyrin (5cxP)	5,8	5,2	1,2%	2-4	Slightly increased rate
Precoproporphyrin (PrCP)	18,0	16,0	3,8%	5-9	Increased rate
Coproporphyrins I & III (CP)	405	362	89,3%	100-200	Increased rate
PrCP/UP (5cxP+PrCP)/(UP+7cxP) ratio		0,48		0,2-0,5	
PrCP/5cxP		0,6		0,3-0,6	
PrCP/CP PrecoP/COP ratio		3,1		1,5-3	
CP / UP copro/uro ratio		4,4	%	2-6	
		10,90		5-9	

### Interpretation

*Urinary Porphyrin Profile suggestive a moderate mercury toxic effect on bodily physiology high in coproporphyrin*

Urinary porphyrin profile is a powerful biochemical tool in diagnosis of intoxication associating sensitivity, specificity and quantificity

\* sensitivity- because heme biosynthesis is highly sensitive to inhibition by many inorganic toxicants such as Mercury, Lead, Arsenic, Aluminium as well as organic agents: chlorinated benzene, biphenyls (PCB), dioxins (TCDD) and also alcohol.

\* Specificity- because nearly each toxic generates a specific urinary porphyrine excretion pattern for example: Biphenyls, Dioxins, Aluminium inhibit an early enzyme on porphyrin biosynthesis pathway Uro-Decarboxylase, Mercury inhibits Copro-oxidase and L.

\*Quantificity or quantitative relationship between increase of specific porphyrins species and toxic or heavy metal body burden with a high degree of correlation designating it as a reliable biomarker for chelation therapy

urinary creatinine 1120 mg/l

# The basic most effective and tolerated toxin elimination protocol

## Continue to **bind metals and other mobilized toxins**:

➤ \*Micro-silica: 4 year old: start 1 scoop (=100mg) in juice once/day, increase to 2-3 on days when things seem aggravated (source: BioPure)

➤ Binders: chlorella, clay, fiber, charcoal, apple pectin, betaSitosterol

My suggestion: chlorella vulgaris (BioPure), use: age times 4 = number of tablets per day. Introduce the child to the idea that chlorella is a snack. You cannot overdose it. Alternate with green clay every 4<sup>th</sup> day or so: ½ tsp twice daily

## Start gentle **metal elimination** with chelating, not complexing agents

➤ \*Phospholipid Exchange (oral): ½ - 1 tsp/year of age. Best item to start real detox with. Enhances absorption of other nutrients taken at the same time. EDTA breaks biofilm (source: BioPure)

➤ Cilantro tincture: age times 2 = number of drops. This number given 3 times per day during active detox. Always before meals (source: BioPure)

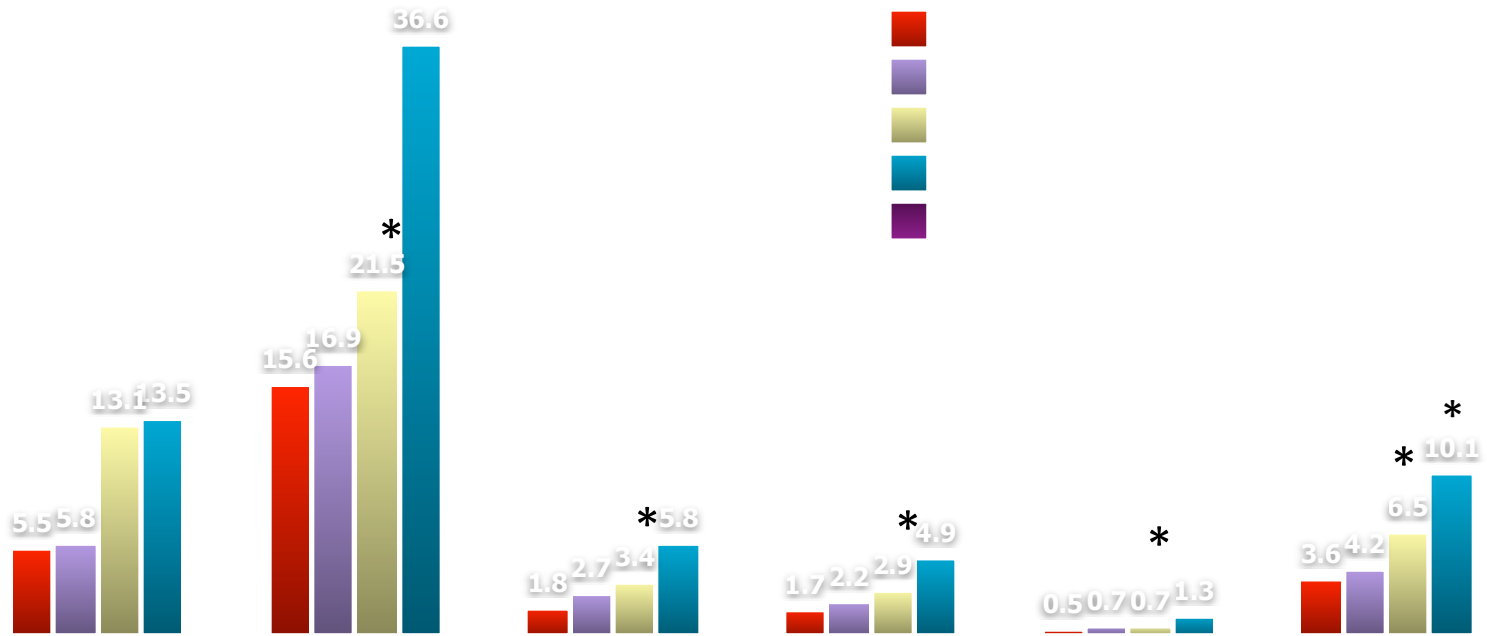
➤ CVE: helps dental and facial development. Detoxes and binds lead. Good anti-microbial. Use 1 cap/year of age (source: BioPure)

➤ \*Ca-EDTA suppositories (Detoxamin, etc.): 375 mg supp 3 times per week at bedtime. Use as a later option, when all items above are implemented successfully (source: Internet)



# EDTA: Excretion of Toxic Metals in Urine

Mean Values  
µg/g creatinine



\*Significantly different from Day 0 (p<0.05)

# Toxin Elimination: sulfhydryl affinitive agents

- Using the Sulfhydryl complexing agents: if at all, bring them in later in the treatment, when everything else is firmly established, working and tolerated. Only, if needed – if a flat line has been reached
- DMSA: oral capsules (source: [www.microtrace.com](http://www.microtrace.com)) 1-5 mg/kg/day. Use at night, every other night. Pause after 3-4 months. Monitor with hair analysis or urine porphyrin test. Do not start until 6 months in the basic detox protocol (previous slide)

Optional items: should be based on lab work, short clinical trial or energetic testing:

- DMPS: i.m or i.v. injection. 3 mg/kg/injection once/month. Prescription only
- OSR: grown up dose is up to 500 mg (=5 scoops) per day in oil. I use OSR late in the detox programme to remove mercury and lead from the CNS (source: BioPure)
- D-Penicillamin: Russle Jaffe protocol. Not tested enough on children
- Alpha-lipoic acid and glutathione (also NAC): helpful in eliminating mold toxins, but too weak to make difference in metal detox
- \*Valkion water and/or air: daily

## Other options to test or try for metal detox

- *Chloralyte* - osmotically broken and enhanced liquid chlorella (BioPure)
- *Matrix Metals* oral spray (BioPure)
- Greens and fiber
- Vit C
- Transdermal chelators or suppositories to bypass the gut
- Modifilan
- Add lots of minerals!
- Zeolite (cave: aluminum!)

# Supporting the Kidneys

This organ is an absolute must to support if you are chelating metals!!!

Some options to consider, if additional help is needed:

- **Phosphorus**
- **Renelix** by Pekana
- **M Water**
- **Unda 243**
- **Electrolytes** added to all fluids
- **Burdock** or **Dandelion** tea
- Nestmann **Solidago** tincture
- **Acupuncture/ Neural therapy**
- **K-Drain** by Transformation Enzymes
- **Emergen C** added to liquids
- Tapping on K27 whenever taking supplements
- Cilantro rubbed topically over the kidneys or around the ankles

# Liver Support

*Suspect this is needed when the bowels are sluggish and your child is not tolerating any medications and is sensitive to most supplements and foods*

- **Phospholipid Exchange (BioPure)**
- **Dandelion Root**
- **Ultrathistle** (milk thistle product that is easier to absorb)
- **Liver Life** by BioRay ([www.bioray2000.com](http://www.bioray2000.com))
- **Castor oil packs** over the liver with heat for up to 50 minutes daily
- Coffee **enemas**, especially when Herxing (not on very young children)
- Ensuring regular bowel movements
- Treating candida/yeast
- **Thorne TAPS, Liver Cleanse or Toxic Relief Booster**
- Neural therapy with Heel **Hepar compositum** or **Hepeel**
- **Phosphatidyl Choline** and **Glutathione**
- Designs for Health **PaleoCleanse** or **Amino D-tox**

## Natural Anti-Inflammatories

all of these should be considered at all times to decrease brain inflammation  
(use extra doses when kids become stimmy and agitated)

- **\*African Boswellia** extract – most powerfull anti-inflammatory to the brain. Reduces TNF-alpha significantly. Weihrauchbalsam nach Dr.Fernando (source: [www.olibanum-bv.com](http://www.olibanum-bv.com))
- **Quercetin**  
Yao Y, Han DD, Zhang T, Yang Z. Quercetin improves cognitive deficits in rats with chronic cerebral ischemia and inhibits voltage-dependent sodium channels in hippocampal CA1 pyramidal neurons. *Phytother Res.* 2009 Aug 17
- **\*Nanonized Curcumin** – second most powerfull brain anti-inflammatory (source: **Enhansa** by [www.ourkidsasd.com](http://www.ourkidsasd.com))
- Hesperidin
- **Vit E** (and Omega 3): Morris CR, Agin MC. Syndrome of allergy, apraxia, and malabsorption: characterization of a neurodevelopmental phenotype that responds to omega 3 and vitamin E supplementation. *Altern Ther Health Med.* 2009 Jul-Aug;15(4):34-43.  
Pavlik V, Doody R, Rountree S, Darby E. Poster Sessions III: Aging and Dementia: Clinical II. [P03.076] Vitamin E Use Is Associated with Improved Survival in an AD Cohort. Presented at the American Academy of Neurology 60th Anniversary Annual Meeting, Chicago, 15 April 2008.
- **Bromelain**
- Vit C in high doses
- Hesperidin

## Hypercoagulation (“sticky” blood)

*- it's a sign of chronic infection/inflammation!*

- May see elevated or abnormal platelets, increased fibrinogen, high serum iron or ferritin, high rbc or Hgb/Hkt
- Best test: ISAC panel from Hemex Labs (Phoenix, AZ, USA)
- Important: take the following well-working non-heparin supplements **away** from food (adult dosages)
- **1. \*Rechts Regulat-** 2 Tablespoons twice daily - my first choice for children. (Source: BioPure)
- **2. Other options:**
  - **Boluoke-** up to 3 daily
  - **Nattokinase-** up to 3 daily
  - **Lumbrokinase-** up to 3 daily
  - **Wobenzym N-** starting at 4 twice daily and increasing
  - **Vitalzym X-** starting at 4 twice daily and increasing
  - **Serrapeptase-** see Dr. Cowden's presentation on [www.thriiive.com](http://www.thriiive.com)

# General Detox Support

- Dr. Neubrander's **methylcobalamin** s.c. injection protocol or nasal spray ([www.drneubrande.com](http://www.drneubrande.com))
- “Designs for Health” **Amino D-tox** and **PaleoCleanse** (great overall detox support)
- **Greens**
- Epsom salt, clay and/or baking soda **baths**
- **Castor oil packs**
- **exercise**
- **Avoiding food allergens**
- **\*Valkion** water and air
- **HBOT/Lymph Drainage**



# General Detox Support

- **Magnesium, B6, zinc** (see later, is also part of HPU protocol)
- Heel **coenzyme compositum** s.c. 1x/week to turn on ATP production, Hepar comp(liver) and Apis homaccord (kidney)
- Always have a **toxin binder** on board
- “BioImmersion **Blueberry** (neuroregenerative)
- Plenty of **antioxidants**
- **Essential Fatty Acids**
- Getting plenty of **liquids**
- **High protein diet** (if possible)
- Measure **ph** as much as possible: saliva 6.7 with variation of 0.2 points up and down. Urine: 6.2 with same variation. If anyone of the values slips down: alkalinize (see Tamaro protocol). If the gap narrows or there is an inversion (saliva more acidic than urine), use phosphorus according to the guidelines given here

# General Detox Support, cont.

- **Probiotics** in high doses
- Pause during a crisis and provide support (especially for gut and kidneys)
- **detox foot pads**
- **\*Laser Field Restructuring (LFR):** metabolic enzyme regulation, activation of detox enzymes and allergy reset
- **IR Sauna** (but make sure to stay well hydrated)
- Keep bowels moving (magnesium products often work well)
- **MAP** amino acids that act as collagen and protein building blocks (pre-digested for max absorption)



# GENOVATIONS™

## DetoxiGenomic™ Profile Physician's Copy

Patient: **ROBERT**  
**K**  
Age: 75  
Sex: M  
MRN: 0000144671

Order Number: **57210418**  
Completed: October 12, 2004  
Received: September 21, 2004  
Collected: September 20, 2004

COMPREHENSIVE MEDICAL CENTER  
DIETRICH KLINGHARDT MD  
1200 112th Ave NE  
Ste A100  
Bellevue, WA 98804

Security Code: 6854324

### PHASE I Detoxification: The First Line of Defense

In Phase I detoxification, enzymes, known collectively as the cytochrome P-450 system, use oxygen to modify toxic compounds, drugs, or steroid hormones. Many toxins must undergo Phase II detoxification after a reactive site has been formed. Because there are many different toxic compounds the body might encounter, there are many variants of Phase I enzymes.

(CYP1A1) detoxifies polycyclic aromatic hydrocarbons (PAHs) produced from the combustion of organic materials (exhaust fumes, charbroiled meats, etc.).

(CYP1B1) is involved in the 4-hydroxylation of estrogen.

(CYP2A6) detoxifies nitrosamines and nicotine

(CYP2C9) detoxifies coumarin and sulfonamides.

(CYP2C19) detoxifies proton-pump inhibitors (e.g., prilosec®) and many anticonvulsants (e.g., valium®).

(CYP2D6) detoxifies ~20% of all prescription drugs including tricyclics, MAOIs, SSRIs, opiates, anti-arrhythmics, beta-blockers, Cimetidine, etc.

(CYP2E1) detoxifies nitrosamines and ethanol (acetaldehyde).

(CYP3A4) detoxifies over 50% of all prescription medications and most steroid hormones.

#### Cytochrome P-450

Result	Gene	Internet information
✓	CYP1A1 *	www.genovations.com/gdgen01
●	CYP1B1 *	www.genovations.com/gdgen02
✓	CYP2A6	www.genovations.com/gdgen10
✓	CYP2C9 *	www.genovations.com/gdgen05
✓	CYP2C19 *	www.genovations.com/gdgen06
✓	CYP2D6	www.genovations.com/gdgen03
✓	CYP2E1	www.genovations.com/gdgen04
✓	CYP3A4 *	www.genovations.com/gdgen07

Use of H2 blockers (e.g. Cimetidine) should be avoided as these bind to the heme-containing reactive site of all CYPs inhibiting binding to toxins.

#### General Therapies to Improve Detoxification:

Foods that generally improve Phase I detoxification and as well improve the efficiency of Phase II conjugation are generally recommended for individuals with CYP SNPs. These include most vegetables and fruits, but especially cruciferous vegetables (broccoli, Brussels sprouts, cauliflower, watercress, and cabbage), garlic, onions, soy, grapes, berries, green and black tea, and many herbs and spices like rosemary, basil, turmeric, cumin, poppy seeds, and black pepper. Indeed, improving Phase I and Phase II detoxification helps explain why vegetables and fruits protect against many cancers.

**Your Results:** Polymorphisms (SNPs) in the genes coding for a particular enzyme can increase or, more commonly, decrease the activity of that enzyme. Both increased and decreased activity may be harmful. Increased phase I clearance without increased clearance in Phase II can lead to the formation of toxic intermediates that may be more toxic than the original toxin. Decreased Phase I clearance will cause toxic accumulation in the body. Adverse reactions to drugs are often due to a decreased capacity for clearing them from the system.

#### Key

- ✓ Optimal genomic potential - no polymorphism detected
- Polymorphism detected in this enzyme, increasing your susceptibility to toxins, if exposed
- \* Multiple SNP locations were evaluated for these genes
- NR See commentary if applicable.



**GENOVATIONS****PHASE II Detoxification: Conjugation of Toxins and Elimination**

In Phase II detoxification, large water-soluble molecules are added to toxins, usually at the reactive site formed by Phase I reactions. After Phase II modifications, the body is able to eliminate the transformed toxins in the urine or the feces (through the bile).

(COMT SNP) higher risk for depression, bipolar disorder, ADHD and alcoholism.

<b>Methylation</b>				
Result	Gene	SNP Location	Internet Information	Affects
--	COMT	V158M	www.genovations.com/gdv158m	Liver/Gut

**Your Results:** Catechol-O-methyl transferase is the enzyme primarily responsible for breaking down the neurotransmitters dopamine, epinephrine, and norepinephrine.

(NAT SNP) both slow and rapid acetylators are at increased risk for developing lung, colon, bladder, or head & neck cancer.

<b>Acetylation (N-acetyl transferase)</b>				
<b>SLOW METABOLIZER POLYMORPHISM</b>				
Result	Gene	SNP Location	Internet Information	Affects
--	NAT1	R64W	www.genovations.com/gdr64w	All Cells
--	NAT1	R187Q	www.genovations.com/gdr187q	Liver/Gut
--	NAT2	I114T	www.genovations.com/gdi114t	Liver/Gut
+ -	NAT2	R197Q	www.genovations.com/gdr197q	Liver/Gut
--	NAT2	G286E	www.genovations.com/gdg286e	Liver/Gut
--	NAT2	R64Q	www.genovations.com/gdr64q	Liver/Gut
<b>FAST METABOLIZER POLYMORPHISM</b>				
--	NAT2	K268R	www.genovations.com/gdk268r	Liver/Gut

**Your Results:** N-acetyl Transferase detoxifies many environmental toxins, including tobacco smoke and exhaust fumes. Polymorphisms can result in slower than normal or faster than normal addition of an acetyl group to these toxins. Slow acetylators have a build up of toxins in the system and rapid acetylators add acetyl groups so rapidly that they make mistakes in the process. Both slow and rapid acetylators are at increased risk for toxic overload if they are exposed to environmental toxins. If the toxin exposure is reduced, the risk is reduced.

(GST SNP) The GST isoforms (M1, P1, and T1) are more or less prevalent in various tissues; all catalyze the conjugation of electrophilic compounds with glutathione. Defects in GST activity can contribute to fatigue syndromes, and to various cancers throughout the body.

<b>Glutathione Conjugation (Glutathione s-transferase)</b>				
Result	Gene	SNP Location	Internet Information	Affects
NULL	GSTM1	1p13.3	www.genovations.com/gdgstm1	Liver/Kidney
+ -	GSTP1	I104V	www.genovations.com/gdgstp1	Brain/Skin
--	GSTP1	A113V	www.genovations.com/gda113v	Brain/Skin

**Your Results:** Glutathione-S-transferase detoxifies many water-soluble environmental toxins, including many solvents, herbicides, fungicides, lipid peroxides, and heavy metals (e.g., mercury, cadmium, and lead). The various forms of GST work together to eliminate toxins. Decreased glutathione conjugation capacity may increase toxic burden and increase oxidative stress.

(SOD SNP) SOD1 is present in the cytosol; SOD2 is present in the mitochondria. Changes in the SOD enzyme are associated with changes in risk for neurodegenerative disorders like ALS.

<b>Oxidative Protection</b>				
Result	Gene	SNP Location	Internet Information	Affects
--	SOD1	G93A	www.genovations.com/gdg93a	Cytosol
--	SOD1	A4V	www.genovations.com/gda4v	Cytosol
+ -	SOD2	A16V	www.genovations.com/gda16v	Mitochondria

**Your Results:** Superoxide Dismutase is an enzyme that protects cells from increased oxidative stress and free radical damage to cell structures like membranes, mitochondria, DNA, and proteins.

<b>Key</b>	--	Neither chromosome carries the genetic variation.	Homozygous negative or wild type
	+ -	One chromosome (of two) carries the genetic variation.	Heterozygous positive
	++	Both chromosomes carry the genetic variation.	Homozygous positive
	NR / NULL / IND	See commentary	
		(You inherit one chromosome from each parent)	

# Parent Essential Oils (PEO's)

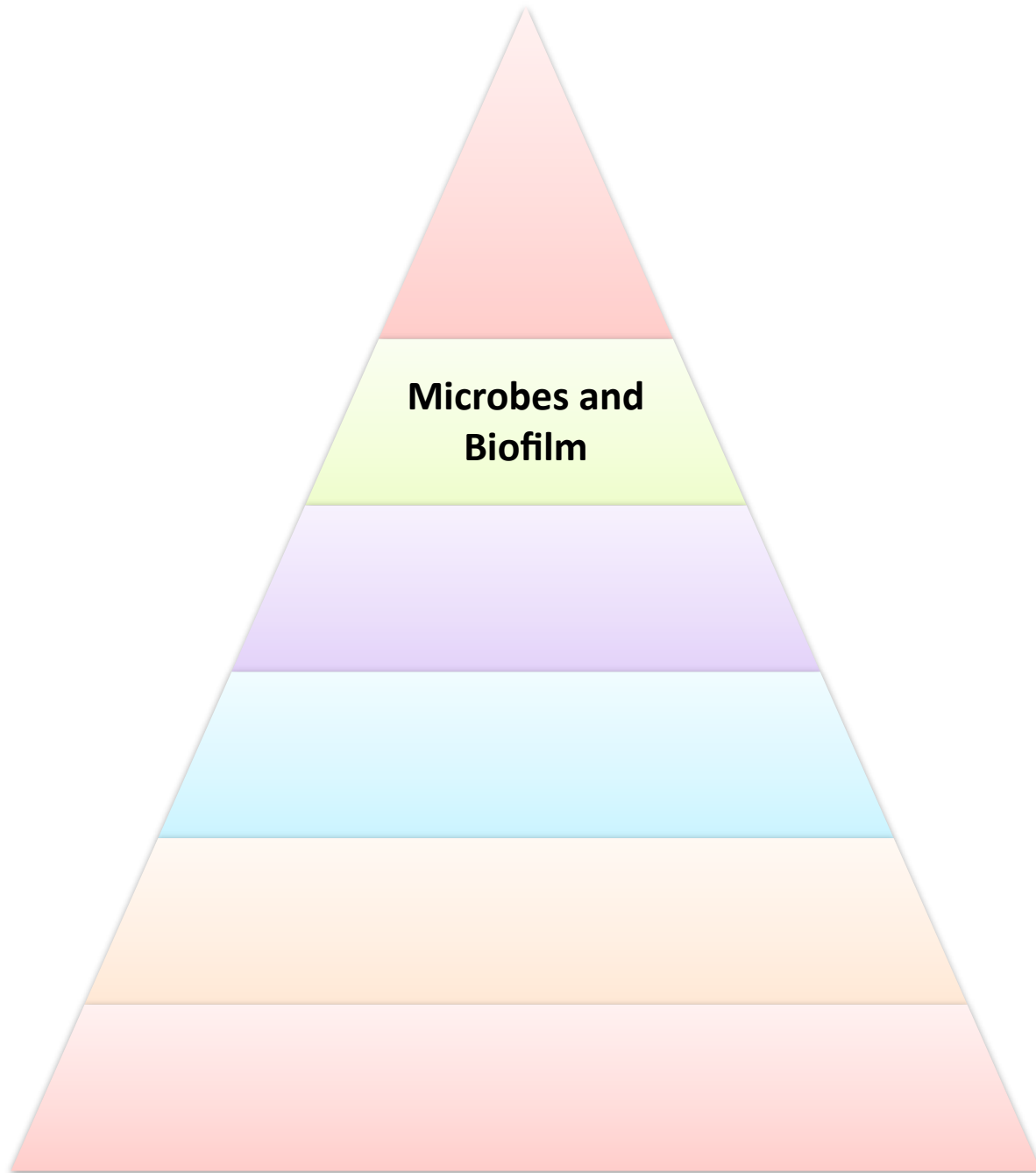
- [www.brianpeskin.com](http://www.brianpeskin.com) offers the latest research
- **PEO's are:**
  - unadulterated forms of essential fats that occur in nature
  - include LA (omega 6) and ALA (omega 3)
  - when consumed, the body keeps 95% in the parent form
  - fish oils are high in EPA and DHA, which are actually non-essential derivatives of parent oils (may actually overdose us with derivatives)
  - best ratios appear to be close to 1:1, vs. higher in omega 3's as we once thought
  - they are not made by the body, so we must get them in foods or supplements
  - obtained from a single plant that has not been crossbred

# Parent Essential Oils (PEO's)

- **Benefits of PEO's:**
  - allow oxygen to reach cells
  - each cell is surrounded by a membrane that is 50% fat
  - the unsaturated portion of that membrane helps the inside of the cell absorb oxygen
  - getting oxygen into the cell can help to fight all intracellular infections (this is essentially what we are trying to do with HBOT)

# Supplements containing PEO's

- “YES” parent essential oil caps and liquid (pumpkin, EPO, safflower, sunflower, flax and coconut oils)  
[www.yes-supplements.com](http://www.yes-supplements.com)
  - this is the product Brian Peskin endorses and the one we are having nice results with so far
- Jarrow brand Omega Nutrition Essential Balance Organic Oil (flax, pumpkin, sunflower, olive oils)  
[www.jarrow.com](http://www.jarrow.com)
  - nice thing is it comes in black HDPE plastic to prevent oxidation and they also make a butterscotch flavor junior formula



**Microbes and  
Biofilm**



# Biofilm (Anju Usman, Allan Mc Donald)

- Biofilms are highly interactive microbial communities (bacteria, mycoplasma, viruses and yeast) sheltered from the host's immune system and interventions (antimicrobials) by a self generated polysaccharide matrix. Calcium is involved in the stabilizing cross links
- It is essentially a layer that encompasses the organisms we are trying to treat, making it very difficult to treat the infections without needing doses so high that would harm our children
- This may explain why several kids are having normal looking stool cultures, but have great responses to anti-fungals and regress when discontinuing them
- Biofilms align themselves with biological surfaces and membranes (gut wall, teeth, fascia, endothelium of blood vessels, inner lining of cerebral ventricles, endocardium and heart valves, biliary collecting ducts, bladder wall, etc.)
- Clay, \*silica, freeze dried garlic and NaEDTA work well on the gut biofilm. Silica, certain enzymes, NaEDTA can weaken the biofilm systemically and make it more penetrable and vulnerable

# Biofilm

- The biofilm has a negative charge and is held together by molecules with a positive charge (like calcium, magnesium and iron)
- This layer also contains several different heavy metals (a requirement)
- Gut-biofilm prevents the normal flora (like acidophilus) from thriving
- Gut-biofilm in the gut prevents or minimizes the absorption of nutrients and all supplements
- Gut-biofilm progresses when sIgA levels are low

KMT 24 microbial inhibition frequencies: can be used like a TENS unit or wireless photoelectric converter, to be used as “electronic antibiotic therapy”, for lymphatic drainage, pain relief, brain anti-inflammatory, immune system entrainment and metal-detoxification, Biofilm breaker.



# Children who may benefit from the biofilm protocol

## Children with

- recurrent fevers, chills or other immune activity suggesting symptoms
- persistent dysbiosis (bloating, malabsorption with food residues in stool, pos. fungal or parasitic cultures, etc.)
- other evidence of gut pain
- resistant and/or persistent Strep infections (tonsils, PANDAS related brain symptoms – seizures, cognitive problems, dyslexia, fatigue and/or hyperactivity, sleeping disorder, developmental delay, etc. )
- Lyme and co-infections

# Gut Biofilm Protocol

(in development by Dr. Anju Usman, modified by Dr. D. Klinghardt)

This can be repeated twice daily

- **Preparation** (in 5 year old): 4-6 weeks ½ tsp green clay on an empty stomach first thing am and last thing pm together with BioSil (choline bound orthosilicic acid) 8 drops 2 -3 times per day
- **Step 1- Lysis and Detachment of the Biofilm**  
Use freeze dried garlic, grapeseed extract, bee venom, enzymes (Rechtsregulat) and/or chelators (NaEDTA) on an empty stomach to “punch holes” in the biofilm. Use KMT 24 microcurrent.
- **Step 2- Target the Microbe**  
30-60 minutes later take antimicrobials (Lyme, yeast, bacterial treatments)
- **Step 3- Clean Up the Mess**  
1-2 hours later (or at night) take toxin binders
- **Step 4- Rebuild**  
probiotics, fermented foods, vitamins

# Gut Biofilm Enzymes

**Enzymes:** The specific enzymes to break down the biofilm are still a work in progress. Freeze dried garlic is a natural biofilm breaker

## Some products being used:

- **\*Rechtsregulat (BioPure)**
- Klaire Interfase (better) or Interfase Plus (added EDTA)- so far the most specific biofilm enzyme mix available
- SPS 30 by Theramedix ([www.theramedix.net](http://www.theramedix.net))
- Mucostop or Virastop by Enzymedica ([www.enzymedica.com](http://www.enzymedica.com))
- Apple cider vinegar
- Lumbrokinase- especially if working on Lyme issues
- Serrapeptase- especially if working on mold issues
- Coming soon: Kirkman Labs (in conjunction with Dr. Usman) and Pure Compounding Pharmacy (Dr. Usman's pharmacy)

# Gut Biofilm Chelators

- There is some controversy on this and you should not add any chelators without close supervision and awareness by your practitioner (advantage is that oral EDTA is poorly absorbed – 5%, so most of it stays in the digestive tract where we want it)
- Another option is **BioPure Phospholipid Exchange** at ½-1 teaspoon per year of age/day. In divided doses (makes holes in biofilm by removing calcium, phospholipids allow for deeper penetration)
- \***BioPure Micro-Silica** (this is the best tolerated and most effective item to remove toxic sulphhydryl affinitive metals like Hg, Cd, Pb)- 50 mcg 3-5 times per day
- Current protocols use oral sodium or magnesium EDTA in powder or capsule form ([www.wonderlabs.com](http://www.wonderlabs.com) is inexpensive)  
Studies on Vancomycin-resistant staph infections showed effectiveness when combined with oral EDTA  
best source of oral EDTA: Phospholipid Exchange
- Other oral chelators could be helpful as well

# Gut Biofilm Toxin Binders

*these are the same things to take when “herxing”*

- **MicroSilica**
- **Green Clay**
- **Chlorella**
- **Freeze dried garlic**
- Activated Charcoal (especially during yeast die-off)
- Fiber (caution with psyllium contains 5% gluten)
- Chitosan (caution with shellfish allergy)
- Zeolites
- Modifilan
- Apple pectin
- Butyrate
- Beta Sitosterol



# Biofilm protocol precautions

- You can release ammonia quickly (watch the kidneys)
- Not everyone tolerates the enzymes
  - consider silica, clay, NaEDTA, freeze dried garlic, yucca, butyrate, BH4, ...
- You can wake up the immune system quickly and get ↑↑↑ inflammation, fevers, diarrhea, rashes, Herx...
- You can release heavy metals (aluminum, lead) that must be bound up to prevent redistribution
- Start **SLOW** and work up gradually

# Parasites

- Parasites are opportunistic: autistic kids have a dysfunctional immune system, keeping the door open for infections and infestations. Assume your child is affected!

## Some clinical signs

- Elevated Eosinophils in cbc (only about 10%)
- Rashes on the chest or neck
- Discoloration around the mouth
- Boys: risky behaviors and insanity
- Girls: docile behavior – and insanity
- Children eat what is good for the parasite, not good for them
- Fatigue
- Aggravations around the full moon (bloating, irritation, etc)
- Pimples on the head within the hair
- Lunar periodicity of symptoms
- Poor lab detection. Newer stool test from Metametrix uses a DNA probe for better sensitivity

## Common parasites in ASD:

- roundworms: ascaris and *Varestrongylus Klapowi* (V.Klapowi/lungworm) has been related to CFIDS, FMS, neurodevelopmental problems
- Protozoae: giardia, amoebas, toxoplasmosis (brain, from cats),
- Others: Bartonella (intracellular, bacterial – from cats), micro-filariae (larvae in brain)

# Parasite treatment (adult dosages)

- Initiate biofilm protocol, foundational protocol and all of the above. We have tried everything out there for over 30 years. Here is what actually and really works:

Then start with

- \*Rizol Gamma. Adult dose: 60-90 drops per day
- If tolerated: freeze dried garlic 1 caps/25kg dissolved in water, 3-4 times/day before or with a meal
- After 6 weeks: Biltricide 600 mg tbl. 2 tbl. three times per day for 2 days only (clears out liver flukes and parasites that have migrated up the bile ducts. Then:
- \*Alinia: 500 mg tablets. Use 2 tbl. Twice daily for 20 days. If good improvement, continue 2 tbl twice weekly for several months. Well tolerated in young children (get the syrup).
- You may want to consider to give 10 mg Dexamethasone on day 3 of Alinia to prevent brain larvae related die-off effects (seizures, coma, etc.)
- PrescriptionSource for Alinia (Nitazoxanide): [www.MagicPharma.com](http://www.MagicPharma.com)

# Lyme disease

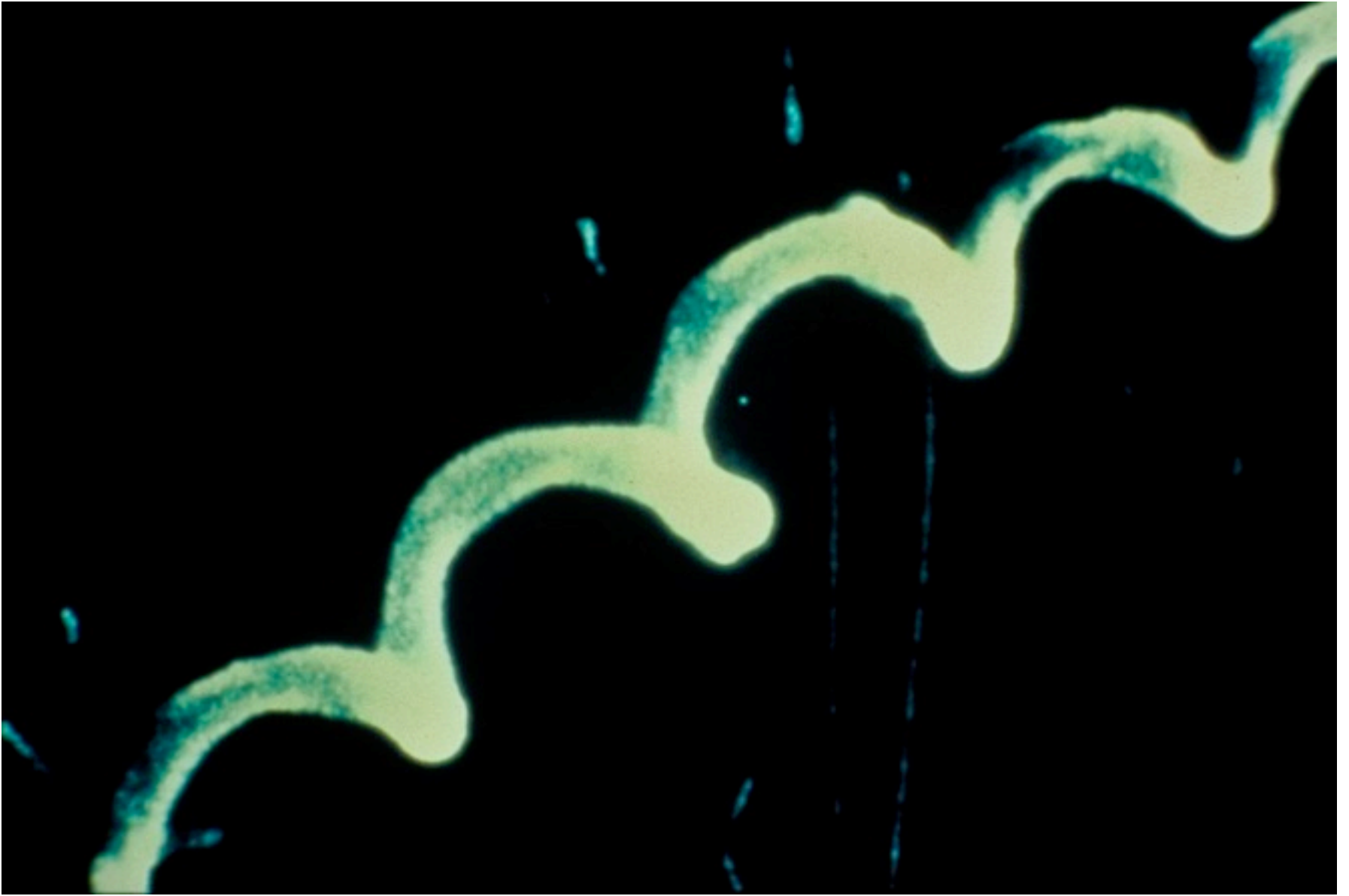
- Is rampant in the US, UK, Germany, etc....
- Use IgeneX Western Blot to make diagnosis - there is no lab in the UK that makes the diagnosis in proven cases
- Should be suspected in every child with ASD
- Mothers are frequently silent carriers of the infection(s) and will infect their unborn babies – the Lyme spirochete travels freely via the placenta into the fetus
- 80% of autism is congenitally aquired Lyme - with the typical co-infections and – later - opportunistic infections
- Lyme may be asymptomatic for years. Milder presentations of congenital Lyme are: ADD, learning disorders, dyslexia, pervasive developmental disorder, etc.
- Chronic infections overwhelm the intrinsic detox pathways and lead to secondary symptoms caused by bio-accumulation of mercury, lead, PBDEs, phthalates etc.

## **Typical co-infections:**

- Babesia : chronic chest symptoms, cherry angiomas, fatigue, night sweats
- Bartonella (cat scratch disease): stretch marks, submandibular glandular swelling
- Ehrlichiosis (often found in horse lovers): sharp shooting pains

## **Typical opportunistic infections:**

- Herpes viruses (fatiguing viruses: EBV, HHV-6. HSV-1 causes brain inflammation and neurofibrillar tangles)
- Borna virus (bipolar behavior)
- Mycoplasma (fatigue)
- Parasites (worms, giardia, amoebas, toxoplasma)
- Bacterial infections (strep, staph, etc.)
- Mold and yeast (often the first symptom to be recognized and treated)



# Bartonella rash: under the arm

Dr. Martin Fried



# Bartonella rashes: back of legs

~





## Bartonella rashes: lower back





# Clinical signs of Lyme in ASD

- All symptoms of Autism (it is in 80% Lyme disease aquired in the womb)
- Noise/light/smell sensitivity
- Waxing and waning of symptoms in cyclic rhythmic pattern (i.e 22 day cycles, 9 day cycles, etc.)
- Skin rashes, striae, cherry angiomas
- Insomnia
- Failure to thrive
- Intractable yeast
- MCS and broad spectrum of allergic responses
- Potentially all neurodevelopmental disorders
- Vulnerable to viruses
- Fatigue
- Thyroid problems
- Anxiety
- OCD
- GERD, leaky gut and food allergies
- Overwhelmed liver and kidney detox pathways
- Low exercise tolerance
- Joint pains
- Fibromyalgia
- Headache

# Clinical signs of Babesia

- Night sweats
- Odd behaviors around the full moon
- Waking at 3-4 am every night
- Rapid cycles of symptoms
- Multiple red pin sized bumps on torso (cherry angiomas)
- Loss of elasticity in ribcage (“armoring”)
- Failure to thrive
- Potentially all neurodevelopmental disorders

## Clinical signs of other co-infections

- Stretch marks (Bartonella)
- Lumpy feeling just under the skin (all co-infections)
- Tooth decay (Bartonella)
- Severe sudden radiating pains (Ehrlichia)
- Chronic fatigue (Mycoplasma, HHV-6, EBV)
- Others...

# Lyme treatment (160 lbs or 70 kg person)

- **\*Rizol Gamma and Zeta:** 15-20 drops each three times per day (fill into AA capsules). Start slow, stay on full dose 3 months, then reduce (BioPure). After 3 months replace Zeta with **Epsilon**
- **\*Quintessence** (proprietary energized herbs): smilax, andrographis, Jap. knotweed, red root, Stephania root (BioPure). Work up to 8 dropperfull 3 times per day
- **Oxo:** 1-2 caps 3 times per day after meals. 3 months on, 3 months off. Several cycles. Improves all aspects of liver function. Melts Lyme cysts and biofilm. Best in Bartonella (source: BioPure)
- If tolerated: **freeze dried garlic** 3 caps. 3times per day, best if dissolved in water
- **\*Artemisinin** 100 mg caps. 5 caps 3 times per day, 2 days in a row each week with grapefruit juice/ 3 weeks on, 1 week off. 1 year (needed for Babesia). Source: Allergy Research, Holly Pharmaceuticals)
- Consider the ILADS protocols
- if tolerated: **Niacin** (no flush) 1000 mg 3 times per day

# Klinghardt Lyme Cocktail (KLC)

(65 kg adult dose- adjust child dosage according to body weight)

- 200-400 mg Artemisinin, 10 ml Phospholipid Exchange in blender at high speed to make liposomal artemisinin (detox, anti-viral, anti-Babesia, anti-Lyme, shuttle agent), 100 mg OSR (glutathion)

Then add

- D-galactose : 5 grams (increases ATP dramatically)
- 10 -20 drops 20 % Propolis Tincture (anti-viral)
- Quintessence (Lyme, Ehrlichia, Bartonella)
- 15 ml Rechtsregulat (enzyme mix to break biofilm)
- MicroSilica 100 mg
- GSE 10 drops - grapefruitseed extract ( anti-microbial, anti-biofilm)
- Co-curcumin (Ayush Herbs): 1 tsp plus pippli 2 caps (pepper to increase absorption)
- Vit C powder 2000 mg
- Acai powder (anti-microbial, anti-oxidant) 1 tsp
- Mucuna powder 1 tsp (increases L-Dopa for language and motor development)
- ½ glass grapefruit juice (important for artemisinin absorption)
- ½ glass water

Drink this amount twice daily, 5 days on, 2 days off. 3 weeks on, 1 week off. Most products from BioPure (425 462 8414)

## Klinghardt Lyme Cocktail (KLC)

This remedy is based on 150 lbs body weight . The dosage has to be adjusted according to the weight of the child. The KLC has helped many autistic children to improve significantly

- 200-400 mg Artemisinin, 100 mg OSR (glutathion) 10 ml Phopsholipid Exchange in blender at high speed to make liposomal artemisinin (detox, anti-viral, anti-Babesia, anti-Lyme, shuttle agent, biofilm breaker)
- Then add
- D-galactose : 5 grams (increases ATP dramatically)
- 10 -20 drops 20 % Propolis Tincture (anti-viral)
- Quintessence (Lyme, Ehrlichia, Bartonella) =5 energetically enhanced anti-Lyme herbs (S.Buhner)
- 15 ml Rechtsregulat (enzyme mix to break biofilm)
- MicroSilica 100 mg
- Co-curcumin (Ayush Herbs): 1 tsp plus pippli 2 caps (pepper to increase absorbtion)
- Vit C powder 2000 mg
- Acai powder (anti-microbial, anti-oxidant) 1 tsp
- Mucuna powder 1 tsp (increases L-Dopa for language and motor development)
- ½ glass grapefruit juice (important for artemisinin absorbtion)
- ½ glass water
- Optional: GSE 10 drops - grapefruitseed extract ( anti-microbial, anti-biofilm)
- Optional: freeze dried garlic 4 capsules

Drink this amount twice daily, 5 days on, 2 days off. 3 weeks on, 1 week off. Most products from BioPure (425 462 8414 - BioPureUS.com and BioPureEurope.com)



# Minerals needed in Lyme:

Borrelia has high need for Mg, Babesia for Fe  
(minerals are oxidized and lost and show up high in hair)

- **\*Magnesium:**
  - Oral: use glycinate, up to 800 mg in young children. Titrate to bowel tolerance
  - Transdermal: [www.transdermalmagnesium.com](http://www.transdermalmagnesium.com)
  - Epsom salt baths (see above)
  - Injection: mix 50:50 with 1% procaine. Use Mag.sulfate. 1 ml of the mix/10 kg bodyweight/ twice per week
- **\*Lithium (neuroprotective):** either aspartate or orotate (try both and see, or test with ART). Dose: 2 mg/kg

# Viruses

## Clinical signs:

- Hot and soft tissue in the forehead repeatedly
- Tinnitus and noise sensitivity
- Fatigue
- Low wbc (2000-5000). Rarely elevated WBC's when symptoms get worse in acute situations
- Enlarged lymph nodes
- Cold sores or canker sores
- Borna virus: bipolar symptoms/schizophrenia

# The viruses

- Rule #1: Meticulous EMF shielding of sleeping location
- The Borna virus responds well to the HPU treatment
- The herpes viruses respond well to managing all of the above protocols. Once in a while direct intervention is needed. Consider this list:
  - Valtrex (Valcyclovir) and Valcyte (Valgancyclovir)
  - Monolaurin (coconut extract - especially if ASD symptoms become worse after a cold or flu)
  - St. John's Wort
  - Freeze dried garlic
  - Olive leaf extract
  - *Lomatium dissectum* (source: LDM-100)
- Laser field restructuring
- BioPure anti-viral CDs
- Red cell membrane fatty acid test and dietary modification
- \***Vitamin A** (some are using up to 400,000IU daily in young children for 2 days every 3-6 months)- Dr. J. McCandless. We also use high doses (see Vit A section) fermented Cod liver oil as best source for children or Vit A from fish liver (small capsules)
- Selenium (selenomethionine is safer) adult dose: up to 2000mcg/day in acute, 1000 mcg in chronic viral situations
- Vit D3 and Vit K have anti-viral effects

# LDM-100

- **\*LDM-100** (*Lomatium dissectum*) by Barlow Herbals-  
[www.barlowherbal.com](http://www.barlowherbal.com)
- Available as a capsule called Sees-100 if alcohol is not tolerated
- Current buzz is that it can cause a healing detox reaction to measles
- Effects:
  - anti-viral
  - anti-fungal
  - anti-bacterial
- Organic herb used by Native Americans for 100+ years to treat:
  - cold/flu/TB/measles/all respiratory infections
  - topically to all wounds
  - rheumatic pains

# LDM-100

- Side Effects:
  - most common is a rash day 7-9 (isolates don't cause this, but likely are not as effective)
  - 1-2% of healthy population, up to 90% ASD
  - rash looks just like measles (but no fever and kids seem pretty happy)
  - it is not thought to be an allergy, since the rash only occurs once and there is no airway difficulty
- Positive effects:
  - you don't build immunity to it and can take for months
  - energetically, kids are clearing viruses
  - huge leaps in verbal skills
  - general immune support

# LDM-100

- Doses:
  - Start slow and build up
  - Kids: 3-4 drops 4-6 times daily (max I have seen is 1 tsp 3 times daily)
- Cautions:
  - Slow down or even pause if rash occurs
  - The rash may indicate a benzene issue (Cowden theory...consider Laser tx first)
  - Timing with school, since the rash looks scary and contagious
  - I don't find this to be a 1<sup>st</sup> line anti-viral (do vit A, monolaurin, EFA's or olive leaf 1<sup>st</sup>)
  - Start to get metals under control 1<sup>st</sup>
  - The rash is NOT an indicator of effectiveness

# Clinical Signs of Chronic EBV (mono)

- Intermittently enlarged lymph nodes
- Intermittent sore throat
- Phases of extreme fatigue
- Prolonged exhaustion after mild viral illnesses
- Very low WBC's (in the 2's or 3's)
- CFS
- Later in life: lymphoma, breast cancer
- Treatment: same as above. Use also:
  - mushroom extracts
  - Propolis
  - \*Artemisinin

# Artemisinin and Artesunate as Anti-Virals

- Journal of Clinical Virology 46 (2009) 24–28  
*Sensitivity of human herpesvirus 6 and other human herpesviruses to the broad-spectrum antiinfective drug artesunate*  
Jens Milbradt, Sabrina Auerochs, Klaus Korn, Manfred Marschall
- Dosage: see Lyme treatment



# Mold/Yeast: Clinical signs

- Gas and bloating
- Lower abdomen is resistant to weight loss
- Kids- high pitched squealing, silly , flushed cheeks and stimming
- White coating on the tongue
- Brain fog and fatigue
- Vaginal or anal irritation/itching/redness
- Headaches
- Weakness/ fatigue
- Sugar cravings

- Stinky BM's
- Light sensitivity
- Rashes
- Memory loss or concentration difficulties
- Joint pain and morning stiffness
- Shortness of breath
- Sinus congestion
- Numbness and tingling
- Skin sensitivity
- Muscle aches and pains

## **Treating Fungal Issues (if child has not responded to rizols and quintessence)**

- **\*Start with \*www. VSL3.com or Saccaromyces Boulardii ( Florastor kids) or – up to 5 sachets/day**
- **Desensitize** against mold allergies (end point titration is best or ART based procedures. “Vaccines” from Breakspear Hospital, London. Weak alternative: homeopathic Sanum remedies)
- **Month 2: Amphotericin B** – This prescription is (in the US) from compounding pharmacies only. In Germany AmphoMoronal. Only limited stress on the kidneys and liver (scary info on the internet is based on IV use and special interest misinformation).  
Adult low dosage: 250 mg 2 times per day
- **Month 3: add Diflucan (Fluconazole)** for 1-3 months continuous (this also helps to address the Lyme issue)- it is also inexpensive now. Keep an eye on the liver enzymes (eyes turning yellow).  
Adult dosage 100 mg twice daily.
- **Month 5:** replace both Ampho B and Difluc. with **Itraconazole (Sporonox)**. Adult dosage: 100 mg twice daily
- **Month 7:** consider **Voriconazole** (very effective against aspergillus species and Lyme)

**Brainchild Nutritionals yeast rotation, use \*Houston Enzymes in larger amounts**

**Probiotics** (like Klaire Therbiotic Complete or Detox Support, VSL#3, Custom Probiotics or BioImmersion Beta Glucan probiotic to stimulate gut immunity)

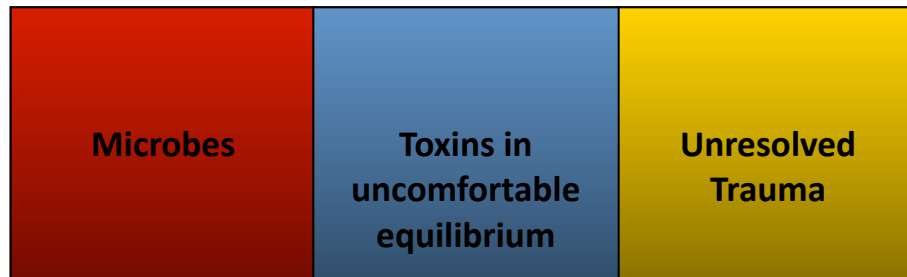
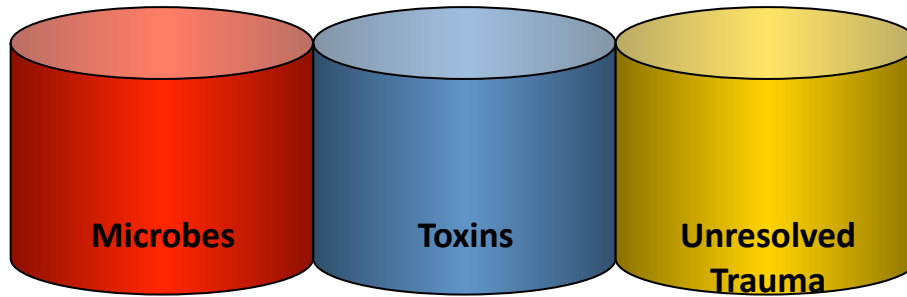
# Exciting new treatments...

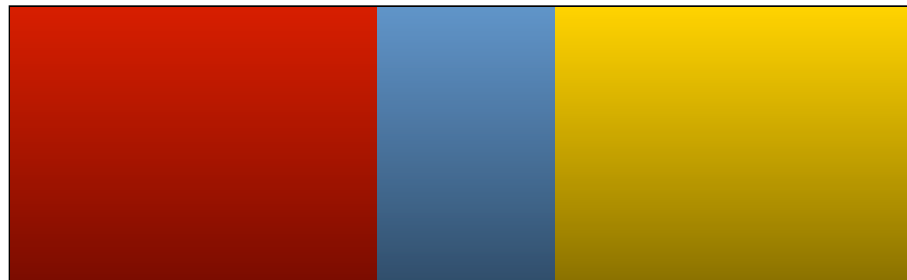
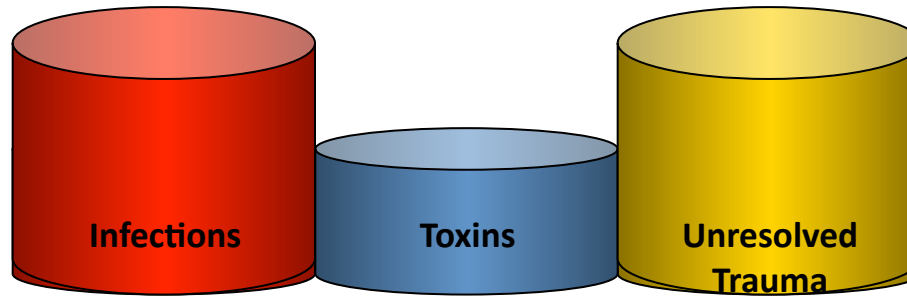
- Researched Nutritional **NT Factor Energy** and other mitochondrial support
- **Enhansa** by [www.ourkidsasd.com](http://www.ourkidsasd.com) for inflammation (curcumin)
- Klinghardt KPU protocol (inexpensive testing available and treatments are zinc, manganese, B6, magnesium, Biotin and omega 6's)
- Inclusion of Lyme protocol (LIA-foundation)
- Valkion: singlet oxygen energy enhanced water and air
- Red and green clays
- Bitter orange: 4 capsules at night, provides octopamin
- Fermented Codliver or PEO oils
- L-Dopa (0.5mg/kg BW in divided doses)
- Biofilm protocols
- Tamaro protocol (Vit K)
- MicroSilica (safe detox)

# Herx Support (die off management)

- Chlorella
- Sodium/potassium bicarb  
½ tsp in glass water, every  
3-4 hrs
- trisalts
- Vit C in frequent doses
- Fluids
- Exercise
- Epsom salt or clay baths
- Have a BM (mag, C,  
prunes...)
- Fiber/clay/MicroSilica
- Charcoal

- Cholestyramine
- Proteolytic enzymes
- Chelators
- Nutramedix Burbur detox
- Liquid minerals
- Coffee enema/colonic
- Cholestepure
- Sun/fresh air/stretching
- Valkion

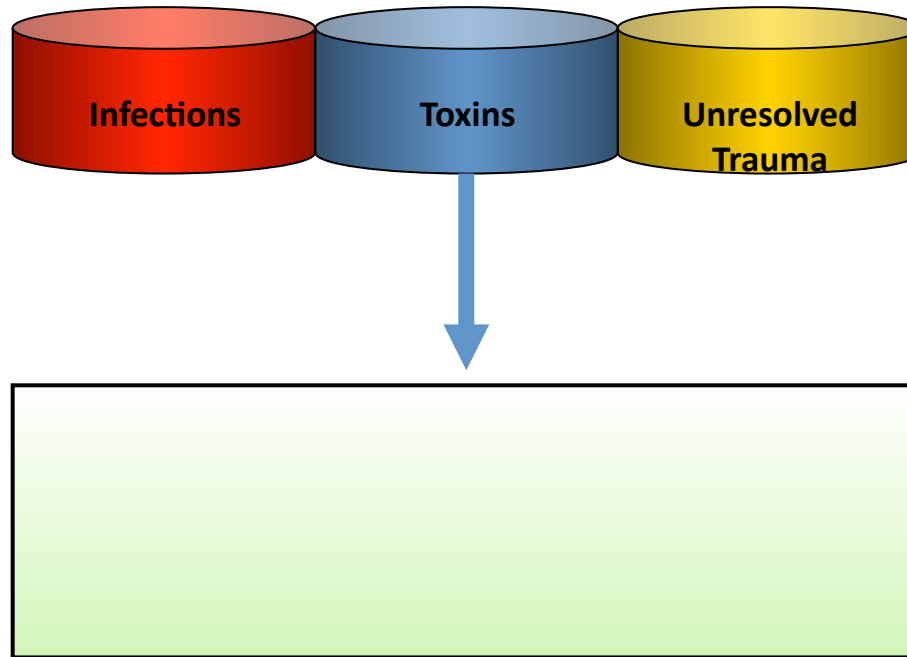




Dysequilibrium:

this patients is entering into a “healing crisis” (if the detox treatment is not paused)

The symptoms will predictably be both infection/immune response related and psychological

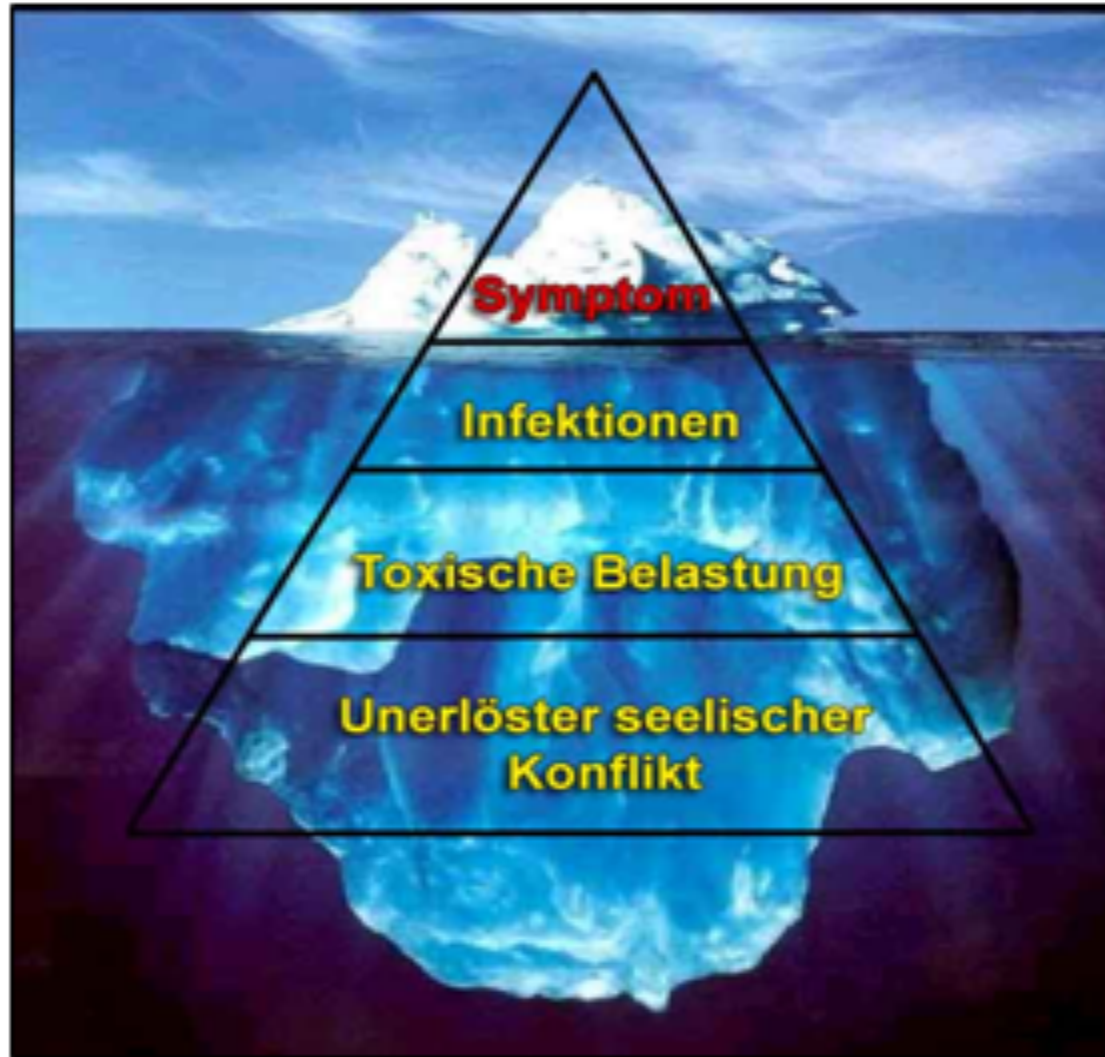


Dysequilibrium:

this patients is entering into a “healing crisis” (if the detox treatment is not paused)

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## Klinghardt axiom III: the iceberg principle







REVIEW

## Mercury Toxicity and Systemic Elimination Agents

JOSEPH MERCOLA DO<sup>1</sup> AND DIETRICH KLINGHARDT MD PhD<sup>2</sup>

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### Abstract

*This paper reviews the published evidence supporting amalgam toxicity and clinical techniques that facilitate mercury elimination. A literature review is provided which documents effective mercury elimination strategies to improve mercury toxicity syndromes. Considering the weight of evidence supporting mercury toxicity, it would seem prudent to select alternative dental restoration materials and consider effective mercury elimination strategies if mercury toxicity is present.*

**Keywords:** amalgam and mercury toxicity, DMPS, DMSA, chlorella, cilantro.

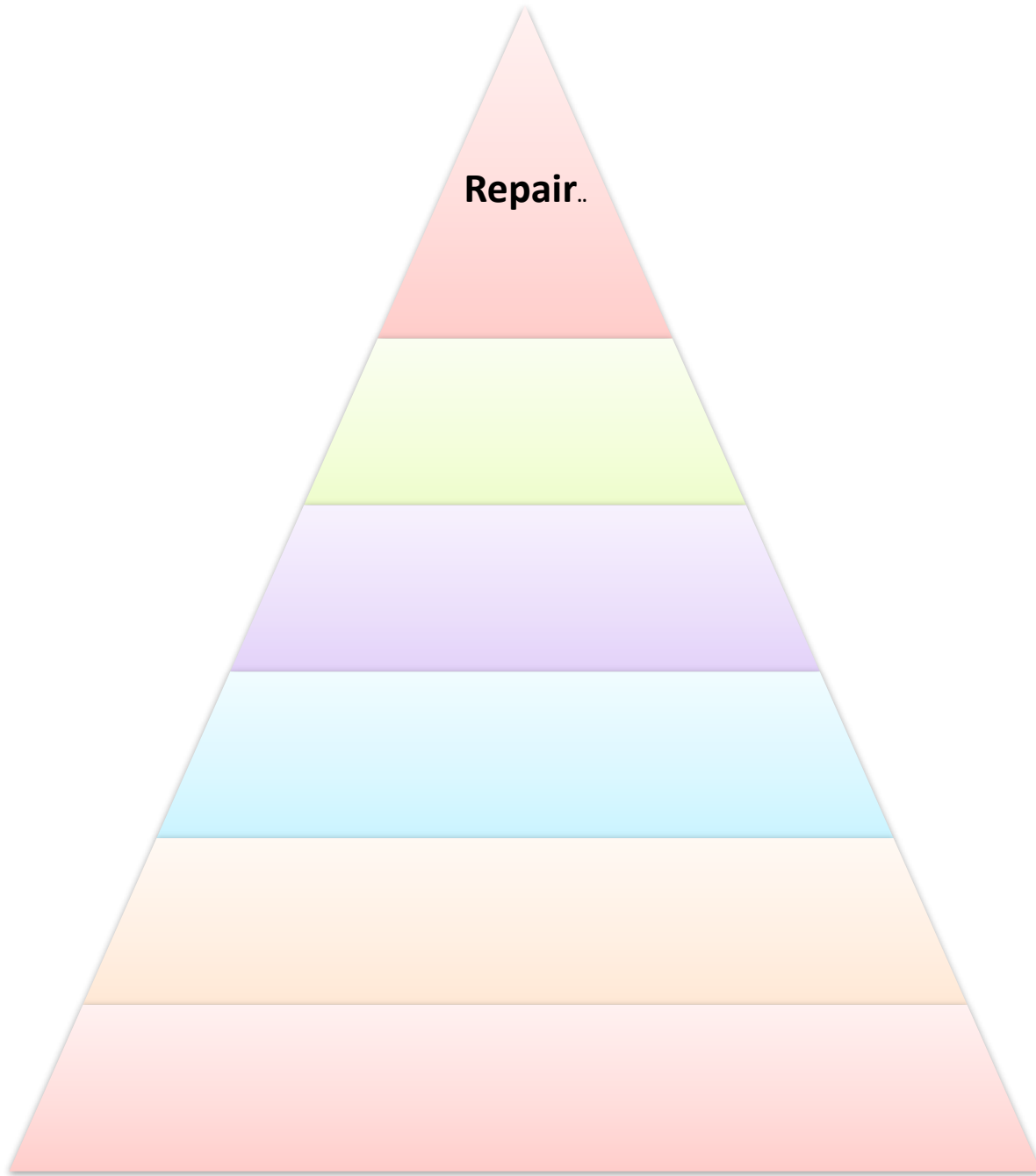
### MERCURY EXPOSURE AND TOXICITY IS A PREVALENT AND SIGNIFICANT PUBLIC HEALTH THREAT

Chronic mercury exposure from occupational, environmental, dental amalgam and contaminated food exposure is a significant threat to public health [1]. Those with amalgam fillings exceed all occupational exposure allowances of mercury exposure of all European and North American countries. Adults with four or more amalgams run a significant risk from them, while in children as few as two amalgams will contribute to health problems [2]. In most children, the largest source of mercury is that received from immunizations [3-6] or that transferred to them *in utero* from their mothers [7, 8].

### DENTAL AMALGAMS ARE A MAJOR SOURCE OF MERCURY TOXICITY

A single dental amalgam filling with a surface area of only 0.4 cm<sup>-2</sup> is estimated to release as much as 15 µg Hg day<sup>-1</sup> primarily through mechanical wear and evaporation [1, 9-11]. The average individual has eight amalgam fillings and could absorb up to 120 µg Hg day<sup>-1</sup> from their amalgams. These levels are consistent with reports of 60 µg Hg day<sup>-1</sup> collected in human feces [12]. By way of contrast, estimates of the daily absorption of all forms of mercury from fish and seafood is 2.3 µg and from all other foods, air and water is 0.3 µg per day [13]. Currently, Germany, Sweden and Denmark severely restrict the use of amalgams [1].

A "silver" filling, or dental amalgam, is not a true alloy. Amalgams are made up of 50% mercury. The amalgam also consists of 35% silver, 9% tin, 6% copper and a trace of zinc [6]. More than 100 million mercury fillings are placed each year in the US as over 90% of dentists use them for restoring posterior teeth [14]. The mercury vapor from the amalgams is lipid soluble and passes readily through cell membranes and across the blood-brain



**Repair..**

# Repair

- Quantum Neurology
- Craniosacral
- OT/Speech/Behavioral Therapies
- \*Laser field restructuring
- BrainGym and LEAP
- Rehab/PT/floor time
- \*[www.FuturesUnlimited.com](http://www.FuturesUnlimited.com) (physiological regression therapy)
- \*[www.Unlimitedbrain.com](http://www.Unlimitedbrain.com) (or google: brainrepairinstitute) – the MAPS programme (Monitored Multi-Cortical Activities for Additional Pathways and Synapses)
- Tomatis therapy/listening programme
- PhotonWave color therapy
- Live cell and stem cell therapy
- So many options...

# Maintenance

- Learn ART to self manage the treatment
- Keep doing the ART testing to particularly keep an eye on issues that had been very problematic before
- monitor heavy metal excretion : use hair analysis and learn to interpret it (Andy Cutler) and also the urine porphyrin test ([www.labbio.com](http://www.labbio.com)) especially during KPU protocol /and know when you have to pause or are finished
- Keep an eye on parasites (monitor stool visually) and bowel movements
- Keep an eye on all aspects of Lyme disease (CD 57 test, IgeneX Western Blot – Palo Alto, Cal, USA) and mold (Jean Monro allergy testing/Breakspear Hospital)
- The neuro-sensory developmental, paedagogic and behavioral approaches, Tomatis therapy and Listening program, floor time, MAPS (Claudie Gordon Pomares) should be integrated into this new biomedical approach and should follow biochemical normalization rather than precede it
- Dietary approaches are not adressed in this paper, since they have become correctly integrated and taught in most schools of thought in ASD (GFCE, specific cabohydrate diet, oxalate free diet, fermented foods, etc.)

# Resources: 1. Core Products (BioPure)

- Tel: 020 7183 7242 Fax: 020 7183 7243 [info@biopure.info](mailto:info@biopure.info) www.ink.ag
- BioSil (Silica): restructures extra- and intracellular matrix. Most important structural molecule
- Chlorella (toxin binding, source of Vit A, K, E, magnesium, chlorophyll, PPAR stimulant, methyl B12, folate, Vit C and more)
- CVE chlorella vulgaris extract (facial development in children, prevention of tooth decay, lead detox)
- Chloralyte (electrolyte/osmotically broken chlorella for detoxification – most cost effective detox agent)
- Cilantro (liver drainage/bile stimulant, anti-salmonella, detox of lead, Al, Ni, radioactive metals and Hg)
- Depyrrol, Depyrrol plus (=with added Mg) and “Depyrrol Kind” (child version): source of high amounts of zinc gluconate, B6 and P5P, Mn to correct HPU
- D-Galaktose : non-sugar, sugar (increases ATP production, works on everything)
- Freeze Dried Garlic (only product with potential to release over 27 000 units of allicin per capsule. Ideal anti-microbial (anti-viral, fungal and bacterial) and detox agent
- Green clay (toxin binding in gut, biofilm braker)
- High potency homeopathic testosterone and DHEA: to lower androgens
- Low potency L Dopa homeopathic (delay in language and motor skills)
- Low potency Serotonin: indicated in all ASD children for processing of sensory input

- Matrix Metals (MIT created nanonized chlorella spray with co-factors)
- Matrix Electrolyte (rehydration, kidney)
- M Water (rehydration, kidney)
- MicroSilica (SH-enhanced silica spheres for maximum toxin binding in the gut)
- Olive Leaf Extract (anti-viral and anti-parasitic)
- OSR (Boyd Haley's answer to increase intracellular glutathione)
- Oxo (plant derived anti-malarial)
- Phospholipid Exchange: best detox agent for lead, Ni, Cd, Al. Enhances the uptake of all other nutrients and medications given at the same time. Stops propagation of Lyme spirochetes. Biotoxin elimination (mould, Lyme)
- Propolis (anti-viral and anti-bacterial)
- Propolis Vaporizer: eliminates mould spores, bacteria, viruses and dust particles in the air at home
- Quintessence (superb energized antimicrobial/lymphatic-drainage herbal combo)
- Rechts Regulat (cascade-fermented bio-product containing hundreds of plant derived enzymes)
- Rizol Gamma (ozonated plant oils for parasites, mycoplasma, Lyme and co-infections)
- Rizol Zeta (same as Gamma plus anti-viral oils)
- St John's Wort (plant derived anti-viral)

## 2. Resources: specific supplements (which are often necessary)

- Anti-yeast probiotics:
  - [www.VSL3.com](http://www.VSL3.com) : most proven probiotic in ASD
  - Florastor Kids : yeast against yeast
- ATP: use BioPure Galaktose ½ tsp 3times per day (best). Alternative ATP 50-450 mg/day. Start slow. “Progressive Labs” (mixed with D-Ribose)
- Artemisinin and Artesunate (Holly Pharma or Allergy Research) : anti-viral (EBV and HHV-6) and anti-malarial
- Di-Methyl Glycine (DMG): most often needed form of glycine for chemical detox and methylation block repair
- DHA Carlsons, Nordic Naturals, vegetarian source:Neuromins: brain and eye development
- Enhansa (highly absorbable curcumin to des-inflate astrocytes in brain and bowel wall)
- Fermented Cod Liver Oil (Green Pasture brand only): best source of natural Vit A (upregulates all hormone receptors except testosterone), Vit D (immunity), fatty acids and co-factors
- Folinic acid : often the most tolerated and needed form of folate in ASD
- Houston Enzymes: with all meals, resolves malabsorbtion, many food intolerances and lessens parasite issues

- Interfase (KLAIRE Labs) - most effective biofilm breaker
- 2-3 capsules Klaire Labs™ Bi-Carb Formula : rehydration
- LDM – 100 ([www.barlowherbals.com](http://www.barlowherbals.com)) - potent natural anti-viral (Native American)
- Morton Lite Salt® : rehydration
- NOW Foods® Potassium Chloride : rehydration
- NT Factor Energy (“Researched Nutritionals” : mitochondrial function, increases cellular efficiency
- Phosphorus (“Angstrom Minerals”): most needed for ATP production, multiple other metabolic issues and ability of kidney to eliminate toxins
- SSKI (pharmacy) or “Tri-Quench” (Scientific Botanicals): turns on metabolism, anti-microbial
- Vit K2 liquid with high MK-4 complex (Thorne Research): blocks conversion of food into toxic oxalates, multiple effects on brain neuroplasticity/regeneration
- Vit A ( Biotics Research Ae-Mulsion forte (12500 i.u per drop) - used in high doses to eliminate measles in the gut (400 000 i.u 2 days in a row, repeat after 6 weeks, 3 months and 6 months)



### 3. Resources: other often indicated products (which are easier to find in the UK)

Sources: Mandi Mart, Breakspear Hospital, Self Health Enterprises, Kirkman, Nutri Centre, Internet

- African Boswellia ([www.olibanum-bv.com](http://www.olibanum-bv.com))
- Alginate or apple pectin
- Alpha-lipoic acid
- Anti-inflammatory enzymes:
- Lumbrokinase (Boluoke)
  - Bromelain
  - Serrapeptase
  - Nattokinase
  - Wobenzym N
  - Vitalzym X
  - Serrapeptase
- Apple cider vinegar
- Beta Sitosterol
- BioImmersion Blueberry, BioImmersion Supernatant (Red 23)
- Burdock or Dandelion tea
- Castor oil packs over the liver with heat for up to 50 minutes daily – local pharmacy

- Charcoal
- Creatine
- Custom Probiotics
- Epsom Salts
- Glutathione oral with phospholipid carrier or combo of NAC, glutamine, glycine
- Hesperidin
- K-Drain (Transformation Enzymes)
- Klaire Detox Support or Therbiotic Complete
- L-Glycine
- Lithium orotate or aspartate, molybdenum
- Magnesium Glycinate
- Melatonin
- Methyl B12 vs. Hydroxy B12 (oral, nasal spray, sublingual)
- Minerals: zinc, selenium, manganese, magnesium, multi-mineral products (Albion chelated is best)

- Modifilan
- Mushroom Extracts
- PaleoCleanse or Amino D-tox (US company: Design for Health)
- Phosphatidyl Serine and Choline
- Pure Encapsulations Vitamin A gelcaps (25000 i.u/cap)
- Pyridoxal vs. P-5-P
- Quercetin
- R-Lipoic acid
- Taurine
- Thorne TAPS, Liver Cleanse or Toxic Relief Booster
- Ultrathistle
- Vit C
- Vit D3
- Zeolite

## 4. Resources: specific homeopathics/herbal preparations

Source: Helios/Tunbridge Wells

- Renelix (by Pekana - kidney drainage)
- Unda 243 (kidney liver drainage)
- Nestmann Solidago tincture (kidney drainage)
- Notakehl, Sanukehl Strep and Sanukehl Pseu (chronic tonsillitis immunotherapy)
- Weleda Argentum Nitricum D4 eyedrops (chronic tonsil/adenoid infection)
- Heel Hepar compositum or Hepeel (liver drainage)
- Heel Tonsilla compositum (tonsil immunotherapy)

# 5. Resources: products available by prescription only (adult dosages given for 65 kg person)

Motor/speech delay: L Dopa sublingual lozenges 0.5 mg/kg/day.

Superb in Rett Syndrome-- research from Japan (Custom Prescriptions 001- 425- 289 0347)

## De-Worming agents

- Biltricide (detergent, superb for liver flukes and ascaris) :600 mg tbl: 2 tbl 3 tid for 2 days, repeat after 2 weeks. Then twice weekly for 2 months.
- \*Alinia/Daxon (Generic: Nitazoxanide (www.magicpharma.com) – Antihelminthic, Anti-Protozoal, Anti-Clostridial, Anti H.Pylori, Anti-Babesial: 1000 mg bid for 3 weeks

## Anti-Virals (adult dosages):

DNA viruses (Herpes Type I, II, EBV, HHV-6, etc.):

- Valtrex (Valcyclovir 1000 mg tid
- Valcyte (Ganvalcyclovir): 900 mg bid for 3 weeks, then 450 mg bid for 6 months (Jose Montoya/Stanford protocol)
- RNA viruses (Borna Virus, etc.):
  - Amantadine 100 mg bid

**Anti-Fungals** (adult dosages, given for 3-9 months or longer

- Amphotericin B (US: Custom Prescription) 250-500 mg bid
- Fluconazole (Diflucan) 100 mg bid
- Itraconazole (Sporonox):. 100 mg bid
- Voriconazole : 100 – 200 mg bid

## Anti-Androgens

- Spironolactone: oral or transdermal
- Lupron – daily injections/Geier protocol

## Complexing/detox agents

- i.v glutathione
- D-Penicillamin
- Oral/rectal/i.v.DMPS (Heyl company, Berlin Germany)
- ZnDTPA i.v. Heyl
- NaEDTA, CaEDTA

## Immunomodulation

- Naltrexone: 3-4.5 mg given best at 11 pm

## **6. Breakspear Hospital**

Allergy desensitization

Vaccines with non-toxic adjuvants

Good quality air filter

Treatment with i.v. Glutathione, DMPS, EDTA etc.

s.c methyl-B12 and hydroxyl-B12

Most sophisticated lab and electro-physiological work-ups

## **7. Other Resources**

Tonsil regenerative cryotherapy ([www.kryopraxis.de](http://www.kryopraxis.de))

**Radiant Life** ([www.radiantlifecatalog.com](http://www.radiantlifecatalog.com))

**Parent Essential Oils** (PEO's) ([www.yes-supplements.com](http://www.yes-supplements.com))

SPS 30 by Theramedix ([www.theramedix.net](http://www.theramedix.net))

Mucostop or Virastop by Enzymedica ([www.enzymedica.com](http://www.enzymedica.com))

DMSA [www.microtrace.com](http://www.microtrace.com)

Liver Life by BioRay ([www.bioray2000.com](http://www.bioray2000.com))

**Helios** Homeopathics ([www.helios.co.uk](http://www.helios.co.uk)) 01892 537254 or 01892 546850

IR Sauna

Valkion (and many of the BioPure products) - Dietlinde Buschbeck ([www.cinak.com](http://www.cinak.com))

**CINAK** (Klinghardt Centre in Geneva)

Tel : 0041 (0) 22 796 94 64 e-mail : [info@cinak.com](mailto:info@cinak.com)

- **Klinghardt Academy of Neurobiology:** Director- Eve Greenberg ([www.klinghardtneurobiology.com](http://www.klinghardtneurobiology.com)) Tel: 001 303 499 4700, or email: info@klinghardtneurobiology.com for English Manuals, DVDs of seminars.
- **Sarah Charlton:** (UK Assistant) email: info@klinghardtacademy.com: Tel: 01342 824906
- **INK:** (www.ink.ag) email: kontakt@ink.ag tel: 0711 8060 870
- **CMC** Dr.Klinghardt's medical practice in the US: Tel: 001 425 823 8818 email: (frontdesk8888@msn.com)
- **Future's Unlimited:** (www.futuresunlimited.com)
- **MAPS** (www.unlimitedbrain.com) 001 888 527 2461
- **Lilias Ahmeira:** all aspects of ASD management, plus master level of bio-energetic brain rehabilitation methods (www.liliasahmeira.com ) 01224 647977
- **Milena Sideris Brooks** (www.autismalternative.com) tel: 001 602 795 5992
- **Self Health Enterprises** (www.selfhealth.co.uk) tel: 01342 824007
- **MandiMart** (www.mandimart.co.uk)
- **The Nutri Centre** (Kirkman Stockists) Tel:0845 602 6744 Fax: 020 8993 2188 (admin@nutricentre.com)
- **Breakspear Hospital** (www.breakspearmedical.com) **01442 261 333**
- **(CMC pharmacy)** If all fails, they can be ordered from the US Tel: 001 425-823-8818

# Testing for Borrelia

## Lab. Sandkamp in Bremen

it is a Melisa LTT of Borrelia. Able to test a "small" panel with 5 Borrelia versions and also the "big" one with 10 Borrelia versions (including the American variety) You can also order the test kits.

Tel: 0049 421 43070

e mail [evt@laborzentrum-bremen.de](mailto:evt@laborzentrum-bremen.de)

## 2. Lab GANZIMMUN .

They are able to test the **CD 57** for the Borrelia. You can also order the test kits for this lab.

Tel: 0049 06131 72050

e mail [info@ganzimmun.de](mailto:info@ganzimmun.de)

Testing for Bartonella and Ehrlichia

You can send EDTA blood to the

### a. University Ludwig Max.

(Prof. Juergen Heesemann)

e mail:

[heesemann@mvp.uni-muenchen.de](mailto:heesemann@mvp.uni-muenchen.de)

Postfach 440361

80752 Munich

Tel: 0049 89 51605200

### b. iGeneX, Inc.

also for most recognized

**Lyme Western Blot**

795 San Antonio Rd

Palo Alto, CA 94303

tel: 800 832 3200

650.424.1191

650.424.1196 Fax

## **Other Laboratory Services (A-Z)**

### **Acumen Labs (John McLaren Howard)**

Email: [acumenlab@hotmail.co.uk](mailto:acumenlab@hotmail.co.uk)

in Devon does less expensive ATP-profiles –  
RBC

glutathion etc.

also lot of good CFS-screens

### **Biolab Medical Unit**

9 Weymouth St

London, W1W 6DB

020 7580 3910

([www.biolab.co.uk](http://www.biolab.co.uk))

trace and toxic metals and metal profiles,  
Vitamin deficiencies, etc.

### **Breakspear Clinic**

Tel: 01442 867 281

[www.breakspearmedical.com](http://www.breakspearmedical.com)

### **European Laboratory of Nutrients (Vitamin Diagnostics)**

Regulierering 9

3981 LA Bunnik

The Netherlands

Phone: +31 30 2871492

Fax: +31 30 2802688

([www.europeanlaboratory.nl](http://www.europeanlaboratory.nl))

### **Genova Diagnostics**

Parkgate House

356 West Barnes Lane

New Malden

Surrey

KT3 6NB

**Phone:** +44 (0)20 8336 7750

([www.gdx.uk.net](http://www.gdx.uk.net))

[eln@healthdiagnostics.nl](mailto:eln@healthdiagnostics.nl)



**HEMEX Laboratories, Inc.** - For Coagulation panels

3930 East Watkins St, Ste. 300, Phoenix AZ 85034, Tel: 001 (800) 444-9111 ([www.hemex.com](http://www.hemex.com))

**Hightree Medical Lab (Dr S.Trefzer)**

Tel: 01825 761140

Cooperate and coordinate tests with the Nuffield hospital labs on a more local level but also uses Sheffield University Protein Unit Lab for complex tumor markers etc.

Can also access via the Homeopathic Hospital link to the University College Hospitals London some Virology and other less common test procedures

**Laboratoire de Biologie Medicale av.Philippe Auguste / Paris**

Urin Porphyrin Test for lead and mercury toxicity/porphyria

Tel: 01 43 67 57 00

Dr Nataf

**Dr A.J. Wright**

e-mail [thefatigueclinic@yahoo.co.uk](mailto:thefatigueclinic@yahoo.co.uk))

fax: 01942 815657

For parasites and Borrelia-Co-infection-laboratory work using

microscopy as main tool to provide relatively inexpensive probability assessments

## How and where to get a blood sample taken

Ask your GP to take the blood for you. If he is not willing to do that, then find a qualified nurse via a local nursing agency or contact one of the establishments listed below. They may ask for a referral letter from a doctor. Contact your practitioner for such a letter.

North Downs Hospital, 46 Tupwood Lane, Caterham, Surrey CR3 6DP; tel: 01883 348981

The Birmingham Nuffield, 22 Somerset Road, Edgbaston, Birmingham, B15 2QQ tel:0121 456 2000

The Chesterfield Nuffield, 3 Clifton Hill, Clifton, Bristol, BS8 1BP, Tel: 01179 730391

Wolverhampton Nuffield Hospital, Wood Road, Tettenhall, Wolverhampton WV6 8LE;  
Contact: Laboratory Manager on 01902 754 177

Droitwich Private Hospital, St Andrews Road, Droitwich, Worcester WR9 8DN;  
contact: Pathology Dept. 01905 794 793

Mullhaven Medical Laboratory, Unit 9 Stephenson Court, Fraser Road, Priory Business Park, Bedford,  
MK44 3WH

Prices: £10 for venepuncture at the premises, or £20 for domiciliary visits.

Contact: Steve or Joanne Mulliner. Tel. 01234 831115 e-mail: [info@mullhaven.co.uk](mailto:info@mullhaven.co.uk)

BUPA Hospital, Chalybeate Close, Tremona Road, Southampton SO16 6UY;  
Contact: Pathology Manager 02380 775544

Warwickshire Nuffield Hospital, Old Milverton Lane, Leamington Spa, Warwickshire;  
Contact: Laboratory Manager 01926 427971

Essex Nuffield Hospital, Shenfield Road, Brentwood, Essex CM15 8EH;  
Contact: Laboratory Manager 01277 695695

Winterbourne Hospital, Harrington Road, Dorset DT1 2DR;  
Contact: Laboratory Manager 01305 263252

The Park Hospital, Sherwood Lodge Drive, Arnold, Nottingham NG5 8RX;  
Contact: Laboratory Manager 0115 967 0670

Bath Clinic, Clavergon Road, Coombe, Bath BA2 7BR  
Contact: Laboratory Manager 01225 835555

Bournemouth Nuffield Hospital, 67 Lansdown Road, Bournemouth BH1 1RW;  
Contact: Laboratory Manager 01202 291866

Clinic of Integrated Medicine, 97 Harley Street, London;  
Contact: Sister Wiseman 0207 224 6777