

# INTRODUCTION TO BIOMEDICAL INTERVENTIONS

June 11, 2010

PRESENTED BY

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## SETTING THE CONTEXT

Disclaimer

Ed.D

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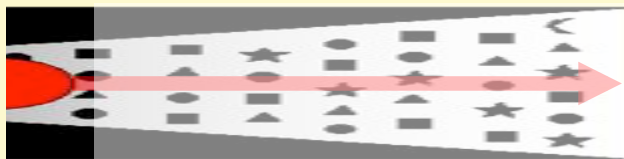
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All material from this presentation is meant to provide information about organizing selected biomedical interventions for autistic conditions and is not to be construed as medical advice from a qualified physician.

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## A CLOSER LOOK AT MY PLACEMENT ON THE AUTISM SPECTRUM — 1.5



AGE	0	1.5	2.5	4	6	8	10	13	19
E	Typical development	Autism bomb hits							
V	Turn over at 8 days	Withdrawal from environment							
E	Rapid physical and motor development	Tantrums							
N									
T									
S									



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## REFRIGERATOR MOTHERS



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## A BRIEF LOOK AT THE HISTORY, ETIOLOGY, INCIDENCE OF AUTISM

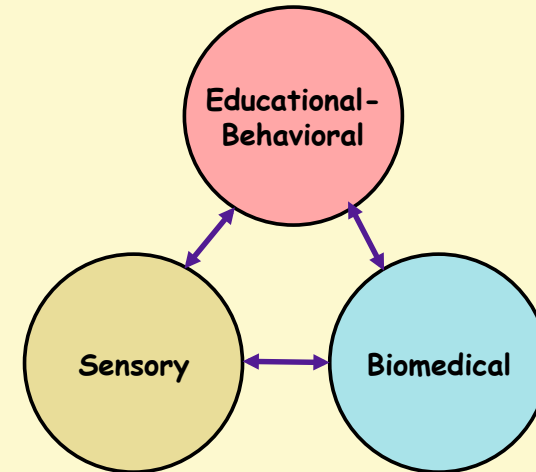
The mother did it	Biology did it	Today
Mysterious disorder	Specific disease entity	Many clues but no specifics
Response to "extreme situations" in infancy	Complex response to genetic and/or biological events	Autistic culture
Mothers withhold affection from their children causing mortal fear	Mothers have nothing whatsoever to do with causing autism	A different way of being.
Psychological problem	Syndrome of biology and genetics	Appropriate educational and biological intervention
Recovery in a therapeutic milieu	Autism is a lifelong disorder	

C U R E

DIFFERENCE

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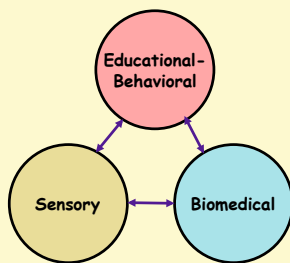
## SETTING THE CONTEXT Three Areas of Intervention



Stephen Edelson, personal communication, December, 2004

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## SETTING THE CONTEXT Three Areas of Intervention



Stephen Edelson, personal communication, December, 2004

### Educational/Behav

- DTT/ABA
- Daily Life Therapy
- TEACCH
- Miller Method
- DIR (Floortime)
- CCT

### Sensory

Occupational Therapy to Treat Imbalances of the Outer and Inner Senses

- Sight
- Touch
- Taste
- Smell
- Hearing
- Vestibular
- Proprioception

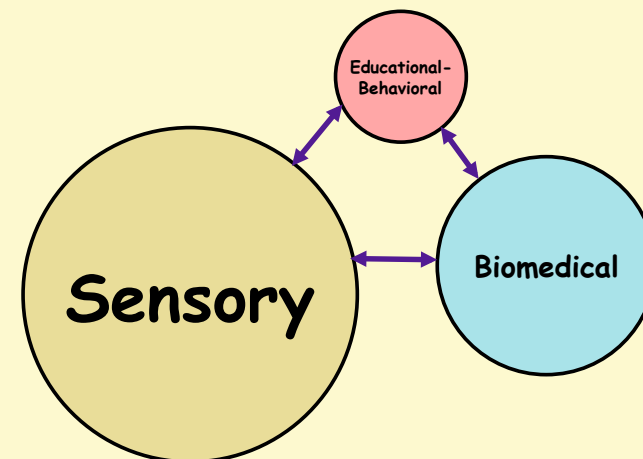
### Biomedical

Treating chemical imbalances caused by internal and external factors

- Digestion
- Nutrition
- Chelation
- GFCE Diet
- Vaccines
- Dysbiosis
- Immunology
- Feingold Diet
- Mercury and other heavy metal toxicities [metallothionein & glutathione]

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## SETTING THE CONTEXT Three Areas of Intervention

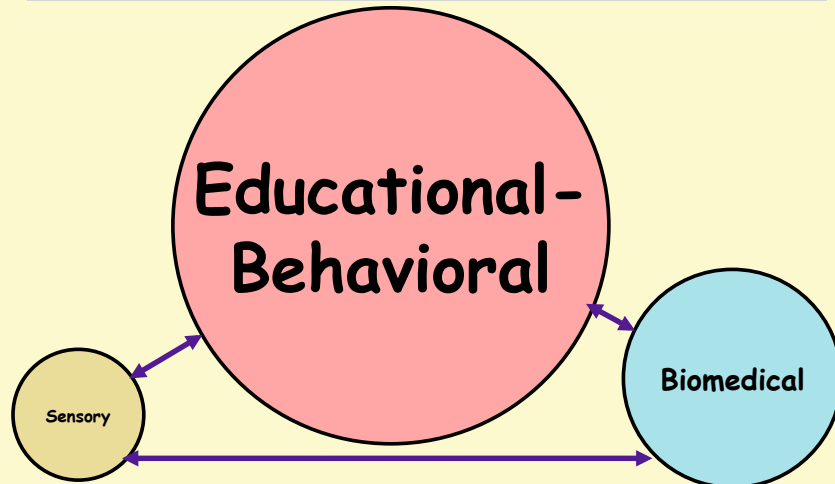


Stephen Edelson, personal communication, December, 2004

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## SETTING THE CONTEXT

### Three Areas of Intervention

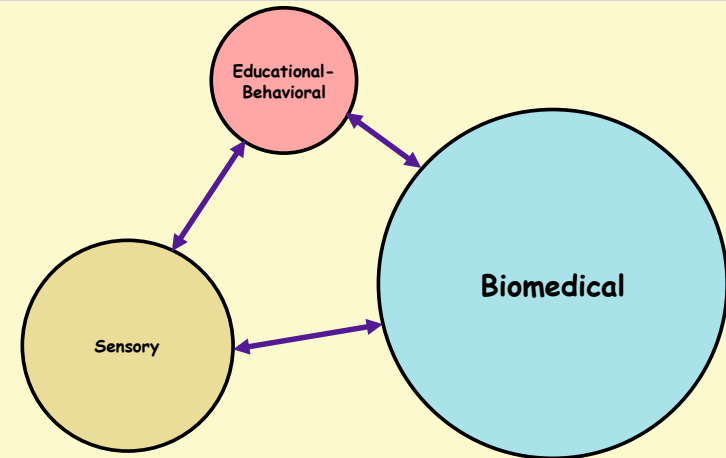


Stephen Edelson, personal communication, December, 2004

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## SETTING THE CONTEXT

### Three Areas of Intervention



Stephen Edelson, personal communication, December, 2004

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## SETTING THE CONTEXT

### Mercury Toxicity

#### HOW MERCURY CAUSES BRAIN NEURON DEGENERATION

F. L. LORSCHIEDER,  
C. C-W. LEONG,  
N. I. SYED

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UNIVERSITY OF CALGARY

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## SAFER VACCINATION PROTOCOL

### Overview

Not to substitute for a qualified physician's advice

- Do not give vaccines to ill children (fever, cold, on antibiotics).
- Separate vaccines in time.
- Use thimerosal free vaccines
- Separate the M, M, and R.
- Consider checking vaccine titers (blood test) before giving boosters.
- Keep children on nutrient-rich diets.
- Limit environmental exposures.

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## SAFER VACCINATION PROTOCOL

Before vaccinations, ask the following...

Not to substitute for a qualified physician's advice

- Is the child sick now?
- Do I...
  - have full information on the side effects?
  - know how to identify and report a vaccine reaction?
  - know the name of the manufacturer and lot number?

Does the child have a personal or family history of:

- vaccine reactions?
- convulsions or neurological disorders?
- severe allergies?
- immune system disorders?

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## SAFER VACCINATION PROTOCOL

Possible Vaccine Schedule for Children at Risk of ASD

Not to substitute for a qualified physician's advice

Age in Months	Vaccine	Age in Months	Vaccine
Birth	Hepatitis B if Mom is Hep B positive, otherwise wait until teenage years	18	DTaP
04	Hib, IPV	21	Rubella
05	DTaP	24	Prevnam
06	Hib, IPV	30	Mumps
07	DTaP	48-60	Varicella (if not already immune)
08	Hib	48-60	Hepatitis B series (at earliest)
09	DTaP	48-60	Test titers for MMR and do not give unless not immune
15	Measles (at earliest)	48-60	DTaP, IPV boosters
17	Hib, OPV		

Cave, Stephanie. (2001). *What your doctor may not tell you about children's vaccinations*. New York, NY: Warner Books. P. 276-7.

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## SETTING THE CONTEXT

Who is DAN?

**DAN!** Defeat Autism Now. A group of physicians and scientists from the US and Europe who share material aimed towards defeating autism.

**1995:** Initial DAN conference

**Published:** *Biomedical assessment options for children with autism and related problems*. Now in it's 2005 edition.



**For:** Physicians  
&  
Parents to bring to their own doctors

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## SETTING THE CONTEXT

GFCF Alphabet Soup

**GFCF:** Gluten Free Casein Free diet.

**Gluten:** Type of protein found primarily in wheat and rye.

**Casein:** Primary protein found in milk, whey and other dairy.

### Books

Lewis, L. (1998). *Special diets for special kids*, vol. 1 & 2. Arlington, TX: Future Horizons.

Seroussi, K. (2002). *Unraveling the mystery of autism and pervasive developmental disorder: A mother's story of research and recovery*. New York: Broadway Publishers.

Ramsey, S. *The cheerful chemist's no casein, no gluten, sugar optional cookbook*. San Diego, CA: Autism Research Center [www.autismwebsite.com/ari/pubs.html]

Semon, B. & Lori Kornblum, L. (1999). *Feast without yeast; 4 stages to better health*. Wisconsin Institute of Nutrition.

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## SETTING THE CONTEXT

### Some Areas to Look at Per DAN! Protocol

1. Improve diet quality
2. 3-month total avoidance of gluten and casein
3. Add digestive enzymes, vitamins & minerals
4. Test thyroid function
5. Test the gut
6. Test for amino acids
7. Test plasma sulfate and glutathione [lack of inhibits heavy metal excretion]
8. Assess heavy metal toxicity by chelation challenge (DMSA)
9. Try additional nutrients
10. Try Mega-B6 w/Magnesium
11. Test for viral infections

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## SETTING THE CONTEXT

Taking the  
**Mystery**  
**Out of**  
**Medications**  
in Autism/Asperger  
Syndromes

A GUIDE FOR  
PARENTS AND  
NON-MEDICAL  
PROFESSIONALS

LUKE TSAI, M.D.

FOREWORD BY Gary Mesibov, Ph. D.  
Director of the TEACCH Program

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## SETTING THE CONTEXT

### Does not...

1. Cure
2. Alter core social and linguistic challenges.

Through compensating for  
some chemical variances  
may reduce frequency of...

1. Agitation
2. Anxiety
3. Mood instability
4. Hyperactivity
5. Impulsiveness
6. Aggression
7. Self-injury
8. Repetitive, stereotypic, and compulsive behaviors

Tsai, L. (2001). Taking the mystery on of medications in autism/Asperger Syndromes: A guide for parents an non-medical professionals. Arlington, TX: Future Horizons. P. 6.

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## SETTING THE CONTEXT

List of behaviors  
and emotions  
of concerns

Functional  
Behavioral  
Analysis

No

If behaviors &  
emotions are not  
learned or maladaptive,  
they may result from  
neuropsychiatric  
disorders

Are the  
behaviors &  
emotions learned or  
maladaptive?

Yes

Non-medical  
interventions

Medical  
assessment

Medical &  
non-medical  
interventions

Tsai, L. (2001). Taking the mystery out of medications in autism/Asperger Syndromes: A guide for parents an non-medical professionals. Arlington, TX: Future Horizons. P. 17.

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## SETTING THE CONTEXT

### Informed Consent — Making Informed Decisions

1. Purpose of treatment and potential benefits
2. Description of the treatment process, including the procedure or name of the medication, duration, and costs
3. Explanation of the risks of the treatment, or unknown risks in a new treatment
4. The alternatives to the proposed treatment, including no treatment
5. The right to refuse the recommended treatment

#### Recent JAMA Study

90% of decisions made between patients and doctors fail to include enough discussion to allow for effective informed consent.

#### ..... Exceptions .....

1. Emergency
2. Therapeutic privilege - ex: extremely unstable psychiatric condition

Tsai, L. (2001). *Taking the mystery on of medications in autism/Asperger Syndromes: A guide for parents an non-medical professionals*. Arlington, TX: Future Horizons. P. 9-10.

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## SETTING THE CONTEXT

### General Principals (Rules of Thumb)

1. Psychopharmacology begins with a functional behavioral analysis (ABC) followed by thorough medical diagnostic assessment.
2. A careful history through physical and neurological examination with some laboratory data for evaluation to serve as a baseline prior to medical treatment.
3. Never use medication as a first and only treatment.
4. Reserve medical treatment for severe challenges that fail or only partially to respond to non-medical intervention.
5. With multiple problems or concerns the team determines treatment initially with one medication for the most urgent problem.

Tsai, L. (2001). *Taking the mystery on of medications in autism/Asperger Syndromes: A guide for parents an non-medical professionals*. Arlington, TX: Future Horizons. P. 43-52

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## SETTING THE CONTEXT

### General Principals (Rules of Thumb)

5. With multiple problems or concerns the team determines treatment initially with one medication for the most urgent problem.

- Behavior that is a direct hazard to the child or others
- Disruptive/destructive behavior such as running, screaming, tantrums, throwing
- Threats to self-esteem (social skills, shyness)
- Other (baby talk, stimming)

Tsai, L. (2001). *Taking the mystery on of medications in autism/Asperger Syndromes: A guide for parents an non-medical professionals*. Arlington, TX: Future Horizons. P. 43-52

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## SETTING THE CONTEXT

### General Principals (Rules of Thumb)

6. Multiple factors govern selection of psychotherapeutic medication.
  - A. Medical
  - B. Patient and family
  - C. Physician
  - D. Social
  - E. Economic
7. Be aware of individual responses to medications.
8. Favor single daily dosages where possible.
9. Tastier medication where possible. Always take oral medication with liquid.
10. Educate and involve the child in the treatment process as much as possible.

Tsai, L. (2001). *Taking the mystery on of medications in autism/Asperger Syndromes: A guide for parents an non-medical professionals*. Arlington, TX: Future Horizons. P. 43-52.

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## SETTING THE CONTEXT

### General Principals (Rules of Thumb)

11. Involve yourself in the entire process from initial evaluation, monitoring effects, and termination of medication treatment.
12. Valid and clinically meaningful measures should be implemented regularly to assess therapeutic effects and side effects of psychotherapeutic medications.
13. More frequent physician visits in initial stages of treatment.
14. When terminating medication the potential for reoccurrence should be clearly discussed in terms of risks to benefit ratio

Tsai, L. (2001). *Taking the mystery on of medications in autism/Asperger Syndromes: A guide for parents an non-medical professionals*. Arlington, TX: Future Horizons. P. 43-52.

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## RESOURCES

Live elsewhere? [www.autism.com](http://www.autism.com)  
Find a **DAN!** doctor near you.

Internet: [www.autismtoday.com](http://www.autismtoday.com)  
Experts and web-based presentations.

Supplements: [www.kirkmanlabs.com](http://www.kirkmanlabs.com)

### Books

Tsai, L. (2001). *Taking the mystery on of medications in autism/Asperger Syndromes: A guide for parents an non-medical professionals*. Arlington, TX: Future Horizons. P. 43-52.

*Treating autism: Parent stories of hope and success*. (2003). Stephen Edelson and Bernard Rimland (Eds.). San Diego, CA: Autism Research Institute.

Shaw, W. (2002). *Biological treatments for Autism and PDD*, 2nd ed. Lenexa, KS: Great Plains Laboratories.

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