

# Detox for Life: part 9

Chemical Toxins



# Objectives

- Educate – Healthy Home, Healthy Diet and Life Style – learn and reinforce (we all need information and health coaches – if we are serious about success)
  - Organic and toxic chemical free living
- Detox for life - Focus on toxic fat soluble chemicals
- Assessment and Treatment Strategies for toxic chemicals
- Toxic Chemicals and Obesity



# Educate your self

My resources: Debbie McCabe, Drs. Schauss, Klinghardt, Williams, Clark, Wm. Rae

- Web sites:
  - [www.EWG.org](http://www.EWG.org) Environmental Working Group
  - [www.ehponline.org](http://www.ehponline.org) Environmental Health Perspectives
  - [www.radicalmedicine.com](http://www.radicalmedicine.com) – Dr. Louisa Williams, references for “clean” personal care products
  - Academy of Environmental medicine
- Books
  - “Achieving Victory over a Toxic World”; Dr. Mark Schauss. DB
  - “Radical Medicine”; Dr. Louisa Williams
  - “In Harm’s Way” Boston Physicians for Social Responsibility
  - “Fateful Harvest”, Duff Wilson
  - “Our Stolen Future”, Theo Colburn
  - “Evidence Of Harm”, David Kirby
  - “Deceit and Denial”, Gerald Markowitz and David Rosner
  - “Less Toxic Alternatives”, Carol Gorman
  - “Silent Snow”
  - “Cure for all diseases”, Hulda Clark



# Detox Principles

**Principle # 2: The most important rule in detox is:  
Remove the source of toxicity- this is a process of  
education and action:**

Understand the basic environmental law for all living things -  
what is on the **outside of your body** – **eventually will get  
on the inside.**

- Don't put anything on your skin that you wouldn't put in your mouth
- Solvents, personal care products, dry cleaning, drugs, herbs, foods, supplements
- Animals and plants absorb, breath and incorporate into their tissues the pollution of the air...



# Detox for Life

For detoxification and functional rehabilitation to be effective you must get rid of source

- **Your diet and life styles:** to understand the issues and make positive steps to improve all healthy aspects of your life. Diet and Life Style coaching for health is the most critical first step. You can't get to where you need to go unless you get help, guidance and encouragement to overcome the hurdles along the way.
- **Your home:** can be a source of health and healing or a source of toxicity. Are chemicals, noxious energies, mold and other debilitating environmental poisons can stealthfully making you toxic?
- **Your mouth:** eliminate toxic metals

# Effects of petrochemicals and chemical toxins on health

- Humans exposed to heavy metals for 3000+ years
  - Mercury, Lead, and Arsenic poisoning known in ancient times
  - Smelting plants forced to build smoke stacks and eventually move from cities due to the number of people getting sick, large number of deformed babies



# Historical Perspective

Petrochemicals and related chemical toxins – human exposure of 150 years, most less than 40 years

Effects are well documented, little doubt about the broad range of health effects

Largest documented effects are on unborn and babies and future generations, life on earth

- Very big un-addressed toxic problem



# Future Generations

- For the first time in human history males are becoming more infertile than women
- The number of males being born is declining at an alarming rate
- Males being born are being feminized by a wide range of chemicals
  - Amphibians, reptiles, fish and mammals are seeing this change worldwide
- Must reduce, remove and reject the toxins – our species, and life is in trouble
  - Survival of the fittest, you ability to detox?





# Toxicity in Humans

- Due to numerous studies – our blood and tissues **contain and retain large numbers of toxins, especially petrochemical toxins**
- Testing blood or fat tissue levels for toxins is not necessary – every one has it
- Testing the **excretory capacity** for these toxins is the most important
- **Children** are the second most vulnerable group because of their poor detox pathways



# The Insult to the Unborn

Whatever is on the outside – will eventually get to the inside of our bodies: air, food, water and through the skin (whatever you don't want to eat or drink – don't put on your skin)

- **The Unborn – most sensitive** to toxic chemicals
- Study: Environmental Working Group entitled “Body Burden II” in which the umbilical chord of the average baby contained 200 chemicals at birth – [www.ewg.org](http://www.ewg.org)
  - Would have found more but study only provided for testing 200 chemicals
- Healthy foundation for a long life begins at conception
- If the parents are toxic parents, the child has little chance of living a healthy life.



# Nursing Mothers

- Generally accepted that mother's milk is the best nourishment for developing babies
  - Immunoprotective components – lactoferrin, lysozyme, oligosaccharides...
  - Numerous hormones, peptides amino acids and complement factors
- Mothers' milk must **mobilize adipose tissue, which is where these fat soluble toxins are stored**
- Research: nursing baby receives about **50 times the daily intake of PCB's of adults**



# Summary: Treatment strategy

- There is **constant education** about mothers not smoking and drinking alcohol if pregnant, but nothing is said about the far greater danger of petrochemical solvents, toxic chemicals (and heavy metals)
- **Test:** to determine if you are an excreter
- Educate and **avoid** – remove from your environment
  - Make changes - radically or gradually
- **Detox for life:** diet and lifestyles – organic, healthy home, personal care products... more reviewed later



# Testing Protocol

- US Biotek's "Environmental Pollutants Biomarker"
- First morning urine test, looks for the metabolites of the following toxins:
  - Xylene, toluene, Benzene, Styrene, Trimentylbenzene, Parabens and Phthalates
- Good test for all, especially for mothers-to-be



# Cast of Characters

- Petrochemical solvents
  - Alcohols: butanol, ethanol, isopropanol, methanol
    - Required to be listed in product label
    - Toxicity first noticed in 1920
    - Toxicity of alcohol increases with length of carbon chain (eg. Propyl 2x more toxic than ethyl)
    - Primary alcohols more acutely toxic but the isomers are more chronically toxic (isopropyl, isobutyl, iso amyl)
    - Breakdown products: methyl into formaldehyde; isopropyl into acetone
  - Aromatic: (benzene derived) benzene, toluene, xylene, styrene
    - Not required to be on label
- Formaldehyde, PCP, dioxin, pesticides, herbicides
  - 10% of the barrels of crude oil goes into cosmetics, medicines carpets, paints, rubber and plastic products



# Issues

- Acute exposure vs. **chronic exposure**
  - Slow dosing to threshold, no exposure history
- Toxic load – synergistic with heavy metals and biotoxins;
  - Competes with detox capacity, adds to overwhelm
    - Fat soluble: liver-bile
- Stored in fats and membranes
  - Weakens or dissolves the membrane through continuous exposure
  - Cellular barrier less effective – invasion of cell of toxic metals, and infectious agents (Lyme, virus, Mycoplasma)
- Allergy/ hypersensitivity – facilitates storage; if addressed, more efficient detox



# Issues

- Order of detoxification (usual) – matrix then cells
  1. Toxic metals – water soluble (salts of mercury)
    - Re-establish the Autonomic Nervous System function, tissue blood flow
  2. Toxic chemicals and organic mercury (fat soluble)
    - Re-establish membrane integrity
  3. Chronic infections: parasites, virus, bacteria, Mycoplasma, molds and fungi
    - Re-establish immune system

Psycho-emotional issues





# Phthalates

- Numerous studies on the human and neonatal (fetal development) effects of phthalates
- Disorders such as feminization of males (shrinking ano-genital distance), ectopic dermatitis, insulin resistance, asthma and others – many references
- Toxic found in air fresheners, hair and beauty products, perfumes, soft plastics, new cars (American built predominantly), and many other hidden sources
- Excellent resource for household sources of these toxins is [www.ewg.org](http://www.ewg.org) and look at “Skin Deep” data base



# Petrochemical: Xylene

- Xylene is one of the most common petrochemicals in the environment
- 600,000 tons are released into the atmosphere annually in the US alone
- Leading cause of smog
- Known to cause birth defects, increases the risk of miscarriage and cleft palate
- Known neurotoxin
- Arsenic and alcohol will reduce the ability of an individual to excrete xylene



# Petrochemical: Toluene

- Toluene is the petrochemical additive used to replace lead as the anti-knocking agent in gas; it is very common
- Nail polish, many adhesives and cosmetics
- A neurotoxin that effects the hypothalamus – the functional nervous system (ANS)
  - Direct effect on Dys-regulation



# Petrochemical: Styrene

- Styrene found in styrofoam; has been found in the blood of every person tested in the US since 1970
- 1998 estimated that 56 million pounds released into the atmosphere in US alone – probably much more
- Carcinogen, neurotoxin and endocrine disruptor
- In US BIOTEK EP test – if low or no excretion of metabolites of styrene, phenylglyoxylate and mandelate , then typically the most symptomatic
  - Consider all have the toxic burden, and if not in the test – you are retaining not excreting
  - Guide to your excretion program



# Petrochemical: Parabens

- Parabens considered GRAS (Generally Recognized as Safe) by FDA, found in thousands of products including nutritional products, underarm deodorants
- Found in high amounts in breast tissue of women with breast cancer (low levels in women with no breast cancer)
- No causative relationship but cause for concern; the likely culprit is the affinity of parabens for a number of estrogen receptor sites.



# Petrochemical: Bisphenol A

- Bisphenol A is an estrogen like chemical –implicated in wide range of health issues, long list for this toxin
- Increases fat – induced fibroblast differentiation into adipose tissue
- Increases blood sugar – disrupts glucagon secretion, and glucose transportation in fat cells
- Damages sperm cells
- Implicated in multiple birth defects including Down's syndrome
- Implicated in a number of cancers especially in women
- This chemical generates \$100M dollars per hour



# Petrochemical: Bisphenol A

- used to harden plastics
- Developed in the 1930's as an estrogen replacement, then secondarily found to harden plastics
- Dental “white” fillings
  - Richardson Report: Canadian researcher, 10+ years ago found that Dental exposure is 1/1000 less than average nutritional exposure
  - IAOMT: post light cured – no longer has the estrogen link
  - Problem is with sealants



# Toxic chemicals

- Flame retardants: PPVE, PBDE and antimony
  - In plastics, fertilizers, farmed fish, house dust
  - In airplane: PPVE used as flame retardants
    - 8 hours in plane and the PPVE's remain for 2 years
  - PBDE rapidly increasing in breast milk – samples almost 100% positive
  - Average breast milk PBDE level approaching thyroid toxic dose
- PCB's
  - Incinerator waste, electric industry
  - Contaminate in food (animal and fish products)
  - Breast fed infants receive 34-53 times ATSDR safe exposure limit
  - Banned in 1978 but very persistent
  - 100% of breast milk samples tested positive





# Are We Protected?

- In USA – must prove that a chemical is toxic
- In Europe – must prove that a chemical is not toxic

## Going green?

- Recycled plastics – currently using cleaning solution, which increases toxicity
- Toxic plastics + toxic addition



# Treatment strategies

- Primary focus:
  - Reduce or eliminate the exposures
  - Become a good excreter
  - Detox for life
- Identify the toxins
  - US Biotek Environmental Pollutants Biomarker test
  - Full interpretation and detox protocols
  - Assess the excretion potential of patient
  - Identify the toxin, so to identify the source – to avoid



# Toxic chemicals

- Toxic chemicals injure (dissolve) the cellular membranes making them less of a barrier to keep heavy metals and chronic infections out. Therefore toxic chemicals and heavy metals are synergistic to encouraging chronic infections to root. Toxic chemicals injure all membranes, extra and intra-cellular; it is the cellular membranes that perform all functions – therefore the functional capacity of the contaminated, cell, tissue, organ or entire bodily performance is reduced.
  - Energy functions – Kreb's cycle
  - Detox functions – liver, gut and all organs
  - Immune and neurological functions
  - Protein, enzyme, and all cellular and extracellular regulators...
- Diseases: obesity, cancer – especially breast, prostate, ovary, and uterine; neurological diseases, chronic fatigue, multiple chemical sensitivities (all allergy diseases)...



# Toxic chemicals

- Toxic chemicals interfere with glutathione production
  - our bodies #1 inherent detox tool
- Supplements:
  - Toxic chemicals as solvents
  - Responsible for the bowel biofilm
    - Mg Sterate –
      - Paralyze the NK cells in gut
    - Titanium dioxide –
      - Autoimmune

# Detox strategies – similar to heavy metals: Biochemical therapy

Biochemical basics for toxic chemicals:

- #1 Avoid re-contamination
  - Toxic chemicals and trans fats in foods
- Biochemical detox and rehabilitation of the fatty membranes:
  - Sulfur, membrane re-habilitation – good fats, anti-oxidants, minerals, hydration (with electrolytes), protein
  - La cocktail: Chlorella, cilantro, garlic, and fish oils
    - Chlorella – mobilization and binding in bowel and connective tissues; binds heavy metals and toxic chemicals
  - Repair methylation and glutathione pathways
    - B-12, folinate, B-6, SAMe



# Detox strategies

- Treat the hormonal and metabolic dys-functions:
  - Adrenal, thyroid, blood sugar, sex hormones
    - estrogen dominance, lack of testosterone,
    - DHEA, melatonin, growth hormone
    - Herbal, glandular, natural hormone replacement, protein, foods
- Systemic enzyme therapy – to reduce the coagulopathy and sledge
  - Rechts Regulat
  - Enzymes away from food



# Detox strategies

- Detox through the Bowel – Liver
  - Treatment for healthy bowel
    - Probiotics, garlic, digestive enzymes and others for healthy gut
    - If no healthy bacteria, no short chained fatty acids, which feed the gut cells and liver cells for detox:
      - Then when restoring the bowel, eat and supplement with butyrate - Ca/ Mg Butyrate, eat plenty of butter
    - Benzene toxicity, pathogenic bacteria can increase the carcinogenicity of the petrochemical solvent by converting phenylalanine and tyrosine into phenolic compounds
  - Gall bladder flush:
    - Remove the “stones” and sludge from the liver and gall, bladder



# Detox strategies

Detox through the skin – sauna and baths: Ongoing

- Heat, hydration and the proper electrolytes – pumps the toxins out through the system
- See sauna protocol: B-3, oils, Selenium, drainage (especially lymph), regulation homeopathics – (toxic chemical remedies)
- Steam Cabinet (with ozone)
  - Very effective skin detox with opening the pores (moist heat); eliminates the re-breathing the volatile fumes; provides oxygen and oxidative therapy – especially good if Lyme and other chronic infections are present; toxins in the ozone become oxidized, turn color and become visual in the towel – good visual for detox and monitor for when detox is producing diminishing returns
- Baths:
  - Vinegar (2 cups) and sea salts (1 cup); Epsom salt ( $\frac{1}{2}$  -1 cup); ginger (1-3 tbs) and cayenne pepper (1-2 tsp)
  - Toxic chemical clay baths – Bentonite clay and specific herbs
  - Liquid needle company – specific body soaks
- Dr. Karack's Oil therapy
  - Hold oil in mouth and after 10 minutes spit – good for detoxing chemicals and other toxins
  - Mouth mucosa is thin and close to the circulating blood; blood circulates through the mouth mucosa every couple minutes
  - By placing oils in the mouth, a fat soluble solvent can facilitate in diffusing the toxins from the blood





# Treatment Strategies: universal

## Biochemical detox:

- Glycine use often/ daily
  - ½ to 3 grams per day (cheap, 100g = \$7, and safe)
  - Main conjugate of many petrochemicals (Phase II Liver)
- Enhance Glutathione
  - Chlorella, NAC, Vitamin C, Whey protein, DMG (di-methyl-glycine), B-12, Alpha Lipoic Acid
  - MaxGSL – vitamin C, ALA, glutamine, NAC, blend of cordyceps, N-acetyl D Glucosamine, Quercetin, Milk thistle
  - Coffee enema
  - Glutathione administration: IV, IM, skin – liposomal, sub-lingual drops, inhaled

# Treatment Strategies: REGULATION THERAPY

- Drainage remedies – to support the weakest detox organ and support the organ which is handling the greater load
  - lymph - most often default in toxic chemicals
  - Liver – organ which removes the most toxic chemical because of all are fat soluble
  - Kidney – water soluble, support is removing toxic metals through the kidney (EDTA, DMSA, DMPS)
- Allergy Elimination therapy
  - Neurological hyper-reaction is used by the ANS to facilitate the storage of toxic chemicals
  - To enhance the detox and minimize the adverse reactions to detox, AET to the toxic chemicals is helpful



# Regulation therapy

Homeopathic and herbal remedies for chemical detox – very important

- Cellular release of toxic chemicals: homeopathics “open” the cellular membranes to the frequency of the toxic substance
  - Since the storage of the toxic chemicals is in the membranes and intracellular fats, homeopathics are appropriately used in all Phases of Detox
- Cellular restoration of energy and detox pathways
  - Chemical detox – DesBio, Hoban Detoxisodes: organ detox, organ support and chemical detox: 21<sup>st</sup> Century, APEX
  - Ubichinon – stimulate defense mechanism against toxins and reactive the blocked enzyme system.
  - Co-enzyme A compositium - Enzymes of the citric acid cycle – increase ATP and aerobic metabolism; Removes the cellular biochemical blocks of the cells after toxins; Increases the activity and amount of peroxisomes – which detox the intracellular spaces.
  - Lymphomyostat – lymph and support of many detox functions
  - Tonsilla - lymph and immune,
  - Viscum – cellular phase detox, radiotherapy and cancer



# Regulation therapy

- Custom made homeopathics: wave front
  - Homeopathics (reverse) to specific toxins from AET
  - Homeopathics from sweat
  - Specific chemical through direct resonance and Steuben-Pharma-Nosode box
    - Low dose - (D-6) higher concentration, higher dose (D30) lower concentration
- Drug-uptake enhancement
  - MFT tapping points
  - Lasers to enhance the blood flow and cellular dynamics: health lite, MFT
  - Micro current: KMT



# Global obesity explosion

- Link between Obesity and Environmental Toxins: more and more evidence
  - Study undertaken – 100,000 kids, 21 year prospective on role of environment and toxicity on obesity; main chemicals are Bisphenol A and Phthalates
  - Exxon Mobile high percentage of employees are clinically obese including their kids study – effects on practice of dipping their hands in xylene (petrochemical solvent and toxic chemical)
    - Even after many company directed programs
- “no matter what I do or eat, I cannot seem to lose weight”
  - Problem is many people are eating under 1500 cal/day and still obese
  - Endocrine or toxin problem or both?



# Toxic Chemicals and Obesity

- Toxic chemicals block the Krebs's Cycle, therefore block the ability to efficiently create energy
  - To lose weight, one must create efficient metabolism – i.e. mitochondrial production of aerobic energy (oxygen utilizing through the Krebs's cycle)
  - Maintains the normal metabolic rate and temperature, or caloric utilization at the basic metabolic level
  - Build up of organic acids, change the bodily milieu to acidosis
- When toxins are overwhelming to the detox systems, they are stored in the fat; fat is created to maintain the toxic storage
  - When fat needs to be mobilized, the toxins are released
  - Breast milk production; losing fat – must detox the toxins



# Toxic Chemicals and Obesity

“Environment and Obesity in the National Children’s Study”

- Exposure during pregnancy to certain endocrine disruptors can increase the risk of obesity in childhood
- Correlation between early life exposure to toxins and the progression of disease in adulthood
- Disruption of the hypothalamic-pituitary axis by toxins



# Toxic Chemicals and Obesity

- Endocrine disruption of many of the petrochemical solvents
  - effect on mitochondrial energy
  - Resting metabolism by reducing the efficiency of the citric acid cycle
  - Resting metabolism accounts for 50-70% of daily energy production





# Obesity

- Detox toxic metals and chemicals
- Diet and life-styles
- Metabolic regulation
- Calorie restriction, turn off the starvation genes
- Fat loss without lean body reduction
- Mitochondria enhancement
  - Exercise