

# A Treatment Guide: Lyme and other Chronic Infections

Dietrich Klinghardt MD, PhD

October 2009

# The Symptoms of Lyme Disease Are Non-specific

- Fatigue
- Fibromyalgia
- Multiple chemical sensitivity
- Immune deficiency
- Strange neurological symptoms (buzzing, fasciculations, tinnitus)
- Low grade depression to severe psychiatric presentations
- GERD
- Low exercise tolerance
- Possibly every symptom known to Medicine

# Making the diagnosis

- Symptoms and history
- Neurological/physical findings
- Direct microscopy
- Detection of antibodies (ELISA, Western Blot)
- Lymphocyte proliferation tests (MELISA)
- ART testing (*[www.neuraltherapy.com](http://www.neuraltherapy.com)*)
- Indirect tests (FACT, different lab parameters)
- History of an insect bite, mold exposure, recent radiotower/cellphone tower installation near home, installation of wireless technology at home or work, mother's illnesses, multiple sex partners in past

# Lyme: forget the tick bite

- Making the diagnosis dependent on the history of a tick bite represents poor logic: 22% of horse flies, deer flies and mosquitoes are infected with *Borrelia* and co-infections in endemic areas

The etiologic agent of Lyme disease in deer flies, horse flies and mosquitoes, J Infect Dis 154 (1986), 355-358, LA Magnarelli, JF Anderson, AG Barbour, Klinik der Lyme-Borreliose: Hans Huber Verlag, Bern, CH (2002). 39-40, Norbert Satz

## Consider the Differential Diagnosis

- Lyme disease, co- infection or other infection
- Parasitic Infestation (very common: Varestrongylus Klapowi/Lungworm = tiny roundworm)
- Thioether toxicity from jaw infections
- Toxicity from root filled teeth
- Poor diet
- Mold / Mycotoxin exposure
- Environmental illness (toxicity and allergy)
- Electrosmog exposure (Lyme patients are electro-sensitive)
- Side effect of medication
- Psychiatric disorder
- Biotoxin-producing intestinal infection
- Scar and ganglion interference fields
- Heavy metal toxicity
- Mycoplasma
- Borna Virus
- HHV-6 and EBV

# Three Pathogenic Types of Borrelia Spirochetes

- *Borrelia garinii*
- *Borrelia afzelii*
- *Borrelia burgdorferi* (Bb)

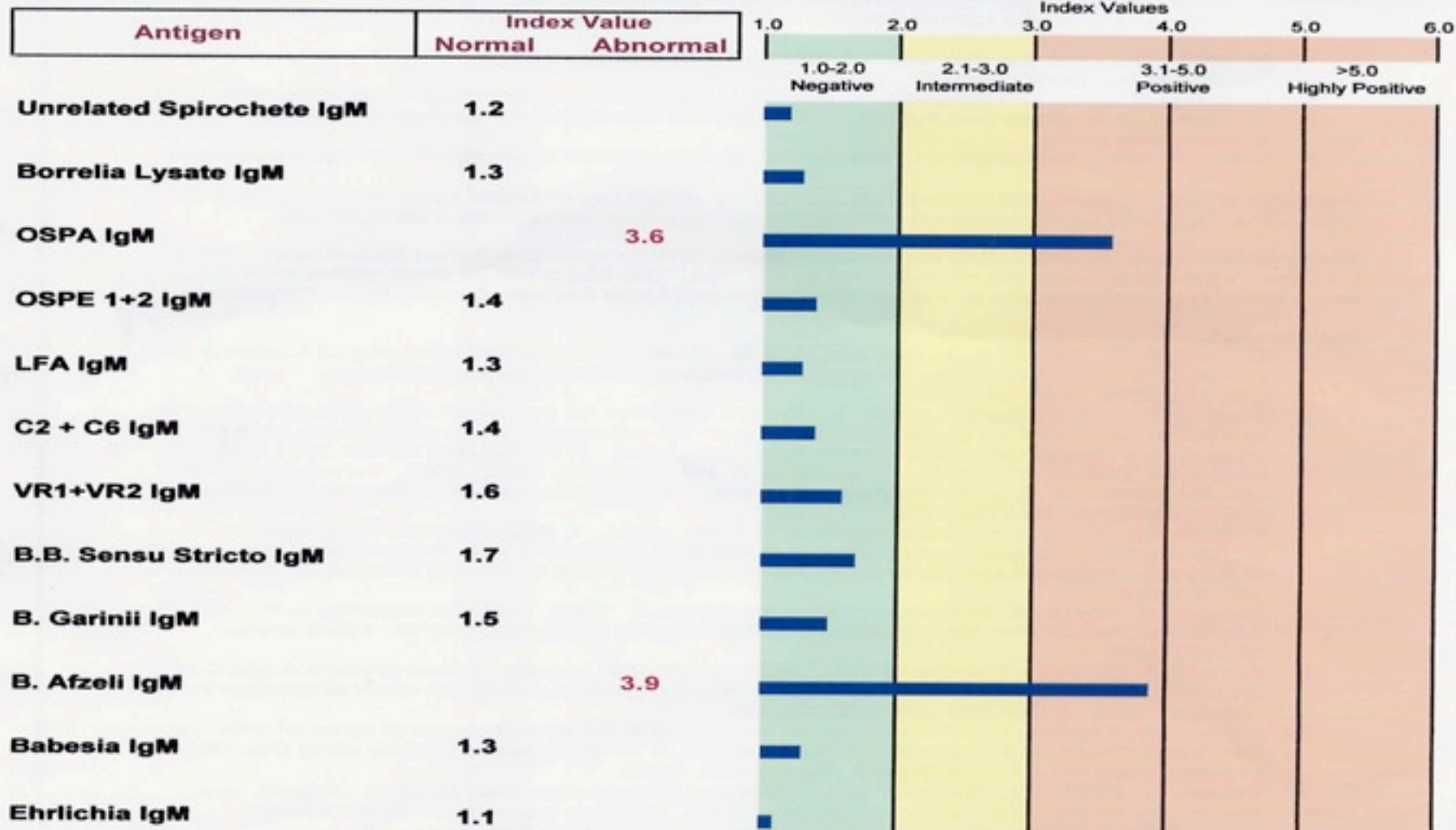
*Borrelia burgdorferi* group: in-vitro antibiotic sensitivity: Orv Hetil, 2002 May 26; 143 (21): 1195-8 (article in Hungarian), JP Henneberg, U Neubert –department of dermatology, Ludwig-Maximillan University, Munich, Germany



Patient Name: **Klinghardt, Dietrich**  
Report Number: **175056**  
Blood Drawn: **12/21/2004**  
Date Reported: **1/14/2005**

Clinic:

**Klinghardt, Dietrich**  
**1200-112th Avenue, NE, Suite a-100**  
**Bellevue WA 98104 USA**

**IgM Antibodies to Borrelia burgdorferi and Cross Reactive Antigens:**

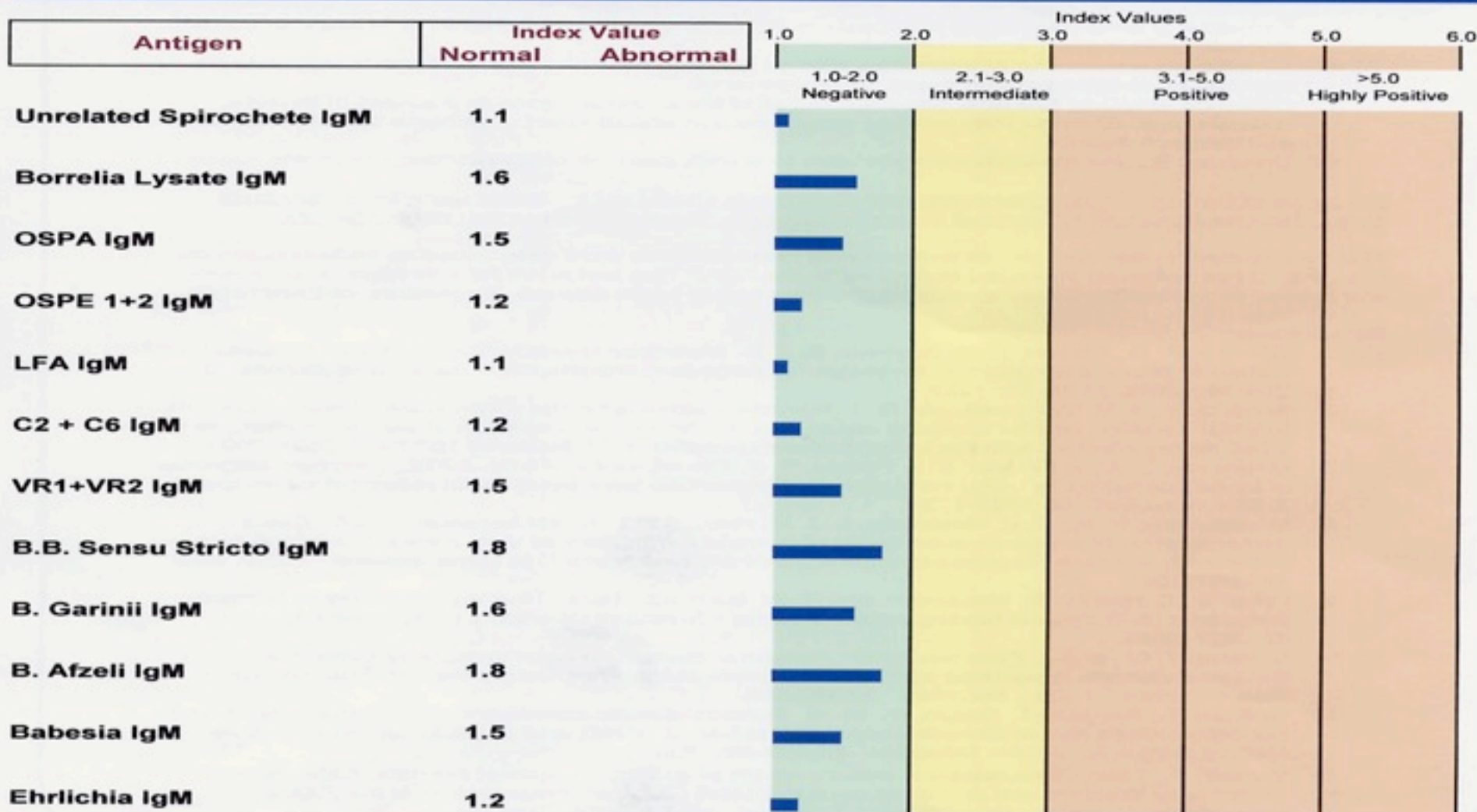




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**Bellevue WA 98104 USA**

**IgG Antibodies to Borrelia burgdorferi and Cross Reactive Antigens:**



PATIENT: KELLY, ROBERT  
DOB: 01/01/29 SEX: M

SAMPLE ID: 101685

DIETRICH KLINGHARDT, MD  
1200 112TH AV NE STE A100  
BELLVUE, WA  
98004

DRWN: 12/12/02  
RCVD: 12/16/02  
PRNT: 12/20/02

DIRECTOR: BOYD G. STEPHENS, M.

-----  
TEST NAME

RESULT

UNITS  
-----

LYME IgG WESTERN BLOT

-----  
The IgG WB is considered positive if two of the starred bands are present:  
23-25, 31, 34, 39, 41, 93 kDa.

The IgG WB is considered equivocal if one of these bands are present:  
23-25, 31, 34, 39, 93 kDa.

41 kDa, by itself, is negative.\*\*\*REVISED 9/16/99

ASTPHLD/CDC recommendation: An IgG WB is positive if five of these bands  
are present: 18, 23-25, 28, 30, 39, 41, 45, 58, 66, 93kDa. New York State  
Department of Health considers Western Blots positive that conform to the  
ASTPHLD/CDC criteria.

BAND INTENSITY: Low +, Medium ++, High +++, Equiv +/-  
-----

LYME IGG WESTERN BLOT

POSITIVE

18 kDa	-
22 kDa	-
**23-25 kDa	++
28 kDa	++
30 kDa	++
**31 kDa	++++
**34 kDa	++
37 kDa	-
**39 kDa	+/-
**41 kDa	+++
45 kDa	+
58 kDa	+/-
66 kDa	+/-
73 kDa	-
83 kDa	-
**93 kDa	-

PATIENT: KELLY, MARIA  
DOB: 04/20/42 SEX: F

SAMPLE ID: 103704

DIETRICH KLINGHARDT, MD  
1200 112TH AV NE STE A100  
BELLVUE, WA  
98004

DRWN: 00/00/00  
RCVD: 01/31/03  
PRNT: 02/18/03

DIRECTOR: BOYD G. STEPHENS, M.

TEST NAME	RESULT	UNITS
LYME IgM WESTERN BLOT	.....	
The IgM WB is considered positive for the presence of AB to B. burgdorferi if two of the starred bands are present: 23-25, 31, 34, 39, 41 kDa.		
The IgM WB is considered equivocal if one of the starred bands is present.		
ASTPHLD/CDC Recommendations: An IgM WB is positive if two of these bands are present: 23-25, 39, 41 kDa. New York State Department of Health considers Western Blots positive that conform to the ASTPHLD/CDC criteria.		
BAND INTENSITY: Low +, Medium ++, High +++, Equiv +/-		
LYME IgM WESTERN BLOT	POSITIVE	
18 kDa.	+/-	
22 kDa.	-	
**23-25 kDa.	+/-	
28 kDa.	-	
30 kDa.	+/-	
**31 kDa.	+/-	
**34 kDa.	+/-	
37 kDa.	-	
**39 kDa.	+	
**41 kDa.	++	
45 kDa.	+	
58 kDa.	++	
66 kDa.	+	
73 kDa.	-	
83 kDa.	-	
93 kDa.	+	

*AWP ML 3/17/3*

Continued on next page

Dia' int *Western - Blot*

ratory tests alone. Results should be cal symptoms and patient history.

## Meaningfull minimal lab work:

- HPL test (r.o.HPU)
- Hair analysis and urinary porphyrins (metals) – only after challenge
- Urinary mold mycotoxins (active mold/yeast)
- CD 57 below 100: suggestive of Lyme, below 60 suggestive of Lyme + Mycoplasma
- Western Blot (IgeneX)- only after challenge
- Chem panel and CBC ( systemic health issues, viral indicators, kidney and liver health)
- 24 hr urine hormones
- Stool for parasites (still frustratingly high false negatives)

# Lyme: Helpful Tips From the Laboratory

- Abnormal lipid profile (moderate cholesterol elevation with significant LDL elevation)
- Insulin resistance
- Borderline low wbc, normal SED rate and CRP
- Low-normal thyroid hormone tests but positive Barnes test and excellent response to giving T3
- Phase 2 adrenal failure (high cortisol, low DHEA and testosterone)
- Low alkaline phosphatase (indicating low zinc levels, usually from lyme associated kryptopyrole disorder)
- Decreased urine concentration (low specific gravity)
- High iron, zinc and copper in hair analysis

## Treatment

- Microbes exist in communities: bacteria, viruses, mycoplasma and molds co-habitate. One species supports and mutually benefits from the other.

*Conclusion: treat broad-based!*

- Microbes secrete biotoxins to subdue the host's immune-responses:

- Immunotoxins
- Enzyme blocking agents. Result: kryptopyrroles
- Molecular mimicry

*Conclusion: detoxify!*

- Patients get sick in certain environments and in certain life phases against a certain genetic, biochemical and emotional background

*Conclusion: change who you are and how and where you live!*

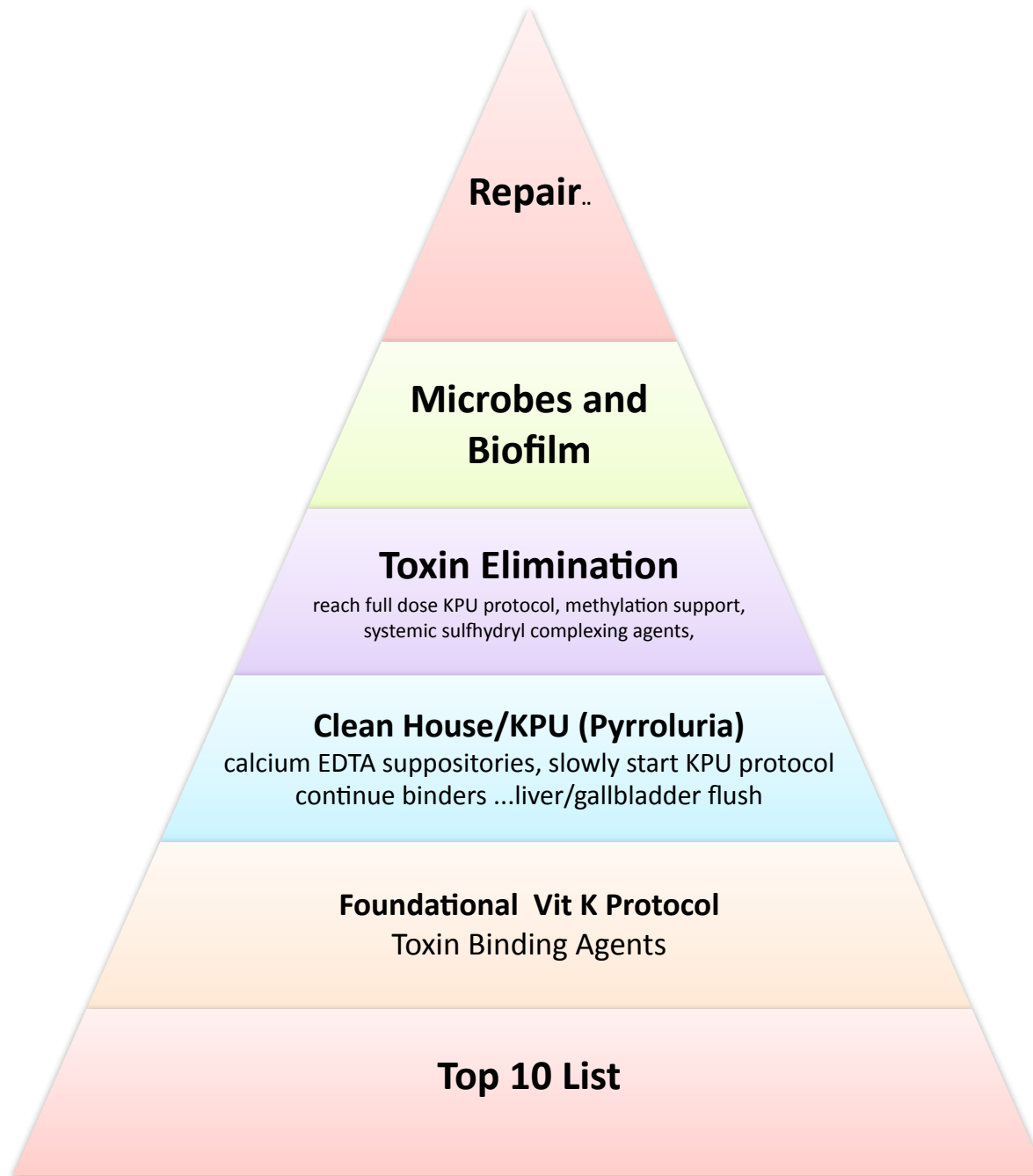
# Klinghardt's 4 steps of managing chronic infections/Lyme:

1. Decreasing toxic body burden/unloading the system (MicroSilica, chlorella, etc.)
2. Improving disturbed physiology (HPU and vitamin K protocol, methylation block supplements, etc.)
3. Decreasing microbial count (anti-microbials)
4. Immunemodulation (Klinghardt H7-method – the details are described in the HPU handout)

These principles are woven into the treatment suggestions on the next pages

- The content and creation of the next slides was only possible with the communal effort of the Dana Gorman [www.thriiive.com](http://www.thriiive.com) think tank and summit of experienced AutismSpectrumDisorder (ASD) and Lyme practitioners. We believe that most ASD children have congenitally aquired Lyme and we can apply the principles of ASD treatment successfully to our Lyme patients
- Special thanks to Catherine Tamaro for the Vit K protocol, Amy Derksen for organizing and re-thinking the material, Anju Usman for sharing the experience of the busiest and most successful ASD practice in the world. Also thanks to Amy Yasko for introducing us to the Methylation cycle, Abram Hoffer for discovering KPU and to all the other unnamed pioneers in our field.
- With humility and respect,  
Dietrich Klinghardt MD, PhD





# Thriiive.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

# 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  
from Switzerland: [info@cinak.com](mailto:info@cinak.com)



# Dental issues and suggestions

- Tooth decay in children and adults 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  
[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.
- 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”

## 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

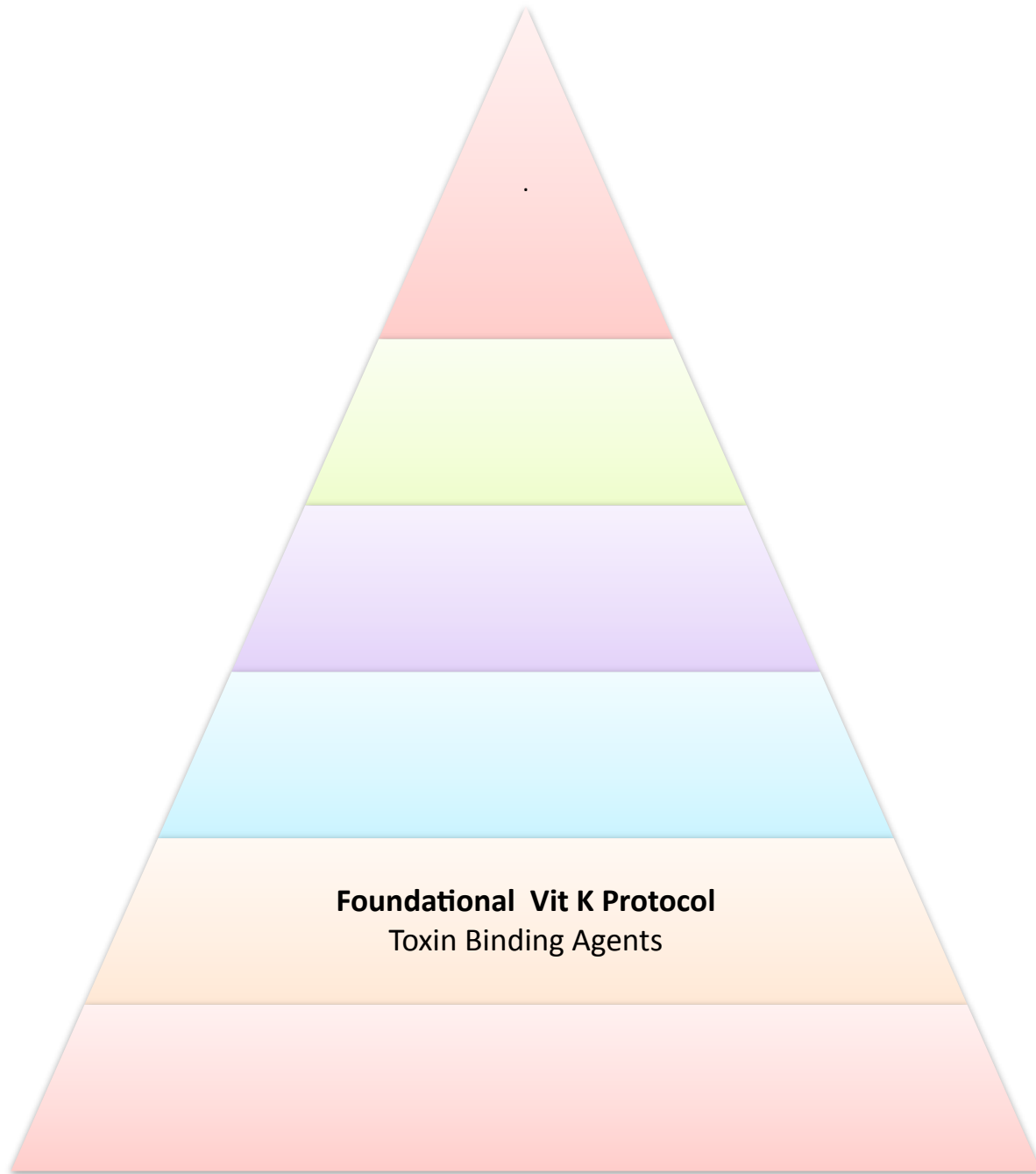
## Detox: environmental toxin reduction

- 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



## Detox in children: 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)
  - ASD children: 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”)

<http://health.groups.yahoo.com/groups/Vitamink>

- 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). Otherwise 2 scoops (200mg) per day
  - Chlorella – BioPure: 1- 2 tbl /kg during days of crisis
  - Green clay and/or zeolite: 1 tsp twice daily
  - Charcoal for acute reactions
  - Beta Sitosterol
  - Alginate or apple pectin for mild reactions

## Step 2: baking soda baths

- 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)

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# 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

## *Step 4. Basic Ingredients*

# Magnesium

- Minimum 200mg 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. 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 most 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 .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. Basic Ingredients: Fat Soluble Vitamins*

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

**Controversial in Lyme (see Marshall Protocol)**

- 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. 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*

### Vitamin A

- 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. 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. 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. 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. 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. Work up to 3 drops/day (adults), best if inhaled with vaporizer (Omron)
- Anti-microbial, anti-yeast, normalizes breast tissue, helps the thyroid
- Inhalation has strong effect against Babesia, Bartonella and Lungworm
- Increases body temperature and decreases microbial count
- 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

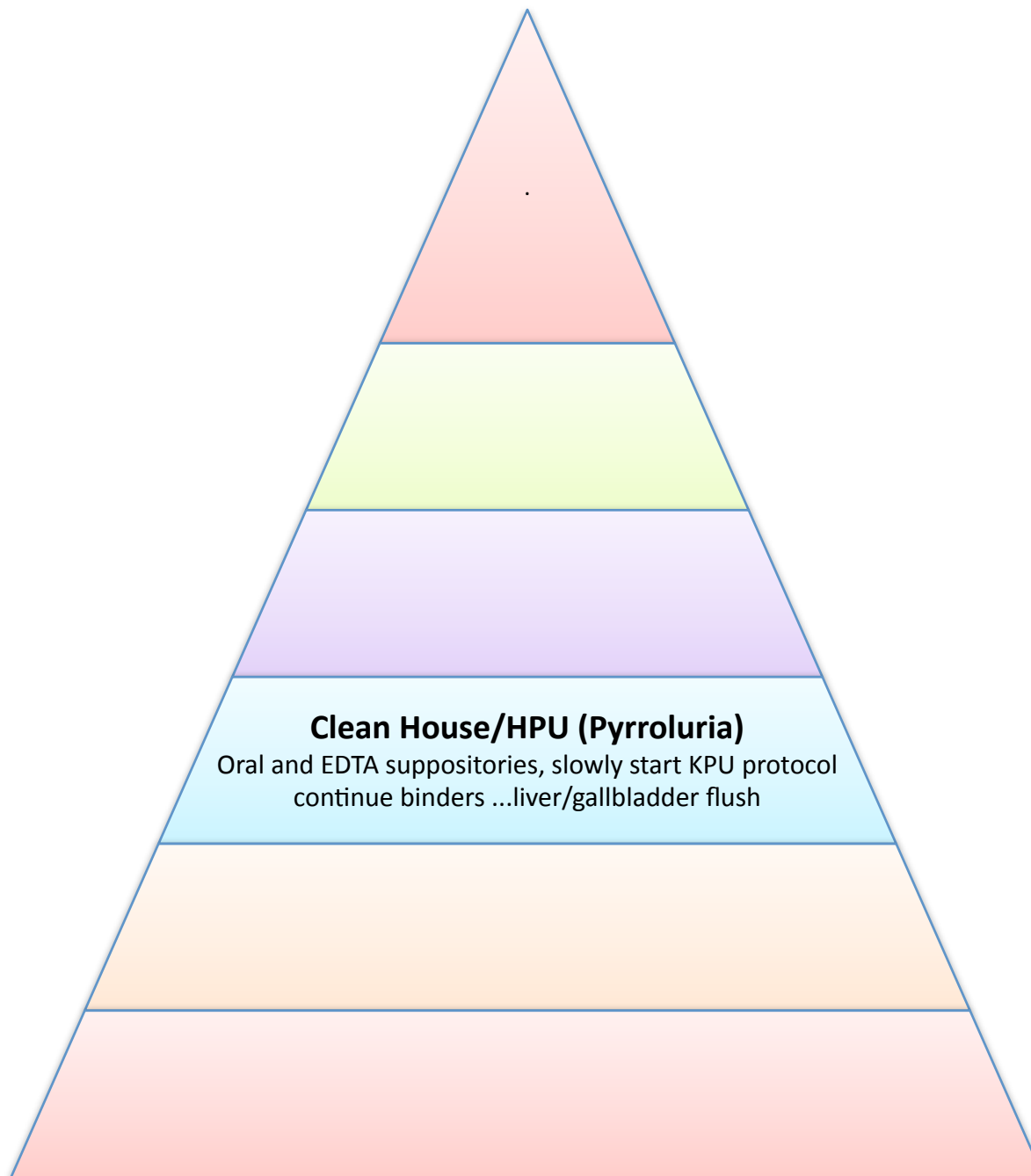
## 4. Basic Ingredients:

# 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

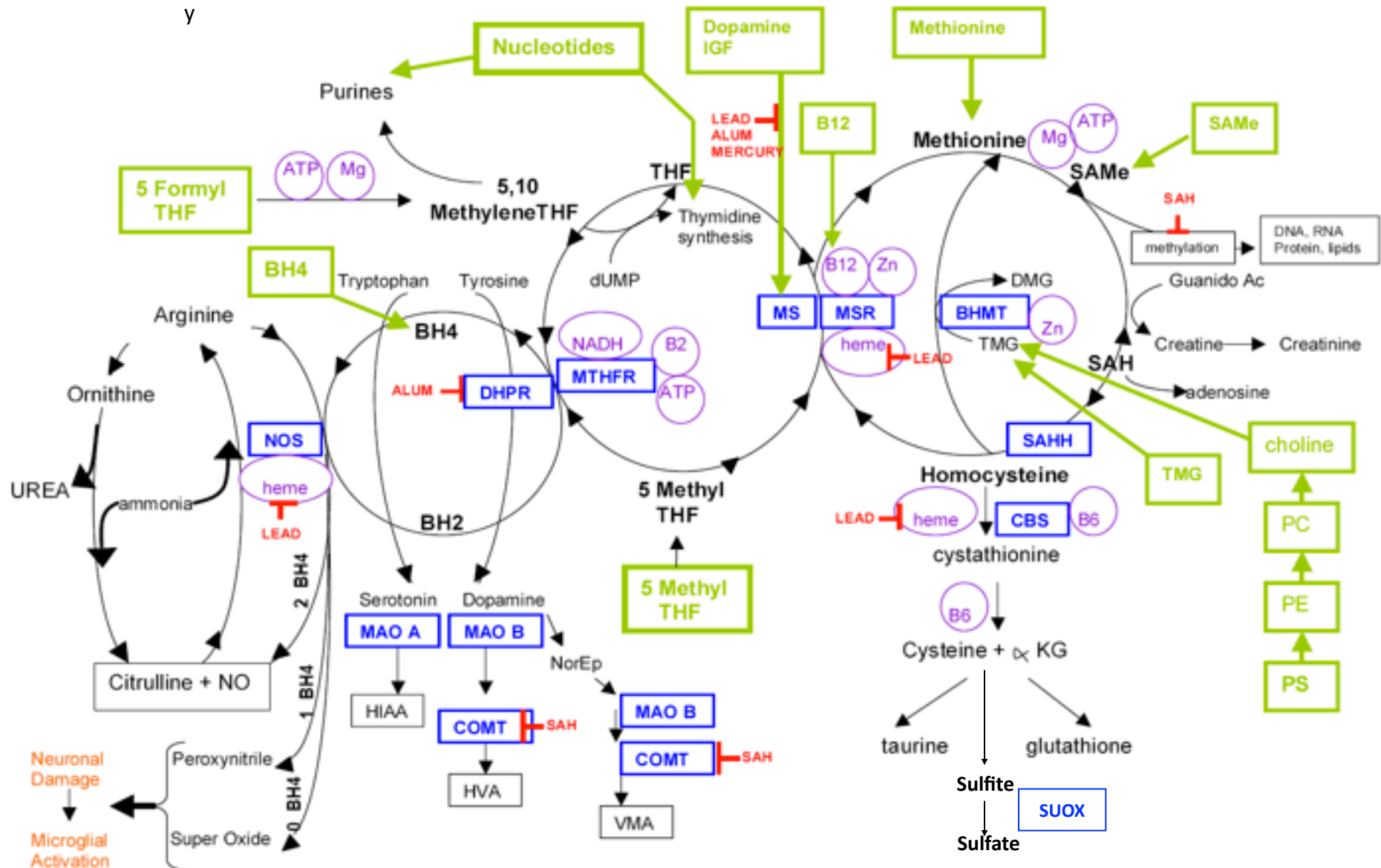
The science is given in a separate lecture (see our web-site).

**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)

# Pathways With Enzymes, Cofactors, Supplements & Blocking Metals/SAH modified from Amy Yasko PhD

y



Activating the detoxification systems with inhaled singlet oxygen  
Instrument available from Switzerland: [info@cinak.com](mailto:info@cinak.com)





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



**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 [info@cinak.com](mailto:info@cinak.com)

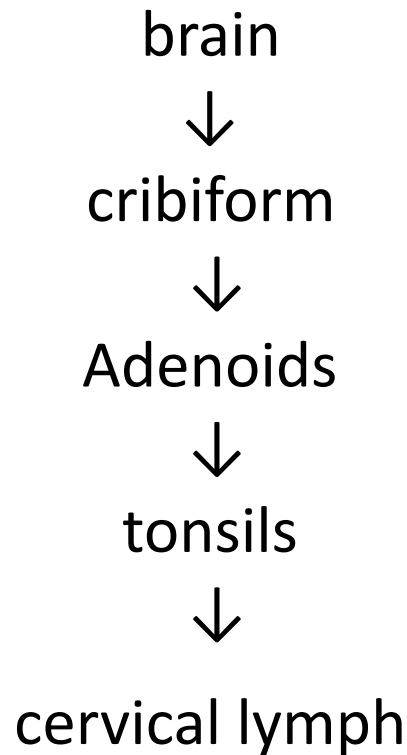
## *2. Clearing the exit routes*

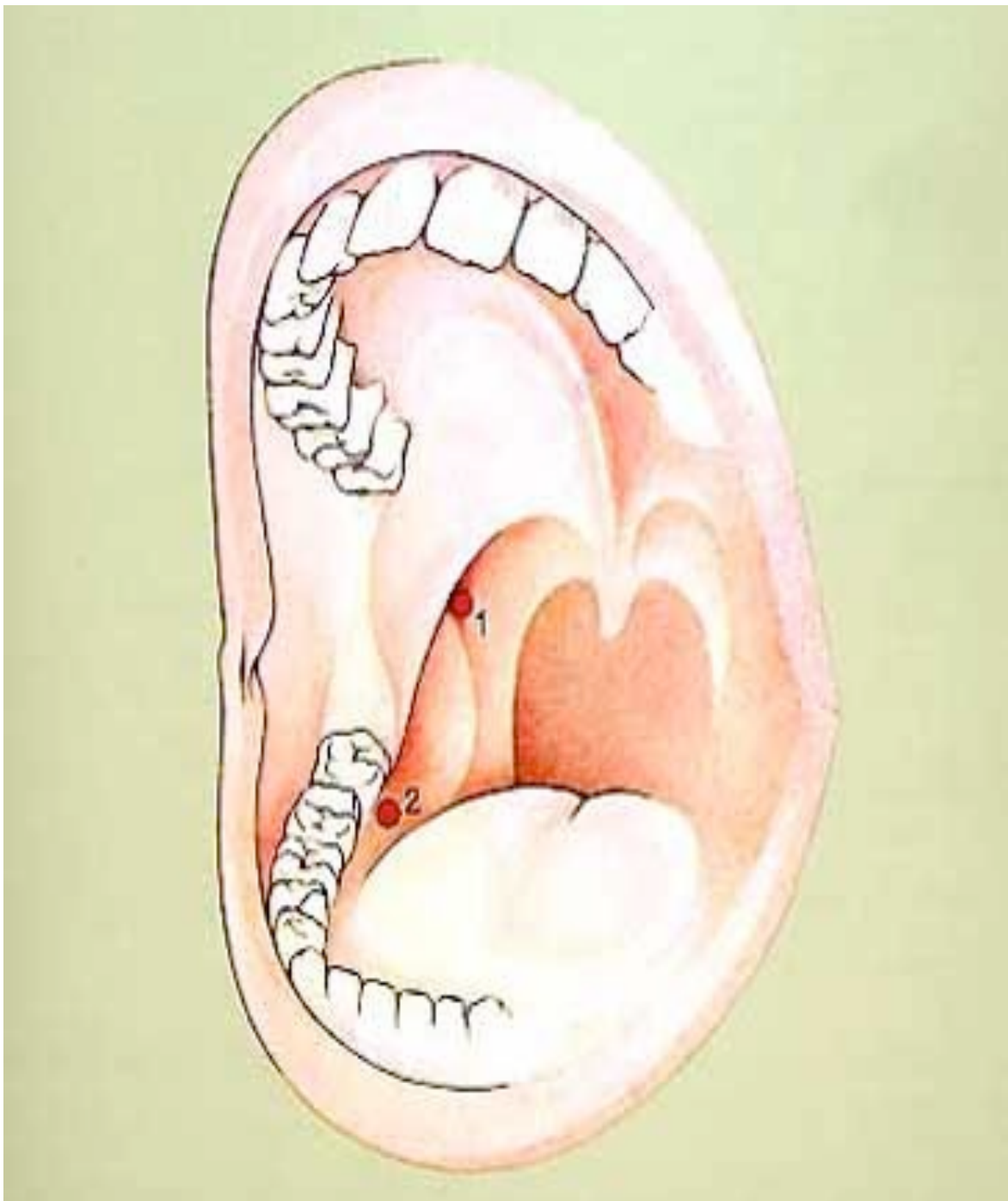
### **A. The tonsils and adenoids**

- 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: use Quintessense (BioPure) and neuraltherapy (procaine injection)
- 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**

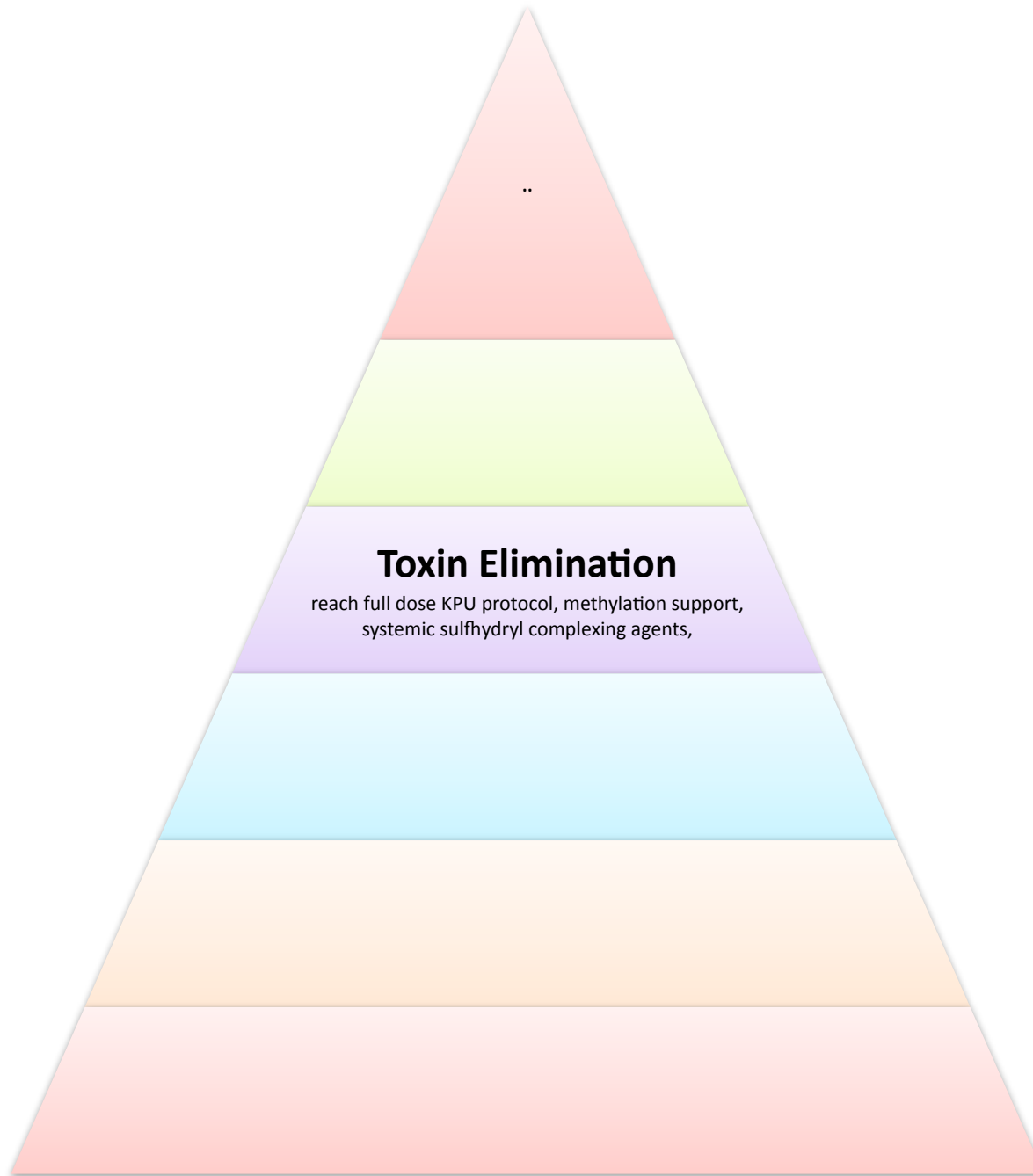




## 2. *The exit routes*

### 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

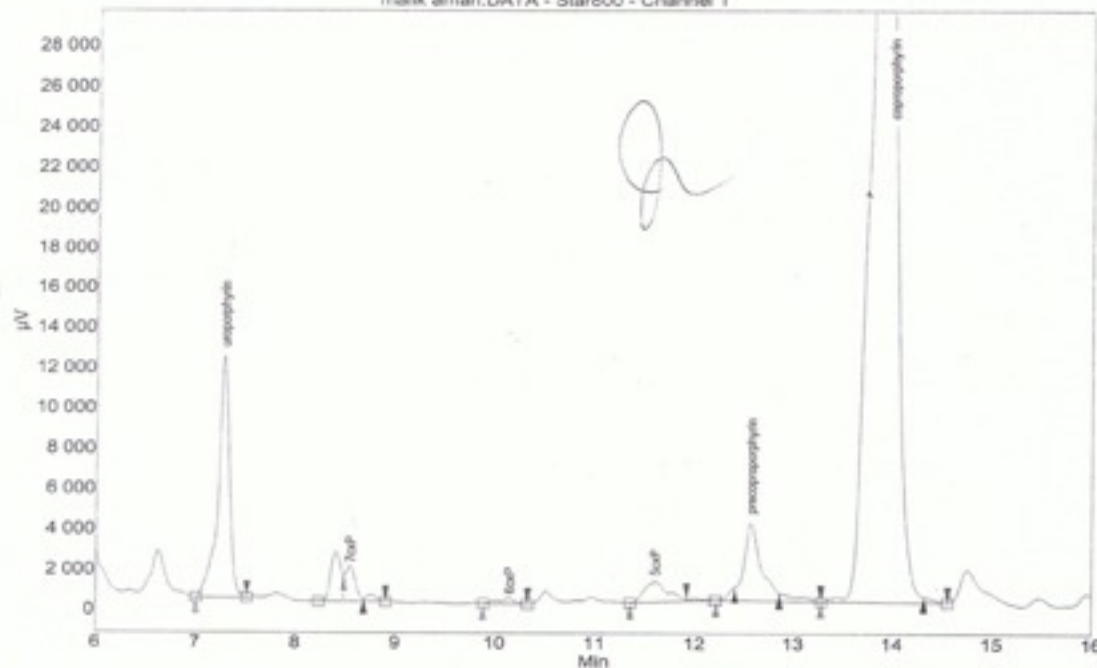
(nmol/l urine)

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 - Star800 - 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
precoproporphyrin	17.95	16.03	4.1	12.56
coproporphyrin	405.40	361.96	83.8	13.91
Total	471.67	421.13	100.0	

Reference (nmol/gr Cr)
UP : 8 - 20
7cxP : 2.5 - 4.5
6cxP : 0.5 - 1.5
5cxP : 2 - 4
PrCP : 5 - 9
CP : 100 - 200 (child)
CP : 70 - 140 (adult)

Ratios :

Reference Range :

PrCP / UP	0.48	0.2 - 0.5
5cxP+PrCP / UP+7cxP	0.58	0.2 - 0.6
PrCP / 5cxP	3.11	1.5 - 3.0
PrCP / CP	4.4	2 - 6 %
5cxP/7cxP	1.36	< 1.0
CP / UP	10.9	5 - 9

urinary creatinin  
1120 mg/l



LABORATOIRE PHILIPPE AUGUSTE  
119 Ave Philippe Auguste 75011 Paris France  
Tel (33) 1 43 67 57 00 fax (33) 1 43 79 00 27  
Email : contact@labbio.net

07/11/2007

## Urinary porphyrins

HPLC-UV+Fluorescence

	nmol/l	nmol/gCr	%	reference nmol/gCr <sub>s</sub>	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)	5,6	5,2	1.2%	2-4	Slightly increased rate
Precoproporphyrin (PrCP)	16,0	16,0	3.8%	5-9	Increased rate
Coproporphyrins I & III (CP)	405	362	89.3%	100-200	Increased rate
PrCP/UP	PrecoP/Uro ratio		0,48	0,2-0,5	
(5cxP+PrCP)/(UP+7cxP) ratio			0,6	0,3-0,6	
PrCP/5cxP			3,1	1,5-3	
PrCP/CP	PrecoP/COP ratio		4,4	2-6	
CP / UP	copro/uro ratio		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 toxics generates a specific urinary porphyrins excretion pattern for example: Biphenyls, Dioxins, Aluminium inhibit an early enzyme on porphyrin biosynthesis pathway Uro-Decarboxylase, Mercury inhibits Copro-oxylase 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**:

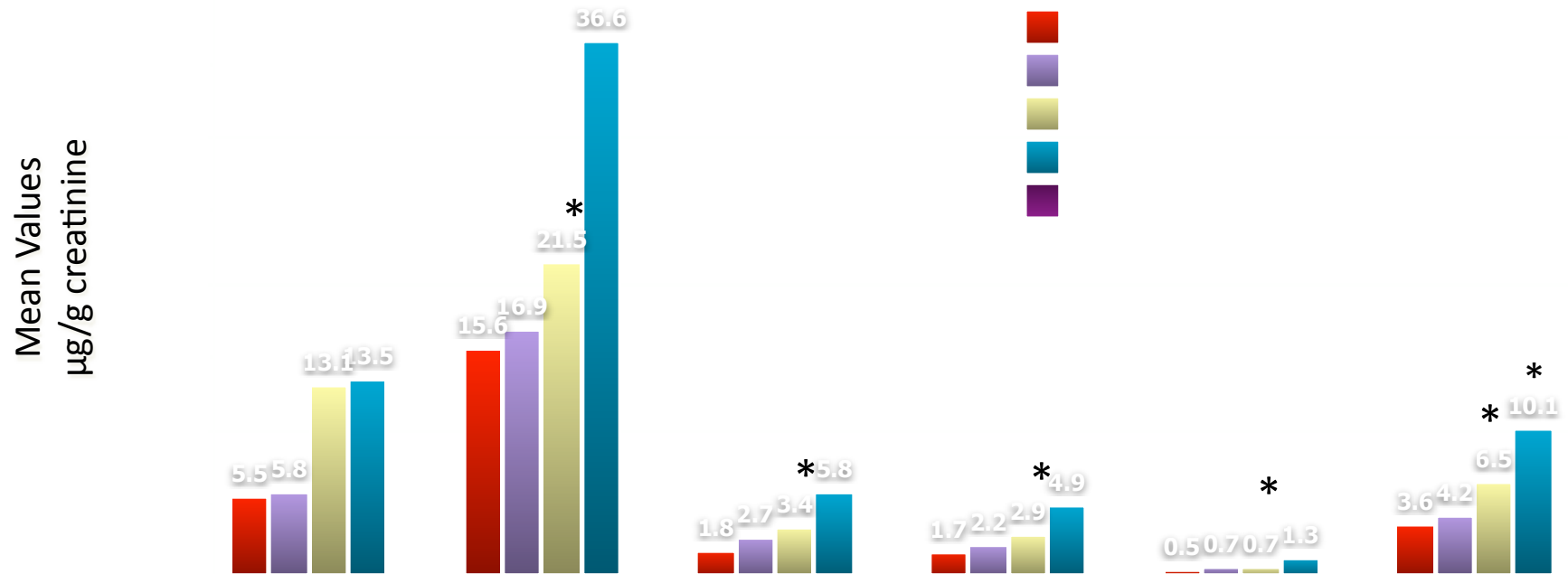
- \*Micro-silica: 4 year old: start 1 scoop (=100mg) in juice once/day, increase to 2-4 on days when things seem aggravated (source: BioPure)
- Binders: chlorella, clay, fiber, charcoal, apple pectin, betaSitolsterol

My suggestion: chlorella vulgaris (BioPure), use in children: 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. Adults: 30-90 tbl/day. 1-2 tsp clay/day

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). Adults: 1 tbsp 1-2 times per day
- Cilantro tincture: age times 2 = number of drops. This number given 3 times per day during active detox. Always before meals (source: BioPure). Adults: 1-2 dropperfull 3 times per day before meals
- CVE: helps dental and facial development. Detoxes and binds lead. Good anti-microbial. Use 1 cap/year of age (source: BioPure). Adults: 6/day
- \*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). Adults: 750-1500 mg/night three times per week

# EDTA: Excretion of Toxic Metals in Urine



\*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): most effective way of using chlorella for oral detox. Great right after dentistry.
- *Matrix Metals nanonized* oral spray (BioPure): detaches and removes intracellular toxins
- Colonics, colonics, colonics
- Greens and fiber
- Vit C (has to be used with caution in HPU)
- Transdermal chelators or suppositories to bypass the gut
- Modifilan
- Add lots of minerals!
- Zeolite (cave: aluminum!)

## 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)

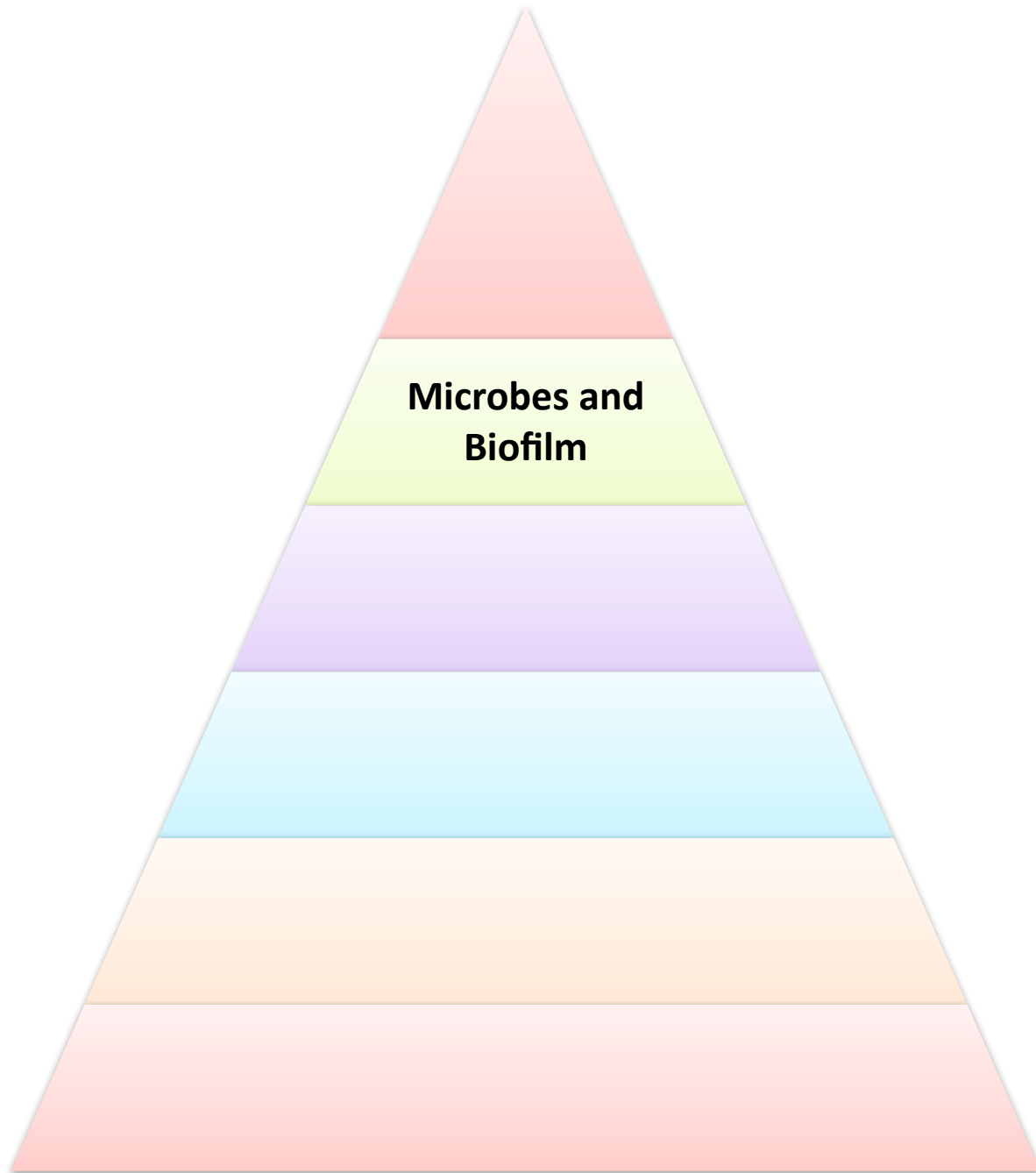
- **\*African Boswellia** extract – most powerfull anti-inflammatory to the brain. Reduces TNF-alpha significantly. Weihrauchbalsam nach Dr.Fernando (source: [www.olibanum-bv.com](http://www.olibanum-bv.com))
- **Quercetin**  
Yao Y, Han DD, Zhang T, Yang Z. Quercetin improves cognitive deficits in rats 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-** adult dose: 2 Tablespoons twice daily - my first choice for children. (Source: BioPure)
- **2. Other options:**
  - **Boluo**- 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.drneubrander.com](http://www.drneubrander.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**





# Biofilm treatment

- Phospholipid Exchange: 1 tbsp/day (oral EDTA)
- Microsilica: 1 scoop (100 mg) 2-3 times per day in juice away from minerals
- BioSil: 10 drops twice daily
- Green clay: 1 tsp 1-2 times per day
- Biofilm breaking enzymes: Interfase. Work up to 5 caps 3 times per day away from food
- NAC, iodine and homeopathic Ipecac 12X

# Parasites

- Parasites are opportunistic and much more commonly causing symptoms than commonly believed

## Some clinical signs

- Elevated Eosinophils in cbc (only about 10%)
- Rashes on the chest or neck. Lung and chest symptoms!
- 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 outthere 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)

**Decreasing the pathogen count : the rizols** (base: ozonated castor oil treated with high voltage electricity)

**Rizol-Gamma**

70% Rizol-raw material (ozonated castor oil treated with high voltage electrolysis)

10 % clove oil

10 % oil of artemesia

10 % black walnut oil

**Rizol-Zeta**

69,3 % Rizol-raw material

10,0 % oil of artemesia annua

10,0 % clove oil

5,0 % black cumin oil

3,0 % moxa oil

1,8 % walnut oil

0,9 % oil of majoram

# Lyme disease

- Is rampant in the US and other parts of the world
- UK: there is no lab in the UK that makes the diagnosis in proven cases
- Should be suspected in every child with ASD and every adult with fatigue
- 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 acquired 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.

### **Typcial 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)

# 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 “Buhner” 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). For EBV: 2 caps bid for months
- **Lyme Nosode** (BioPure)
- Consider the ILADS protocols
- if tolerated: **Niacin** (no flush) 1000 mg 3 times per day

# 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



# The opportunistic 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

# 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 Saccharomyces 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 AmphoMoral. 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)

## ASD/Lyme related newer ideas

- Researched Nutritionals **NT Factor Energy** and other mitochondrial support
- **Enhansa** by [www.ourkidsasd.com](http://www.ourkidsasd.com) for inflammation (curcumin)
- African Frankincense (anti-inflammatory for brain and anti-microbial)
- 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 (large doses!)
- Sodium/potassium bicarb  
½ tsp in glass water, every  
3-4 hrs
- Trisalts
- MicroSilica and OSR
- Vit C in frequent doses
- Fluids
- Exercise
- Epsom salt or clay baths
- Have a BM (mag, C,  
prunes...)
- Fiber/clay
- Charcoal

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



## 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 The cocktail addresses most Lyme related issues, both in terms of treatment and in anticipation of die-off and detox reactions

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

Then add

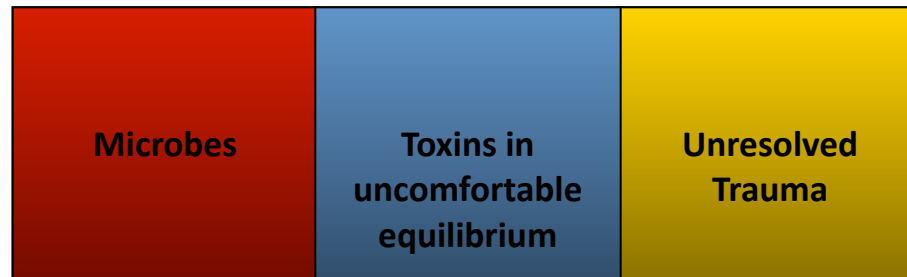
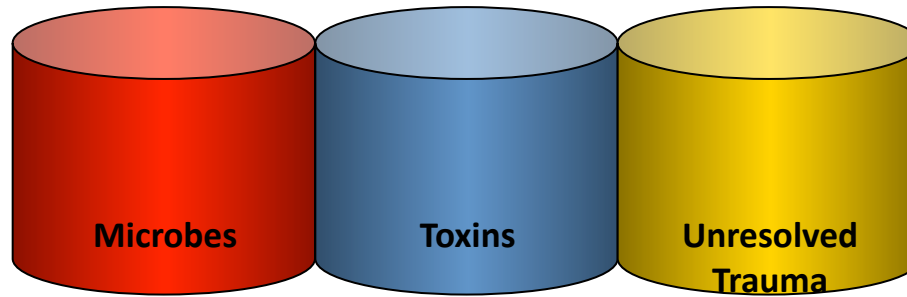
- D-galactose : 5 grams (increases ATP dramatically)
- 10 -20 drops 20 % Propolis Tincture (anti-viral)
- Quintessence (Lyme, Ehrlichia, Bartonella) =5 energetically enhanced anti-Lyme herbs (S.Buhner)
- 15 ml Rechtsregulat (enzyme mix to break biofilm)
- MicroSilica 100 mg
- Co-curcumin (Ayush Herbs): 1 tsp plus pippli 2 caps (pepper to increase absorption)
- Vit C powder 2000 mg
- Acai powder (anti-microbial, anti-oxidant) 1 tsp
- ½ glass grapefruit juice (important for artemisinin absorption)
- ½ glass water

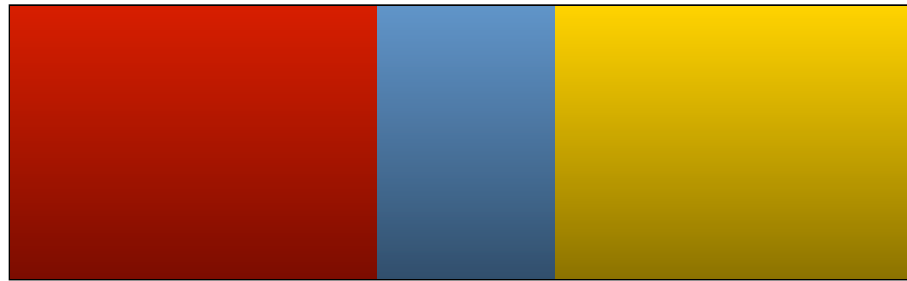
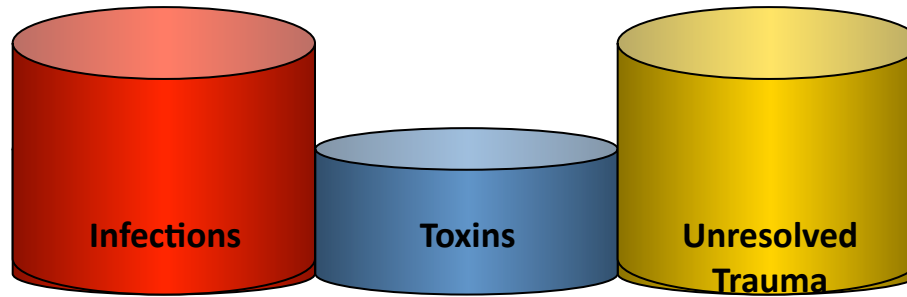
Optional:

- Mucuna powder 1 tsp (increases L-Dopa for language and motor development)
- GSE 10 drops - grapefruitseed extract ( anti-microbial, anti-biofilm)
- freeze dried garlic 4 capsules
- Energized Neem: 2 caps three times/day

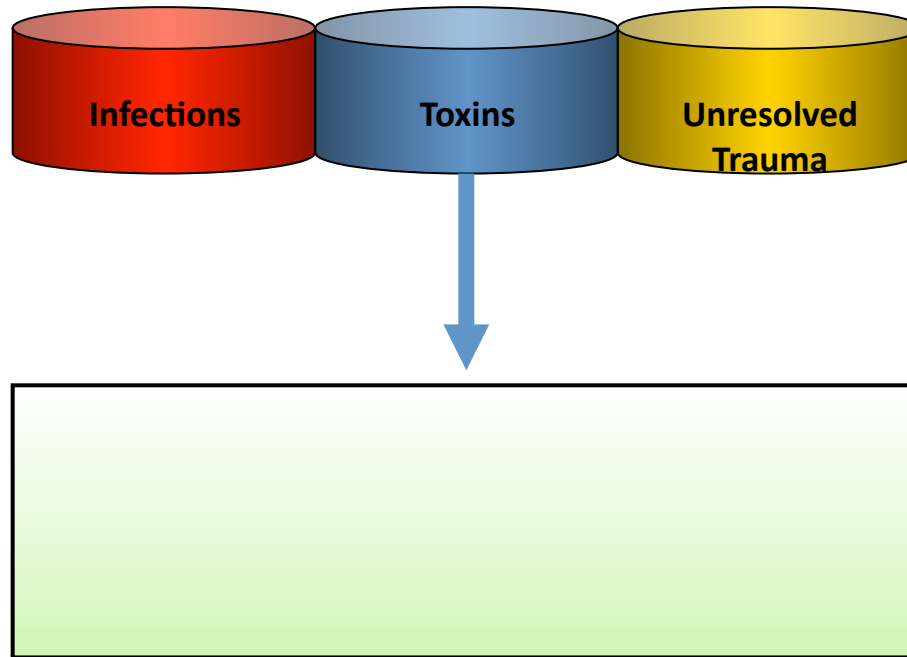
*Drink this amount twice daily, 5 days on, 2 days off. 3 weeks on, 1 week off.*

*Most products from BioPure (425 462 8414 - [BioPureUS.com](http://BioPureUS.com) and [BioPureEurope.com](http://BioPureEurope.com))*



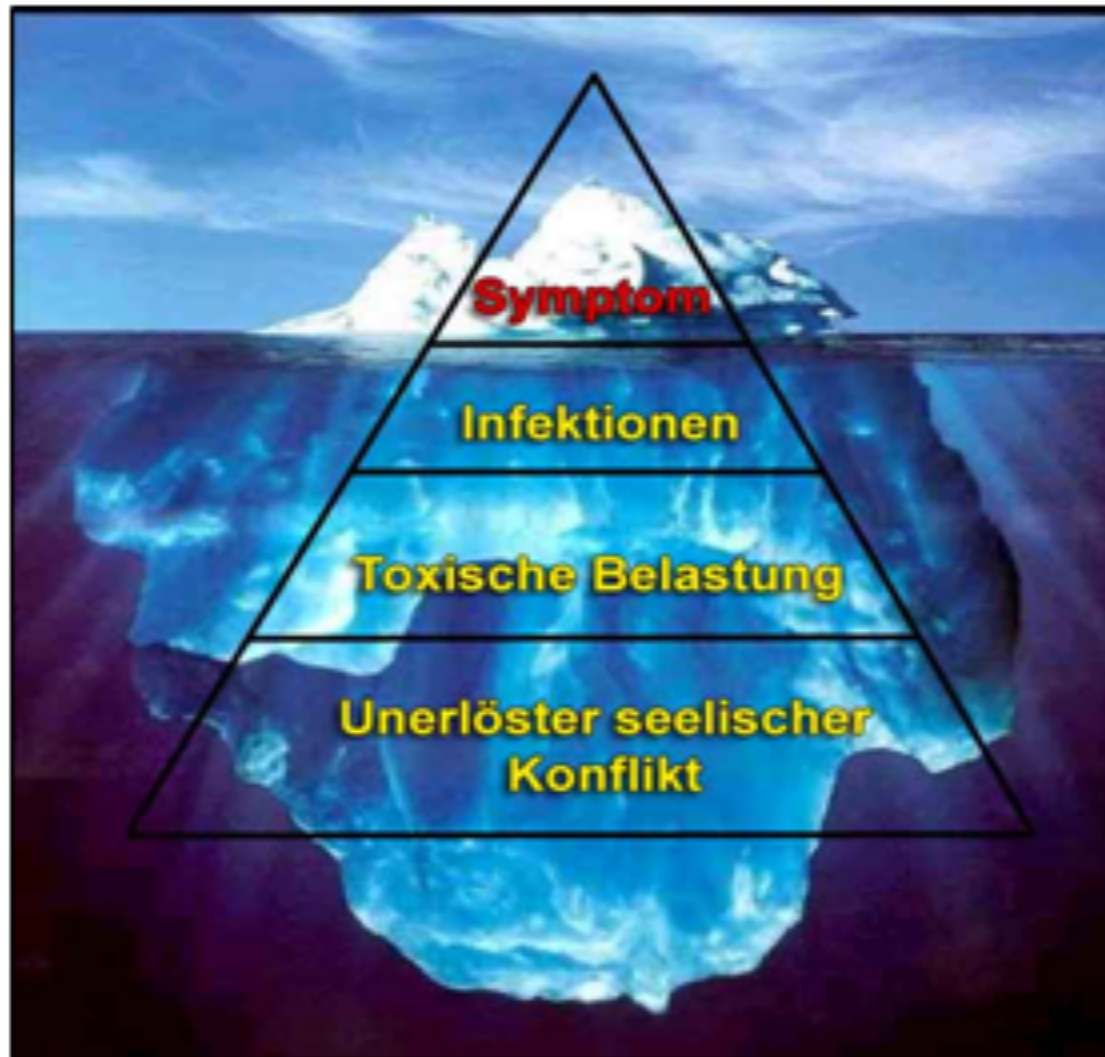


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this patients is entering into a “healing crisis” (if the detox treatment is not paused)  
The symptoms will predictably be both infection/immune response related  
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## Klinghardt axiom III: the iceberg principle





## REVIEW

# Mercury Toxicity and Systemic Elimination Agents

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

<sup>1</sup>Optimal Wellness Center, 1443 W. Schaumburg, Schaumburg, IL 60194, USA;

<sup>2</sup>American Academy of Neural Therapy, 2802 E. Madison#147, Seattle, WA 98112, USA

### 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.

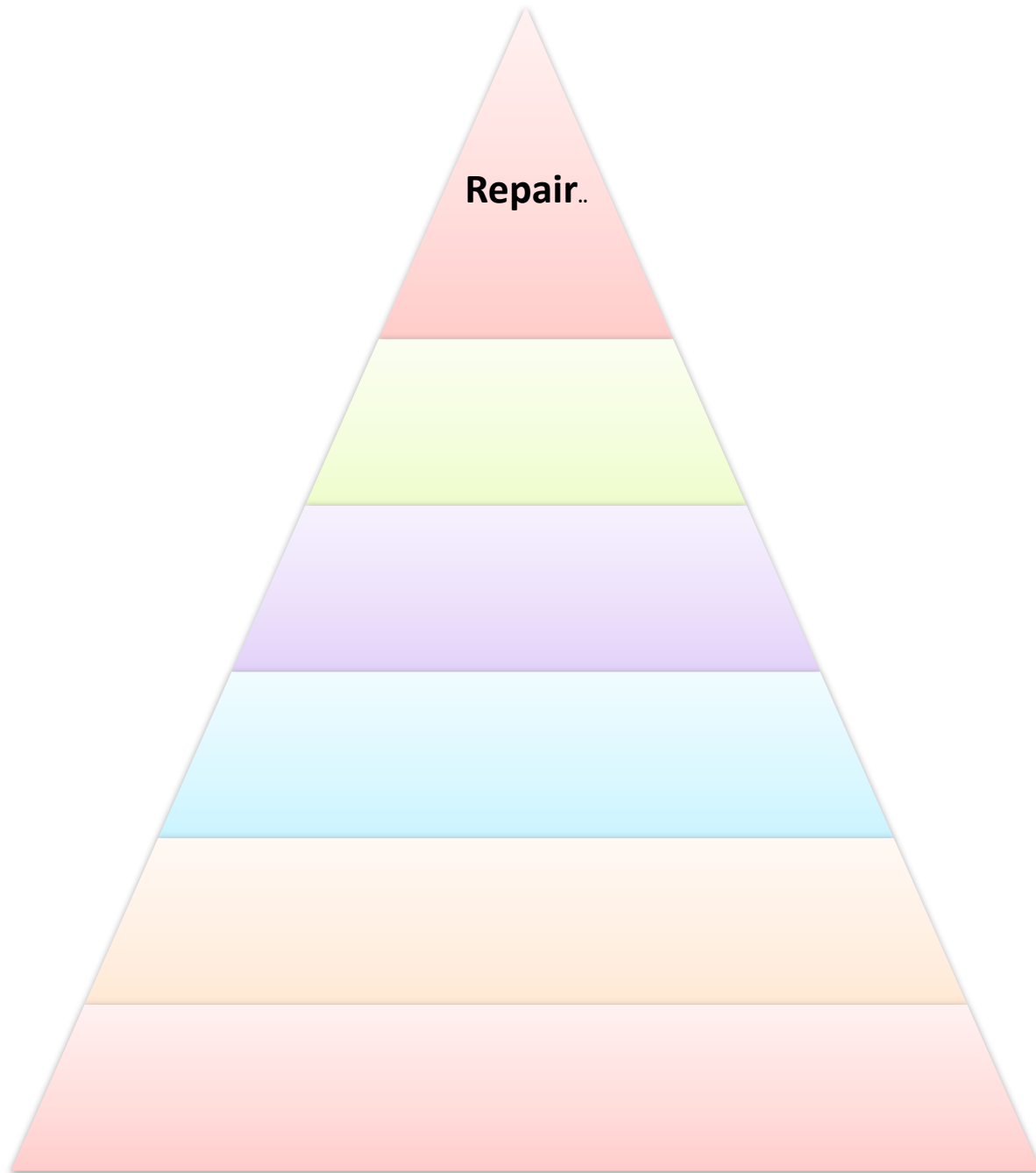
## MERCURY EXPOSURE AND TOXICITY IS A PREVALENT AND SIGNIFICANT PUBLIC HEALTH THREAT

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  $0.4 \text{ cm}^{-2}$  is estimated to release as much as  $15 \mu\text{g Hg day}^{-1}$  primarily through mechanical wear and evaporation [1, 9–11]. The average individual has eight amalgam fillings and could absorb up to  $120 \mu\text{g Hg day}^{-1}$  from their amalgams. These levels are consistent with reports of  $60 \mu\text{g Hg day}^{-1}$  collected in human feces [12]. By way of contrast, estimates of the daily absorption of all forms of mercury from fish and seafood is  $2.3 \mu\text{g}$  and from all other foods, air and water is  $0.3 \mu\text{g}$  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

- Stem cell therapy, live-cell therapy
- 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
- Have a vacation. Sing. Dance.
- 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/Test Kit

## 1. Core Products (BioPure)

- 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)
- “Core”: source of high amounts of zinc piccolinate, B6 and P5P, Mn, chromium, molybdenum, lithium to correct HPU
- D-Galactose : 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 (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 mold 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/Test Kit: specific supplements

- Anti-yeast probiotics:
  - [www.VSL3.com](http://www.VSL3.com) : most proven probiotic in ASD
  - Florastor Kids : yeast against yeast
- ATP: use BioPure Galactose 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/Babesia
- 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)
- 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/Test Kit: other often indicated products

- 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 (C.diff)
- 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

# Resources/Test Kit: 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) – Anthelmintic, 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