Simplifying Autism
Improvement and Recovery

Peter Sullivan
Introduction

- We have people recovering from autism, but it's still challenging
- Acknowledge the complexity, but look for simplifying concepts
- Categories, steps & sequence
  - I had success, but did it all backwards
  - It was harder than it needed to be
- All the information I wish I had known
- No need to take notes: clv.us/autism-simple
  - Booklet
My Background

- Two boys on the spectrum
- Experienced environmental illness myself
- Troubleshooter, engineer & software designer
- My job was to make complex things simple & clear
- Autism & environmental health funder
  - Access to some of the best researchers & leaders
Our Family’s Story

- Stacy and Peter with Max (4) and Jack (6)
- Goal – just wanted the kids to reach their potential.
Today

• Jack (21) just graduated from UC Berkeley - Grad School
• Max (19) will be a sophomore at UC Berkeley - Data Science
• I'm back to a healthy weight and sleeping well
• I want that for every family living with autism
The Complexity of Autism

• Over 1,000 genes associated with autism
• Uninherited mutations (de novo mutations)
• Wide array of behavioral and biological symptoms
• Numerous environmental risk factors
Environmental Factors in Autism

Medical Risks
- Ultrasound
- Prenatal Age
- Dental Amalgam Fillings
- Tylenol
- Circumcision

Vaccine Ingredients
- Aluminum
- Mercury

Chemical Toxins
- Air Pollution
- Mercury
- Total Toxic Load
- PCBs
- Toxic Metals
- Glyphosate
- Lead
- GMO Food

Lifestyle
- Screen Time
- Indoor Time
- Circadian Rhythms
- Interactive Screen Time
- Television
- Food Allergies
- Indoor Air Quality
- Sunscreen Use
- Artificial Light
- Vitamin D

Electromagnetic Fields (EMF)
- Wireless
- Ground Currents
- Dirty Electricity
- Magnetic Fields
- Electric Fields

Other Factors
- Mercury
- Ultrasound
- Ultrasound
- Aluminum
- Mercury

Medical Risks
- Tylenol
- Circumcision
- Mercury
- Mercury

Screen Time
- Indoor Time
- Circadian Rhythms
- Interactive Screen Time
- Television
- Artificial Light
- Vitamin D
- Food Allergies
- Indoor Air Quality
- Sunscreen Use
- Indoor Time
- Screen Time
- Indoor Time
- Circadian Rhythms
- Interactive Screen Time
- Television
- Artificial Light
- Vitamin D
- Food Allergies
- Indoor Air Quality
- Sunscreen Use
- Indoor Time
- Screen Time
- Indoor Time
- Circadian Rhythms
- Interactive Screen Time
- Television
- Artificial Light
- Vitamin D
- Food Allergies
- Indoor Air Quality
- Sunscreen Use
- Indoor Time
- Screen Time
- Indoor Time
- Circadian Rhythms
- Interactive Screen Time
- Television
- Artificial Light
- Vitamin D
- Food Allergies
- Indoor Air Quality
- Sunscreen Use
- Indoor Time
- Screen Time
- Indoor Time
- Circadian Rhythms
- Interactive Screen Time
- Television
- Artificial Light
- Vitamin D
- Food Allergies
- Indoor Air Quality
- Sunscreen Use
- Indoor Time
- Screen Time
- Indoor Time
- Circadian Rhythms
- Interactive Screen Time
- Television
- Artificial Light
- Vitamin D
- Food Allergies
- Indoor Air Quality
- Sunscreen Use
- Indoor Time
- Screen Time
- Indoor Time
- Circadian Rhythms
- Interactive Screen Time
- Television
- Artificial Light
- Vitamin D
- Food Allergies
- Indoor Air Quality
- Sunscreen Use
- Indoor Time
- Screen Time
- Indoor Time
- Circadian Rhythms
- Interactive Screen Time
- Television
- Artificial Light
- Vitamin D
- Food Allergies
- Indoor Air Quality
- Sunscreen Use
- Indoor Time
- Screen Time
- Indoor Time
- Circadian Rhythms
- Interactive Screen Time
- Television
- Artificial Light
- Vitamin D
- Food Allergies
- Indoor Air Quality
- Sunscreen Use
- Indoor Time
- Screen Time
- Indoor Time
- Circadian Rhythms
- Interactive Screen Time
- Television
- Artificial Light
- Vitamin D
- Food Allergies
- Indoor Air Quality
- Sunscreen Use
- Indoor Time
- Screen Time
- Indoor Time
- Circadian Rhythms
- Interactive Screen Time
- Television
- Artificial Light
- Vitamin D
- Food Allergies
- Indoor Air Quality
- Sunscreen Use
- Indoor Time
- Screen Time
- Indoor Time
- Circadian Rhythms
- Interactive Screen Time
- Television
- Artificial Light
- Vitamin D
- Food Allergies
- Indoor Air Quality
- Sunscreen Use
- Indoor Time
- Screen Time
- Indoor Time
- Circadian Rhythms
- Interactive Screen Time
- Television
- Artificial Light
- Vitamin D
- Food Allergies
- Indoor Air Quality
- Sunscreen Use
- Indoor Time
- Screen Time
- Indoor Time
- Circadian Rhythms
- Interactive Screen Time
- Television
- Artificial Light
- Vitamin D
- Food Allergies
- Indoor Air Quality
- Sunscreen Use
- Indoor Time
- Screen Time
- Indoor Time
- Circadian Rhythms
- Interactive Screen Time
- Television
- Artificial Light
- Vitamin D
- Food Allergies
- Indoor Air Quality
- Sunscreen Use
- Indoor Time
- Screen Time
- Indoor Time
- Circadian Rhythms
- Interactive Screen Time
- Television
- Artificial Light
- Vitamin D
- Food Allergies
- Indoor Air Quality
- Sunscreen Use
- Indoor Time
- Screen Time
- Indoor Time
- Circadian Rhythms
- Interactive Screen Time
- Television
- Artificial Light
- Vitamin D
- Food Allergies
- Indoor Air Quality
- Sunscreen Use
- Indoor Time
- Screen Time
- Indoor Time
- Circadian Rhythms
- Interactive Screen Time
- Television
- Artificial Light
- Vitamin D
- Food Allergies
- Indoor Air Quality
- Sunscreen Use
- Indoor Time
- Screen Time
- Indoor Time
- Circadian Rhythms
- Interactive Screen Time
- Television
- Artificial Light
- Vitamin D
- Food Allergies
- Indoor Air Quality
- Sunscreen Use
- Indoor Time
- Screen Time
- Indoor Time
- Circadian Rhythms
- Interactive Screen Time
- Television
- Artificial Light
- Vitamin D
- Food Allergies
- Indoor Air Quality
- Sunscreen Use
- Indoor Time
- Screen Time
- Indoor Time
- Circadian Rhythms
- Interactive Screen Time
- Television
- Artificial Light
- Vitamin D
- Food Allergies
- Indoor Air Quality
- Sunscreen Use
- Indoor Time
- Screen Time
- Indoor Time
- Circadian Rhythms
- Interactive Screen Time
- Television
- Artificial Light
- Vitamin D
- Food Allergies
- Indoor Air Quality
- Sunscreen Use
- Indoor Time
- Screen Time
- Indoor Time
- Circadian Rhythms
- Interactive Screen Time
- Television
- Artificial Light
- Vitamin D
- Food Allergies
- Indoor Air Quality
- Sunscreen Use
- Indoor Time
- Screen Time
- Indoor Time
- Circadian Rhythms
- Interactive Screen Time
- Television
- Artificial Light
- Vitamin D
- Food Allergies
- Indoor Air Quality
- Sunscreen Use
- Indoor Time
- Screen Time
- Indoor Time
- Circadian Rhythms
- Interactive Screen Time
- Television
- Artificial Light
- Vitamin D
- Food Allergies
- Indoor Air Quality
- Sunscreen Use
- Indoor Time
- Screen Time
- Indoor Time
- Circadian Rhythms
- Interactive Screen Time
- Television
- Artificial Light
- Vitamin D
- Food Allergies
- Indoor Air Quality
- Sunscreen Use
- Indoor Time
- Screen Time
- Indoor Time
- Circadian Rhythms
- Interactive Screen Time
- Television
- Artificial Light
- Vitamin D
- Food Allergies
- Indoor Air Quality
- Sunscreen Use
- Indoor Time
- Screen Time
- Indoor Time
- Circadian Rhythms
- Interactive Screen Time
- Television
- Artificial Light
- Vitamin D
- Food Allergies
- Indoor Air Quality
- Sunscreen Use
- Indoor Time
- Screen Time
- Indoor Time
- Circadian Rhythms
- Interactive Screen Time
- Television
- Artificial Light
- Vitamin D
- Food Allergies
- Indoor Air Quality
- Sunscreen Use
- Indoor Time
- Screen Time
- Indoor Time
- Circadian Rhythms
- Interactive Screen Time
- Television
- Artificial Light
- Vitamin D
- Food Allergies
- Indoor Air Quality
- Sunscreen Use
- Indoor Time
- Screen Time
- Indoor Time
- Circadian Rhythms
- Interactive Screen Time
- Television
- Artificial Light
- Vitamin D
- Food Allergies
- Indoor Air Quality
- Sunscreen Use
- Indoor Time
- Screen Time
- Indoor Time
- Circadian Rhythms
- Interactive Screen Time
- Television
- Artificial Light
- Vitamin D
- Food Allergies
- Indoor Air Quality
- Sunscreen Use
- Indoor Time
- Screen Time
- Indoor Time
- Circadian Rhythms
- Interactive Screen Time
- Television
- Artificial Light
- Vitamin D
- Food Allergies
- Indoor Air Quality
- Sunscreen Use
- Indoor Time
- Screen Time
- Indoor Time
- Circadian Rhythms
- Interactive Screen Time
- Television
- Artificial Light
- Vitamin D
- Food Allergies
- Indoor Air Quality
- Sunscreen Use
- Indoor Time
- Screen Time
- Indoor Time
- Circadian Rhythms
- Interactive Screen Time
- Television
- Artificial Light
- Vitamin D
- Food Allergies
- Indoor Air Quality
- Sunscreen Use
- Indoor Time
- Screen Time
- Indoor Time
- Circadian Rhythms
- Interactive Screen Time
- Television
- Artificial Light
- Vitamin D
- Food Allergies
- Indoor Air Quality
- Sunscreen Use
- Indoor Time
- Screen Time
- Indoor Time
- Circadian Rhythms
- Interactive Screen Time
- Television
- Artificial Light
- Vitamin D
- Food Allergies
- Indoor Air Quality
- Sunscreen Use
- Indoor Time
- Screen Time
- Indoor Time
- Circadian Rhythms
- Interactive Screen Time
- Television
- Artificial Light
- Vitamin D
- Food Allergies
- Indoor Air Quality
- Sunscreen Use
- Indoor Time
- Screen Time
- Indoor Time
- Circadian Rhythms
- Interactive Screen Time
- Television
- Artificial Light
- Vitamin D
Dead Ends

- Thinking autism is a lifelong condition
- Addressing only behavioral or sensory levels
- De novo mutations in autism are random or from aging dads
- Something bad that happened in the past
- Not addressing the current environment
Autism: Genetics & Environment

Twins

- 100% Environmental
- 100% Genetics

Genetics

- 38% Genetics
- 62% Environmental

Environmental
Inflammation
Gut health
Poor nutrition
Low minerals
Low melatonin
Oxidation
Disrupted circadian rhythms
Poor sleep
Toxin load
Weak immune system
Infections

• Melatonin
• Glutathione
• Healthy gut
• Healthy mineral balance
• Strong immune system
• Balanced physiology

• Inflammation
• Gut health
• Poor nutrition
• Low minerals
• Low melatonin
• Oxidation
• Disrupted circadian rhythms
• Poor sleep
• Toxin load
• Weak immune system
• Infections

• Stuck In
• Fight
• Flight
• Freeze

• Wireless
• Mercury
• Aluminum
• Glyphosate
• EMF
• Total toxins
• Antibiotics
• Depleted soil & food
• Tylenol
• Screen time
• Artificial light

Total Load – Balloon Model

THRVING

BODY
ENVIRONMENT

SURVIVING

THRVING

THRIVING

THRIVING
A Reason to Hope

• Timothy syndrome (calcium channel)

• Most common genetic pathway of 667 genes:
  – Calcium signaling

• Intracellular calcium is linked to the major biological symptoms in autism.

• Martin Pall’s Talk: “EMFs and Chemicals as the Two Main Drivers of the Autism Epidemic: Mechanism of Action”
Intracellular Calcium

Calcium Channel
- Voltage gated
- Genetics variations
- Tuned by metal ions (both good minerals and harmful toxins via MIDAS) and other factors

NMDA Receptor
- Glutamate
- Reward
- Addiction
- Over activated by chemical toxins

Normal – Very Low Calcium
- Calcium is an excite signal

Excess Calcium (Ca+2)
- False signaling (EMF)
- Free radical damage
- Inflammation
- Excitotoxicity

Cell Membrane
- Epigenetics
- Protect cell
- Voltage
- Lipids (fats)

Cell Danger Mode
- “Electron stealers”
- Infections, toxins
- EMF
A Clearer Definition of Autism?

• Autism or autism spectrum disorder (ASD) is formally diagnosed by observing challenges in communication, social interaction, and repetitive behaviors.

• Autism is the result of long term overload of intracellular calcium that impairs physiological regulation, brain development, nerve function, sensory function, the immune system, and social interaction.
Recovery Sequence

• Lighten the Load
• Change the Mode
• Balance the Body
• Grow & Flow
Lighten the Load

- Wireless
- Mercury
- Aluminum
- Glyphosate
- EMF
- Screen time (interactive)

- Total toxic load
- Tylenol – acetaminophen
- Antibiotics
- Artificial light (blue light at night)
Autism & Your Home

- Air quality
- Constant wireless sources
- Water
- Lighting (UV, IR)
- Electromagnetic fields & noise
- Screen time
- Food
- Personal care products & household products
- Herbicides & pesticides
Change the Mode

• Fight or flight mode
  – Not a sustainable state
  – Mode limits thinking & circulation
  – Release of energy to fight or flight
  – Detox, repair, de-prioritized or off
How Do We Change the Mode?

- Sensory Therapies
- Nature
- Animals
- Breathing
- Cranial Sacral
- Stretching

- Neurofeedback
  - BrainState
- Environmental
  - Invisible Triggers
    - Wireless & EMF
    - Light flicker
    - Air Quality
Balancing the Body

• MAPS Doctors, DAN! Doctors, or functional medicine doctors.

• Supplements that reduce intracellular calcium
  – Magnesium
  – B12
  – B6

• Mineral depletion
Grow and Flow

- Calm and balanced enough to learn, grow naturally
- Sleep and pruning and trauma recovery
- Natural growth and learning with less noise & more signal
- Connect/reconnect
- Sensory, communication, learning, social
- Speech & occupational therapy
- ABA, movement therapies (Anat Baniel, etc.) should be more effective
- School, play
Resources

• Slides and references
  – clv.us/autism-simple

• Talks
  – Autism and Your Home
  – Wireless: A Key Piece of the Autism Puzzle
  – Ending Autism in Your Home and the World
  – Martin Pall-EMFs and Chemicals as the Two Main Drivers of the Autism Epidemic: Mechanisms of Action
Online Resources

• Wireless Safety Card
• Clear Light Ventures
• Facebook Autism and EMF Group
• Safe Household and Personal Care Products
• EWG Healthy Living: Home Guide
• Autism Treatment Evaluation Checklist (ATEC)