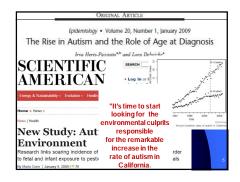


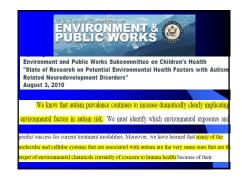


## Autism What is Going On??? Rare to Pandemic

- 1943- psych Leo Kanner first report
- 2011- 68 yrs & > 12,000 peer-reviewed papers later
- No idea of cause, prevention, or cur
- Why? Initial focus three domains-social, communication, behavior, conditioned three generations of clinicians perceptions and awareness.
- No clear biological markers for autism, no medical criteria for autism.
- Science set back 1950-1970's Autism due to BAD PARENTING

# Opinions about obviousness are to a certain extent a function of time. Albert Einstein The earth is flat. Children should be seen and not heard Heavier than air flying machines are impossible. "Sensible and responsible women, do not want to vote "Grover Cleveland 1905 22° & 24° President US Autism is genetic.







George Orwell Autism is a whole body medical disorder Decrease brain blood flow Mitochondrial disorders Brainstem abnormalities • Glutathione decrease Seizure disorder Toxicant exposure Calcium Dysregulation Melatonin decrease Gastrointestinal abn Oxytocin decrease Fatty acid deficiencies Serotonin abn Toxic metals burden Family hx autoimmune

Autonomic nervous abr

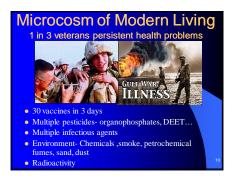
Multiple Immune abn

During a time of extreme deceit, simply

telling the truth is revolutionary.

### Autism and Environmental Connections Pesticides, flea/tick sprays Power plants, incinerators air pollution, landfills March birth, parental psych hx, shorter birth interval, prematurity, first born • HBP, DM, Obesity-mon Toxic metals, pollutants Infection, meds in pregnar Increased rain fall • Fetal distress, low apgar Northern latitude In vitro fertilization Gut Ecology Unplanned C-section Vaccinations Living near freeway ncreased cable usage Older parents

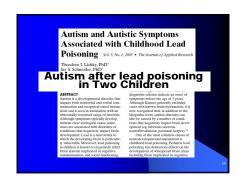
Higher Socioeconom





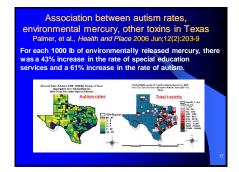


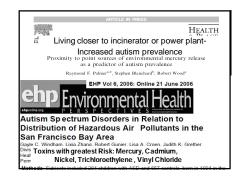




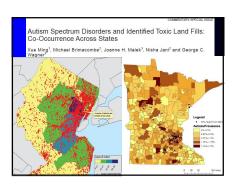






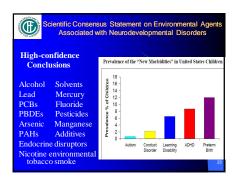




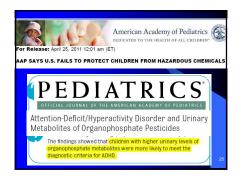


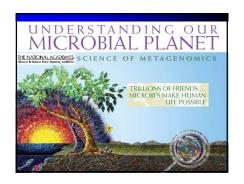






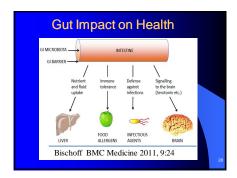








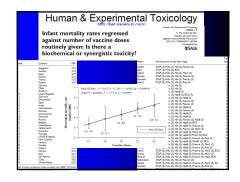
**ns5** norm, 10/30/2007















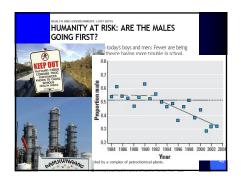


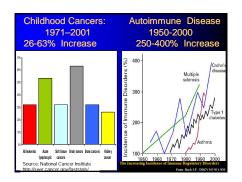














### Guidance

These kids are trying so hard to show us how to live in acleaner world. These kids are here for a reason: to teach us to eat better, clean up the air, get rid of toxins because they can't survive.

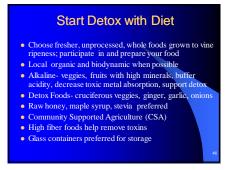
Jenny McCarthy

### **Our Miraculous Bodies Detox By:**

- Antioxidants: neutralize damaging free radicals
- Metalothionein: natural chelator, in health abundant; nutritional deficits or distress depleted
- Liver: 2 step process detoxification. transforms toxins to facilitate elimination
- Bile: eliminates fat-soluble toxins, needs fiber
- Sweating: eliminates heavy metal some toxins
- Low temperature saunas: 105-110°F
- Hair, fingernails, skin: shed toxins

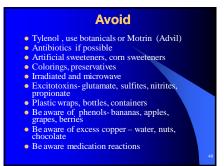
### **Detoxification Limitation in Autism**

- Impaired Methylation
- Impaired sulfur/glutathione chemistry
- Increased oxidative stress
- Decreased ability excrete heavy metal
- Decreased ability detoxify pesticides, pollutants



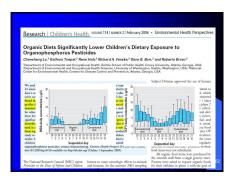


Most Alkaline	More Alkaline	Low Alkaline	Lowest Attaline	Food Calegory		hemical B	More Aeld	Most Anti
Saking Soda	Sphoes-Connerson Valerian Liconitie -Blank Cohash Againe	résits (mind) Arnins, Bergamol, Echinacea Chrysanthemun, Ephelin, Furerfirs, Guideneaul, Lamingrass Alice Vera Nedle Angelice	Rinda Willow Bark Bilgonry Elm Artemesia Annua	Spinoblarb	Cury	Vandis Sievia	Autreg	PublingJaneJuli
Mineral Water	-Kambucha	-Green or Mu Tea	Ginger Tea	Beverage	Kone Coffee	Altechol	Coffee	Swe, Sode
			ducant	December		Stack Yea	Sandaria	YeastHopsMait
	Molasses Sor Sauce	Rice Syrup Apple Cider Vinesar	-Sucanat -Checkochi Vinegar	Vineser	HoneyMapiettyrup Flore Vinesar		Sacoberan Red Wine Vinesar	SugarCocca WhiteAcets Vine
Cheebrahi Plum			-Maps, Et as Green	Therapeutic		Balsanic Vinegar Anthoderatives	Psychologica	Antibiotics
			(lutter)			-	Protein, Collage Cheese	
					Yeart	Appl Cheese		
					Goot/Sheep Choose			
		-Ouel Fgg	-Dack Forg	F-90				
						Land-Wollier	Pries Vend	Basel
				Game	riberison	BoartEN-Game West	Bear	
				Feet/Shell Flat	Flah WM Duck	Mollusia Shell Fait (Mhole)	-Museel/Squid Children	Shell Fish Process -Coboter Phospart
			Out		- Trimete	Goose/Turkey Businessal	Make	Pleasant Barby
			'Grain Coffee'	Orain	Miles		Barley Groat	Processed Floor
			-Ouine	Careal	Kanha	-South Tuff Karred	Com	
	Poppy food	Prinnsee CR	Avocado Oil	Nut	Pumpkin Seed Oil	Almond Oil	Platachia Seed	Customased Old My
Pumpkin Soud	Castew	Seearee Seed	Seeds (most)	Seed Sprout	Grape Seed CEI	Sesame Oil	Chestrat Oil	Hapshout Windows
	Chestrut Pesser	Cod Liver Oil Alreand	Olive Macadania Oil	Oil	Surflower Oil Pine NVS	Sufficeer Oil Tassico	Decar	Grand Not
		darout	Lineagy Flax OI		Canola Oil	riselan or Tota	Palm Kernel Oil	Fried Food
and i	Kohirahi	Potato/Dell Peoper	Donasi Sacret		fining Oil	South Dea	Creen Free	Scothese.
depresed				Western	Kidney Dean			
					String/Nax Dean Zuochini			
Culton/Taro Floot	Endive/Arogula	-Gulally/Dissong	Turnip Greena	Pulse		Line or Hung Bean	Carrot	
-Bea Vegetables (other)	Musterd Greens	Eggptant	Squark	Floot	Chultray	Chard	ChickPea/Garbargo	
Dandelice Greens	Jarusalen Artichoke	Pumpkin	Artichoke		PENDARD			
Gundock*Lotus Root Dweet Potato/Yam	Ginger Root Broccoli	Collard Greena	Jicama					
THE POSSESSES	Conceptual	Lemma	Orange	City Carl	Connect	_		
Sections.	Cashinase	Deer	Acricos	CROSS FROM	Contract	Phon	Cramberry	
Decalement	Borestew	Augusto	Danana		(Parket Cost	Poste	Pomegranate	
Rasoberry	Chya	Apple	Dissberry		Dry Fruit	Tomato	· consequences	
Watermelon	Otive	Blackberry	Pineapple Julice	Fruit	Fig			
Tangerine	Conterry							
Pineapple	Loganberry	Peech	Grape		-Cherimoya			
					Date Date			



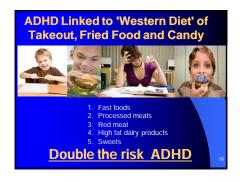


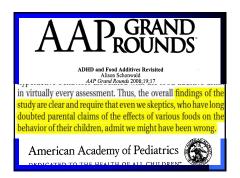














### **Pure Water**

- Pure water is essential; dehydration hinders the body's ability to eliminate waste and keep resilient; pesticide levels, heavy metals, hormone residues, volatile organic compounds fluoride more important than bacteria
  - Clean Air
- Use fresh flowers, natural oils
- Avoid air fresheners, sprays, perfumes, cleaning agents, new paints, new carpets, flea treatments, insecticides, furniture chemicals
- Check for CO output in gas appliances

### **Toxic Metal Sources** Lead: toys, vinyl, food, lead paint before 70's

- Mercury- amalgams, vaccines, breathing- power plants
- Aluminum- cookware, deodorants, baking soda, cans, foil
- Fluoride- tootpaste, water, treatments

### **Plastics- Avoid**

- No phthalates, bisphenols, pvc wraps, microwaving 1,2,4,5 best choices,1&5 can contain phthalates
- Glass always preferable
- on safer plastics

### **Personal Care Products**

- Nearly all deodorants contain aluminum, which is readily absorbed
- Perfumes and cosmetics can contain multiple potential toxins.

  Cotton clothes
- Be aware fungicides, flamer retardants bedding, mattress

### Clothing and Laundry

- Detergents and fabric conditioners are common allergens, contain multiple toxins.
   Choose natural products.

### **House and Garden**

- Cleaning products- natural, biodegadeable
  Minimal perfumes, chemicals
- Flame retardants in clothing, fungicides in bedding
- Persistent organic pollutants in carpets
- Herbicide & pesticides free
- Do not allow children or pets on treated lawns for at least 3 weeks after spraying
- Arsenic in treated wood
- Chlorine from pools

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- Glass always preferable
- www.healthobservatory.org/library.cfm?refid=77083

### What to do: **Medical Interventions**

- Micronutrients
- Copper/Zinc
- GI Support
- Antioxidants
- Sulfur
- Methylation Support
- Medications
- Chelation

### Micronutrients

- Adequate amounts essential to support the body's complex metabolic pathways
- Deficiency in micronutrients predisposes to toxicity
- Deficiency in essential minerals promotes absorption of toxic ones.
- Sufficiency of buffering minerals, primarily magnesium & zinc, facilitate toxic metal excretion
- First morning urine pH in the 6.5-7.5 range suggesting adequate cellular buffering capacity

### Micronutrients

- Multivitamin: documented to improve sleep and GI problems compared to placebo
- Vitamin C: most important water soluble antioxidant, double-blinded placebo study, reduce stereotypical behavior (stimming) in individuals with autism
- Methyl B12 &folinic acid: 2 studies have re improvements in glutathione, oxidative stress

### Micronutrients

- Magnesium &B-6: improve autistic behaviors-social interaction, communication, stereotypical behaviors; improved hyperactivity ADHD
- Zinc: Documented low in autism; deficiency correlated w inattention in ADHD; 400 children treated w zinc improved ADHD symptoms compared to a placebo.

### Micronutrients

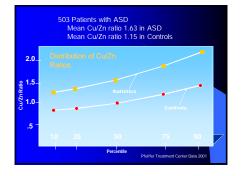
- Carnitine: deficiency in some children with autism; can impair mitochondrial function; helpful in Rett syndrome, improved sleep efficiency, energy level, communication; improved attention decreased hyperactivity and aggression in children with ADHD
- Carnosine: strong antioxidant, decreased seizures; improved speech and social behavior compared to a placebo in autism

### Micronutrients

 Omega-3 fatty acids: deficiency increases hyperactivity, conduct problems, anxiety, and temper tantrums in typical children. Infants w/o omega-3 fatty acids in breast milk or infant formula are 2-4 times more likely to develop autism. Several studies show improvements in children with developmental coordination disorder, developmental coord ADHD, and autism.

### Micronutrients

- Adequate amounts essential to support the body's complex metabolic pathways
- Deficiency in micronutrients predisposes to
- Deficiency in essential minerals promotes absorption of toxic ones.
   Sufficiency of buffering minerals, primarily magnesium & zinc, facilitate toxic metal
- First morning urine pH in the 6.5-7.5 range suggesting adequate cellular buffering capacity



### High Copper/Zinc Ratios in ASD

- Neurotransmitter imbalances (high platelet serotonin, low dopamine, high norepinephrine)
   Abnormal EEG and seizure activity
- Hyperactivity
- Poor attention span
- Explosive TemperPoor Short Term Memory
- Speech DelayYeast Overgrowth

### Treatment of High Cu/Zinc Ratios

- Treat Zinc deficiency
- Adequate Selenium, molybdenum
- Support Glutathione B6/Magnesium Optimize Vitamin C dose
- Avoid Sources of Copper

  Tap water (Cu pipes)
- Swimming pools and hot tubs (Cu algaecide)
- Chocolate, Carob, Soy, Shellfish, Liver
   Avoid Red/ Yellow dyes and MSG (deplete Zn)
- Consider Carnosine supplementation

### **Gastrointestinal Support**

- Treat Constipation/diarrhea
- Digestive enzymes
- Pre and probiotics
- Specific treatments guided by symptoms and lab
- Antifungals, antibacterials, antiparasite
- Specific Carbohydrate, body ecology diet elimination diet
- Nutrient support, anti-inflamatories
- GI referral

### **Antioxidants**

- Vitamins A,C, and E, carotenoids, selenium
- High dose C to bowel tolerance, potential benefits: toxic metal & pollutant elimination improved immune function increased bile flow increased carnitine production adrenal support improved intestinal ecology stabilization of tetrahydropiopterin support neurotransmitter production increases glutathione levels keeps folate in active form increases iron absorption safe and effective laxative at high dose

### Dosages

- Vitamin C: 100 mg/kg/day, initial
- Acetyl-L-carnitine: 50-100 mg/kg/day
- L-carnosine: 200-400 mg twice a day
- Pycnogenol: 1-2 mg/kg/day
- Methy B12injections: 75 mcg/ kg 2-3/wk
- Folinic/folic acid: 400 mcg twice a day
- Ω3 fatty acids DHA/EPA 2 gram or higher
- Zinc: 20-40 mg, more depending on lab • Melatonin: 1-3 mg, 30 minutes before bedtime
- Magnesium: 6 mg/kg/day
- Vitamin B-6: 0.6 mg/kg/day

### Sulfur

- Essential for detoxification
- Liver's two detoxification pathway require
- Taurine, Methionine, Curcumin
- Food source are ginger, onions, garlic, eggs, broccoli, cauliflower, brussels sprouts not high on kids favorite foods, but worth a try.
- Epsom Salt Baths-1c with ½ c baking soda
- Options for supplementation by pills, creams and suppository of N-acetylcysteine glutathione.

### **Maintain Methylation Pathways**

- Critical for detoxification
- Impaired by toxicants
- Supportive nutrients:
   B-12-hydroxy, methyl, adenosyl
  - TMG

  - Folinic acid, methylfolate

  - Ascorbate (vitamin C)
  - N-acetyl cysteine.

### Methylcobalamin (B12) Injections

- Improves methylation, glutathione, oxidative
- helps cognitive ability, abstract thinking, attention,
- No good test, best in urine methyl malonic acid
- 3 month trial.
   Side effects increased energy, hyperactivity, agitation, stimming.
- Parents give the preservative-free, methyl B12 injections themselves
- Oral, under tongue, other forms available

### **Chelation Therapy**

- Toxic metal burden requires specialized predictive and provocative tests, more sensitive and specific
- Experienced Practitioner to assess:
  - toxic burden

  - antioxidant and buffering mineral support
  - minimize effects of residual toxic metal
- monitor lab and clinical progress
- Only used as part of a comprehensive program
- Careful monitoring and physiological support

### Suggestions

- Be Grateful
- Love your children like the whole world
- Usually, the sooner you begin, the better
- Ask yourself: Should I wait for orthodox medicine to find a solution?
- Work in progress, don't stop looking for answers and asking questions
- Keep the faith many children do get better

## The Journal of AutismOne GLOBAL ALERT: ANTHROPOGENIC **INFLUENCES ON BIOLOGY** AND THE BIOTA, AND CONNECTIONS TO AUTISM reactive lite on earth and in the biosphere is appreciated as a suj reacts and rebalances itself, it becomes apparent that how org see the environment affects their health and their offsprings: "No nation is any healthier than its children."







The information on the following slides provided courtesy of Stu Freedenfeld MD Please see his excellent web site: www.StocktonFP.com for more details and information

# Household and Personal Care www.www.mw.reputs/kindesp2/index.php. Searchable index for product safety information www.kockinggoodorgames.com. Personal and house care www.forkinggoodorgames.com. Personal care www.forkinggoodorgames.com. Personal care www.forkinggoodorgames.com. Cleaning products www.sexendage.com. Household and personalicare www.gendage.com. Source of non-toxic art supplies into Account described and com. Baby bottles, sippy cups fifty.www.described.com. Clothing and bedding www.gendage.com. Clothing and bedding www.gendage.com. Bedding and mattresses

Green Lawns- Safe Neighborhoods

Insect control: Insecticidal soap, diatomaceous earth, and neem products. Insects are vital and killing agents are not selective.

Weed control: Corn gluten, hot water and vinegar, pull the weeds, or just leave them be and relax

Fungicide alternatives: Sulfur, baking soda, certain copper products and avoid over watering.

Green Lawns-Safe Neighborhoods

Www.oardonsafive.com Lawn and garden products Also a resource for garden questions.

Www.WHYY.org/Ulfurybyg non-toxic solutions to garden and indoor plant questions.

Www.wwicides.org/Information on dangers of pesticides and safe alternatives

Imp.//www.bevondossticides.org/gateway/index.ht

In Safety information of specific pesticides

Neem oil can be taken orally as a mosquito repellant.
(Ayush Herbs, www.ayush.com)
Thiamin 100mg/d may deter mosquitoes.
Topicals: 2% soybean oil, Vick's Vapo Rub, pure vanilla extract (1:1 with water), cinnamon oil, oil of lemon eucalyptus.
Enzyme shampoos to get rid of fleas and lice and spray house with 50/50 vinegar and water

www.licellands.com/enzyme products for lice, scabies and crabs

Natural Insect Repellants

Cockroaches: spread bay leaves and sprinkle a fine dusting of baking soda and boric acid

Ants: Sprinkle black pepper, chili powder or chalk and brush lavender and olive oil on trails.

Moths: Cedar chips and lavender oil

Mice and rats: Lavender oil, cedar oil or camphor will repel them.

Trade products include Ambermin's Natural Source Bug Repellent, Gone (insect detergent spray), All

Terrain Herbal Armor Insect Repellant, Buzz Away, BiteBlock and Outdoor Herbal Spray

# Environmentally Friendly Products www.hungersdryelemers.com. green dry cleaning www.greeneutheleaning.com green dry cleaning www.greeneutheleaning.com green dry cleaning www.hungersdryeleaning.com info mailing used fluorescent bulbs Note: Home Depot will recycle fluorescent bulbs





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