

Autism: One in 44

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Note: This presentation will highlight some of the issues associated with the autism spectrum disorder. It is extremely complex and involved. This is for information and educational purposes, not a substitute for qualified professional health care.

It is noted that these children are also sensitive to their environments. We just touch on it. That would be another topic in itself.

Opening

- Why does the title include one in 44? One in 44 children are now being diagnosed with autism by the Center for Disease Control. This should raise alarm bells for everyone.
- The increasing numbers of children being diagnosed with autism should concern every person in this country. The numbers keep rising.
- Each child with the autism spectrum disorder is unique. What works for one child may not work for another child. There are some common protocols that have been found to work. However, the results do vary from child to child.
- Three main factors play a role in the autism epidemic:
 - One, environmental assault in the form of toxic substances
 - Two, role of nutritional status
 - Three, the ability to detoxify toxic substances

Overview

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What is Autism?

- Autism is as the autism spectrum disorder and it covers those with mild to severe symptoms. Mild symptoms can start with learning disabilities, ADD/ADHD, Pervasive Development Disorder, to severe autism (out of control behavior and inability to communicate).
- It is a condition that is triggered by environmental assault, whether it be exposure to toxins in the air, prenatal exposure, exposure from vaccines, and other sources.
- It is a complex and involved condition.
- It affects a number of systems in the body, starting with the digestive system, detoxification, the brain, and other symptoms.

Symptoms of Autism: What you Would Expect

- Abnormal levels of anxiety
- High pain threshold
- Lack of eye contact
- Lack of response to vocal commands
- Loss of skill set
- Not hitting language development milestones
- Normal, predictable behaviors regress into abnormal behaviors
- Not developing normal play with toys
- OCD-obsessive-compulsive behavior
- Odd movements, gestures that fascinate them
- Repetitive, obsessive behaviors (stimming)

Symptoms of Autism: What you Wouldn't Expect

- Allergies
- Constipation
- Diarrhea
- Gastrointestinal inflammatory processes Regressive autism – The child is born healthy and doesn't seem to have problems. After exposure especially to vaccinations, they regress.
- Not sleeping properly
- Recurrent bacterial infections like ear infections
- Reflux
- Seizures – In some children, they experience seizures. In such situations, see professional medical help as soon as possible
- Specific Carbohydrate Diet – This diet consists of meats, eggs, vegetables, nuts and low sugar fruit, avoiding starches, grains, pasta, legumes, and bread.

Source: McCarthy and Kartzinel, page 14

Brief History of Autism

- Initially, autism used to be extremely rare and a different type than what we are seeing into today's children before the 1960's.
- The type of autism that we are seeing is what is generally regressive autism. In this case, the baby is born normal, and after serious toxic exposure, regressive behavior takes place.
- There is some question that the sudden infant death syndrome, occurs shortly after a vaccination, the infant suddenly stops breathing. One problematic vaccine is the DTP shot.

Areas of Concern Regarding the Autism Spectrum Disorder

- Digestive Issues
- Detoxification Issues
- Immune System Issues
- Neurological Issues
- Yeast Overgrowth
- EMR Sensitivity

Digestive Issues

- Food problems are common in children with the autism spectrum disorder. They tend to stick to wheat and dairy. There is a reason for this. It creates opiate like effect in their brains.
- Overall, these children often have an extremely limited diet.
- It can be a challenge to wean them off these foods and get them to eat vegetables.
- The other aspect of digestive issues are issues on constipation and diarrhea. This means that there are issues with their microbiome and that it is definitely out of kilter. Their poop can also smell really off, come in different colors, and in different shapes. That is not a good sign and not normal. It can affect behavior, too. (McCarthy and Kartzinel, pg. 220-2)
- Digestive enzymes may be needed to improve the digestive process.
- Maldigestion and Malabsorption – Digestive enzymes needed for breaking down foods.

Note #1: If your child is experiencing diarrhea, it is suggested that you bring a sample to the pediatricians.

Note #2: If see undigested pieces of corn or nuts, it means that the digestive system is not working properly and not breaking down the food.

Detoxification Issues

- Children with ASD have problems with detoxification.
- It turns out that they are sensitive to what we call environmental assaults. It can stem from a number of sources:
 - Mercury in dental fillings and in the mother while in utero
 - Heavy metals in the atmosphere
 - Toxins in our water, food, and air
 - Vaccines
 - Other sources (Over the counter medications, even prescription drugs)
- Part of the detoxification process is in the methylation process. It is found to be poorly functioning in ASD. It is covered in more detail in the appendix.

Immune System Issues

- Nutrition plays a major role in our nutrition. If a child is on a limited diet especially on wheat and diary, there is going to be nutritional deficiencies and that will have a direct impact on the immune system.
- Leaky gut issues also places additional stress on the immune system. More foreign matter escapes the intestinal lining into the blood stream, creating more foes for the immune system to go after.
- Methylation issues also impairs the body to fight off unfriendly microbes and results in a variety of other health issues.
- Dysfunctional Immune System – Many children with autism have a dysfunctional immune system. It can be a Th1/Th2 imbalance.

Note: We are skipping the issue on viruses.

Neurological Issues

- When your microbiome is off balance, this can result in dysbiosis and leaky gut issues. It can also result in yeast overgrowth.
- What is in your gut has a direct effect on the brain. The brain is like a center that oversees thoughts and behavior. One common type of behavior found in these children is the repetitive type of behavior and language.
- The gut area is also a source of neurotransmitters that do travel to the brain. If the levels and types of neurotransmitters are not in the correct balance, that too, affects the brain chemistry.

Yeast Overgrowth

- According to Dr. William Crook, yeast can grow along the lining of the gut wall much like ivy creeping up along a wall. It can attach itself to the lining. It can cause inflammation and facilitate leaky gut issues. This will cause partially digested proteins to leak out into the blood stream, causing problems for the immune system.
- Testing is available to check for yeast overgrowth.
- Repeated doses of antibiotics (like for ear infections) can facilitate yeast overgrowth.
- Source McCarthy and Kartzinel, pgs 115 to 117

Yeast Overgrowth continued

Clinical Signs of Yeast Issues

- Abdominal bloating
- Change in stool smell (yeasty, bready, foul, or sweet)
- Constipation or diarrhea
- Eczema
- Funky-smelling scalp (the “wet dog” smell)
- Increase in flatulence
- Itching: perianal, genital, and/or generalized
- Rashes

Yeast Overgrowth continued

Behavioral Signs of Yeast Issues

- Aggressive
- Brain fog: giddy super-silly behavior
- Chewing (on everything and anything) and teeth grinding
- Climbing all the time
- Cravings for bread, pasta, and sweets
- Hands over ears
- Laughing for no reason
- Noncompliant
- Seeming out of it
- Standing on head or hanging upside down
- Stimming

Source: McCarthy and Kartzinel, pg. 152

EMR Sensitivity

- EMR Sensitivity is a fairly new topic, especially with growing use of cell phones and other types of electronic devices that relies on electromagnetic radiation.
- There have been some children where their diets issues were addressed, they were given supplements, and yet they still had problems.
- Tamara J. Mariea wrote about this in 2007 and there is an article covering this. Some children improved when their exposure to electromagnetic radiation was dramatically reduced.

Note: There are people that can measure EMR levels in the home and ways to cut down the exposure.

Treatment Protocols – Diet

- Gluten and Casein – When removing these two substances from their diets, as much as 80% of these children with autism seem to respond. Their response varies from child to child.
- Gluten and casein can not breakdown completely, break down into neurotransmitters that like opiates (morphine-like substances). Constipation is common and they have a higher tolerance to pain. It can be a challenge to wean these children from these foods. (Source: McCarthy and Kartzin, page 31)
- Specific Carbohydrate Diet – A diet consists primarily of meats, eggs, vegetables, nuts, and low-sugar fruits (and avoiding starches, grains, pasta, legumes, and bread). (McCarthy and Kartzin, page 37)

Treatment Protocols – Diet continued

Low Oxalate Diet – Oxalates are molecules that can cause problems in some children. It can increase oxidative stress and decrease glutathione levels. It enhances the inflammatory response. (McCarthy and Kartzin, page 39)

It is important to minimize intake of processed foods, and focus more on organic foods, grass fed meats, wild caught fish, vegetables, and some fruit.

Foods that can cause problems

- Avoid dyes in foods like red dye- They are derived from petroleum and coal tar. They can cause hyperactivity, loss of focus and concentration, allergic reactions, and even cancer.
- Avoid High Fructose Corn Syrup – Can cause loss of concentration and increase in activity.
- Nitrates and Nitrites (It helps the meats to retain a pink/red coloring). It can be converted into nitrosamines and cause cancer.

Source: McCarthy and Kartzinel, pgs 42-44

Treatment Protocols - Supplements

- Calcium and Magnesium
- Digestive Enzymes and Protein
- Fatty Acids (Omega 3s)
- Probiotics
- Vitamin B12
- Zinc and Selenium

Vitamins that can be toxic are:

Vitamin A
Vitamin D
Vitamin E
Vitamin K

Note: These are fat soluble vitamins.
It has to be extremely high dosages.

Source: McCarthy and Kartzel, pgs. 60-64

Note #1: This would be another whole topic. We are just mentioning that these nutritional supplements have been found to help children with ASD. It is best done with testing and under professional health guidance.

Note #2: There are probably at least 90 nutrients needed by the body for optimum health.

Treatment Protocols – Supplements continued

Vitamin B12

- It is used in every cell in the body
- Helps with the normal function of the nervous system, gastrointestinal system, and other systems
- Need proper stomach acidity to be absorbed
- Best form is methyl B12

Other Supplements

- Selenium and Zinc
- Calcium and Magnesium
- Fatty acids – omega 3s (anti-inflammatory and essential for cellular membranes)
- Digestive enzymes (helps break down food eaten)
- Protein (it is not always broken down)
- Probiotics (for gut health)
- Multi-vitamin

Source: McCarthy and Kartzinel, pgs 55-66

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Appendix: Addendum Facts on Autism

- Antibiotics given in the first months of life increases the toxic effects of mercury and alters the intestinal flora (pg. 25 - Pangborn)
- Constipation problems also common in autistic children (pg. 44 - Pangborn)
- Methylation and thiols processes are found to be damaged in autistic children (pg. 29 - Pangborn)
- Molds is in a lot of foods and can be a problem for autistic children (pg. 86 - Pangborn)
- Yeast problems are common in children with ASD (pg. 37 - Pangborn)

Appendix: Autism and Comorbid Conditions

- Abnormal gait (awkward walking or running)
- Aggression
- Allergies
- Anxiety
- Auditory disturbances
- Candida
- Compulsions
- Frequent infections (e.g. ears)
- Gastrointestinal diseases
- Headaches
- Hypotonia (low muscle tone)
- Immune system dysfunction
- Numerous dental issues
- Obsessions
- Oral sensory disturbances
- Problems with focus, concentration
- Rashes, eczema
- Seizures
- Sleep disturbances
- Visual disturbances

Source: McCarthy and Kartzin, pg 16

Appendix: Bibliography

- Autism: Effective biomedical treatments (2005) by Jon Pangborn, Ph.D. and Sidney MacDonald Baker. (Publisher: Autism Research Institute). Note: this book was written 17 years ago, it would be interesting to learn what else has been discovered.
- Biological Treatments for Autism and PDD, 3rd ed. (2008) by William Shaw, Ph.D. (Publisher: William Shaw, Ph.D.)
- The Official Autism 101 Manual: Everything you need to know about Autism from experts who know and care, updated and revised (2018) created and compiled by Karen L. Simmons, edited by Jonathan Alderson. (Publisher: Skyhorse Publishing). (Note: This book covers a number of topics relating to autism, specially on the behavioral aspects).
- Healing and Preventing Autism: a complete guide by Jenny McCarthy and Jerry Kartzinel, MD. (2009) (Publisher: Dutton Group)
- Wireless Radiation in the Etiology and Treatment of Autism: Clinical Observations and Mechanisms by Tamara J. Mariea and George L. Carlo. (Published by Journal of Australasian College of Nutritional & Environmental Medicine (August 2007), Volume 26, Number 2, pages 3-7).

Appendix: Bibliography continued

- <http://lowoxalate.info/>
- <http://womansvibe.com/government-directly-admits-vaccines-cause-injury-and-death-in-table-published-by-hhs/> (Note: This website is no longer available on the internet.)
- www.scdiet.org
- www.scdrecipe.com/home/

Appendix: Center for Disease Control

- The Center for Disease Control is a U.S. federal agency that lists recommended vaccinations for both children and adults.
- Over time, the list of recommended vaccines has become longer and longer.
- The issue is bioaccumulation, the buildup of toxic ingredients that remains in the body (heavy metals). For sensitive individuals, at a certain threshold, the body is no longer able to detoxify these toxic ingredients, and autism can appear (or other health conditions).

Appendix: Environmental Friendly Sources

- Healthy Paints
 - www.ecofriendlyflooring.com
 - www.ecospaints.com
 - www.freshairchoicepaint.com
 - www.greenplanetpaints.com

Note: In view of the environmental assaults that these children feel, it is important to use paint that has a minimum of harmful chemicals. It is also important to use “clean” personal care products as well as “clean” cleaning products around these children.

Appendix: Glossary

- Bioaccumulation – It is the buildup of toxins like heavy metals in the body.
- Casein sensitivity – It can cause increased levels of caseomorphin which can be measured in the urine.(pg. 110 – Pangborn)
- Chelation Therapy – A way of helping with detoxification, especially heavy metals.
- Comorbid conditions – it is about other multiple secondary disorders in addition to those associated with a primary disorder like autism.
- Creatine - It is involved with energy transfer. (pg. 167 – Pangborn)
- Detoxification - It is carried out by the kidneys, the liver, and there is a process of methylation. Those with ASD are found to have issues with methylation.

Appendix: Glossary continued

- DPP4 – Dipeptidyl peptidase-4 can be a problem in children with autism. It is a particular peptidase. (pg. 107 – Pangborn)
- Hyperimmunity – It is when children don't ever sick. (Note: To improve the immune system, reduce sugar intake.)
- Informed consent – It is about being informed about both the positive and negative outcomes of a specific protocol or treatment.
- Intestinal permeability or leaky gut – It can play a role in having multiple food allergies. (pg. 115 – Pangborn)
- Low Oxalate Diet –Oxalates can cause problems for some children.
- Mercury – It is a heavy metal that is extremely toxic. It is a substance added to vaccines, including flu vaccines. It is included in silver dental fillings.
- Methionine metabolism – Methionine is connected to the methylation process, oxidant stress, sulfur, folate chemistry and nucleotides. (pg. 159 – Pangborn)

Appendix: Glossary continued

- Opiod Peptides – It is found in the urine of children with autism and schizophrenia. (pg. 108 – Pangborn)
- Regressive autism – The child is born healthy and doesn't seem to have problems. After exposure especially to vaccinations, they regress. Or, it can occur following a dental procedure with mercury included in the dental fillings.
- Seizures – In some children, they experience seizures. In such situations, see professional medical help as soon as possible.
- Specific Carbohydrate Diet – This diet consists of meats, eggs, vegetables, nuts and low sugar fruit, avoiding starches, grains, pasta, legumes, and bread.
- Threshold – It is a level where the body's exposure to toxins reaches a level or crosses the line that it is unable to detoxify. Repeated dosages of vaccines can cause this threshold to be breached.

Appendix: Glossary continued

- Vaccination Responses in Autistic Children – Many ASD children have abnormal responses to immunizations. Multiple and simultaneous vaccinations increases exposure to the mercury and aluminum in these vaccines. Also, if the infant or child is unwell at the time of the vaccination, this creates more problems. The question that needs to be raised are where are the studies on the health outcomes and safety issues of multiple vaccinations especially after 3 to 4 weeks. (pg. 129 – Pangborn) If a child has shown adverse reactions to vaccines, it is suggested that no further vaccinations be taken.

Appendix: IgA, IgE, IgG, IgM

- IgA – These cells exist on the surface, like our eyes, the nose, the mouth,
- IgE- They give us problems with allergies.
- IgG- Another type of reaction that occurs in a delayed manner like 2 or 3 days later. It makes it harder to track these type of reactions.
- IgM- They are the first responders from our immune system.
- Note: Ig means immunoglobulin, a protein made by the body that can tag other proteins that are not normally found in the body.

Appendix: Methylation and Glutathione

- Methylation is the movement of a carbon atom, which is called a methyl group, down a chain of chemical reactions until it ultimately produces glutathione. This process also makes cysteine.
- Glutathione is produced through methylation. It is a powerful antioxidant and the body's most powerful detoxifier. Many of the ASD kids are low in glutathione, which can explain why they have so much trouble detoxing vaccines, medications, environmental toxins, toxins in food, and also have trouble fighting infections and diseases.

Source: McCarthy and Kartzel, pgs. 207 to 209

Note #1: Poor methylation can run in families and also a factor with schizophrenia, depression, bipolar disease, dementia, alcoholism and other diseases.

Note #2: It can be tested.

Appendix: Nutritional Issues in Autism (Pangborn – pgs. 210 – 290)

- Basic Guidelines:
 - One, do the testing
 - Two, clean up the diet, especially with gluten free and casein free diet. A number of these children do better on the specific carbohydrate diet.
- General Rules:
 - Start with a low dose
 - Discontinue supplement if there are adverse reactions
 - Introduce one supplement at a time
 - Keep records, on dosage, brand and what is successful and what is not

Appendix: Addendum Information on Nutrition for the Autism Spectrum Disorder

- Amino acids cannot be properly process when Vitamin B nutrients are inadequate (pg. 213 – Pangborn)
- For those suffering from the ASD, some of the nutrients may be needed at higher levels to enable the metabolic process to take place. An example includes vitamin B6 and B12, (pg. 214 – Pangborn)
- Generally, begin with a low dose and document results (both in behavior and physical changes) Keep records of these changes and see what works and what doesn't. It is also important to obtain supplements from sources that know what sources to use. (pg. 214 - Pangborn)
- Introduce one supplement, one at a time.
- Need the services and oversight of a health care provider knowledgeable about the autism protocol. Some nutrients can also make it worse. (pg. 214 – Pangborn)

Appendix: Other Treatments – Hyperbaric Oxygen Therapy

- A hyperbaric chamber is a closed container and the child (sitting or lying down with a parent) receives additional oxygen.
- It brings additional oxygen to the brain cells.
- It helps the immune system, and increases the immune system cells to go after the bad bacteria. Inflammation goes down.
- Low grade infections from viruses and bacteria are common in these children.
- Improvement in their sleep is seen and the child is calmer.
- Generally, there are fewer seizures (they are careful to make sure that seizures don't get worse.)

Source: McCarthy and Kartzin, pg. 234-6

Appendix: Addendum Information on Nutrition for the Autism Spectrum Disorder

- Amino acids are used to construct enzymes, antibodies, immunoglobins, hormones as well as help operate the detoxification biochemistry.
- Multi-vitamin and mineral supplement are best taken at breakfast. (pg. 259 – Pangborn)
- Probiotics – it is recommended the refrigerated ones are better. What can they do? They pre-digest food molecules and synthesize some vitamins.
- Protein maldigestion can be assessed and diagnosed by the amino acid analysis. Amino acid supplementation should wait until gut issues have been addressed and resolved. (pg. 285 – Pangborn)
- Undigested food promotes dysbiosis. (pg. 260 – Pangborn)

Type Nutrient	Name of Nutrient	Role of Nutrient
Amino Acid	Taurine	Needed for formation of bile salts. It helps balance glutamate and GABA levels. It can also balance the electrolytes in the heart. Taurine is needed along with other substances for fat absorption.
Amino Acid	Trimethylglycine	Trimethylglycine (TMG) helps the body to use taurine. Start with a low dose.
Enzyme	Lipase	Lipase is an enzyme that helps digest fats and is needed along with taurine and glycine (both amino acids).
Essential Fatty Acids	DHA	DHA helps with cell membranes, correct receptor function, and interaction with lipid hormones like estrogen, progesterone, and angiotension.
Hormone	Melatonin	Melatonin is a type of hormone and it helps with sleep. It helps 85% of those with autism. It is made by methylation from serotonin. Melatonin in abdominal tissues influences gastrointestinal functions, increases the movement of food mass in the gastrointestinal tract.
Mineral	Calcium	There are different types of calcium. Some are better than others.
Mineral	Magnesium	Magnesium is best taken with vitamin B6. Magnesium chloride or magnesium sulfate is more absorbable.
Mineral	Zinc	Zinc plays a number of roles. Zinc deficiency appears to be common in children with autism. A lack of zinc affects taste.

Listing of Nutrients

Source:
Pangborn,
Pages 214-285

Listing of
Nutrients

Source:
Pangborn,
Pages 214-
285

Type Nutrient	Name of Nutrient	Role of Nutrient
Other	Bile Salts	Bile salts are needed for absorption of fats.
Other	Creatine	Creatine is needed for cellular communication processes. Hypotonia, low muscle mass, is consistent with low creatine.
Probiotics	Saccharomyces boulardil	It is often found with probiotic supplements. It can kill yeast like candida. Die-off reactions can occur with this probiotic. If this occurs, take activated charcoal.
Vitamin	Vitamin B 6	It is found in salmon, herring, liver, meats brown rice, and vegetables. Autistics may need 10 times more vitamin B6 than the average person. Those with carpal tunnel issues may need 50 to 200 mg of B6 a day (don't go above 500 mg a day).
Vitamin	Vitamin B12	A vitamin B12 deficiency can cause pernicious anemia. It exists in several forms. B12 injections seem to work more effectively.
Vitamin	Vitamin C	Much of vitamin C is derived from corn, which can be a problem for gluten sensitive individuals.
Vitamin	Vitamin D	Vitamin D helps with the assimilation of calcium

Appendix: Resources

- A list of all vaccines and their ingredients:
 - www.cdc.gov/vaccines/vac-gen/additives.htm
- Advocacy Group for Autism:
 - <https://www.autismspeaks.org/>
 - <https://www.autism.org/> (Autism Research Institute)
- Advocacy Organization on Children's Issues:
 - ChildrensHealthDefense.org
- Amount of thimerosal and/or mercury that is in all the vaccines (pediatric and adult)
 - www.fda.gov/cber/vaccine/Thimerosal.htm#3
- Autism Research Institute (in San Diego, California)
 - <https://www.autism.org>
- Clinicians that treat individuals with autism:
 - www.autismwebsite.com/practitioners/us_lc.htm
- Organization that addresses medical kidnapping issues:
 - <https://medicalkidnap.com/>

Appendix: Testing

Testing Methylation and Glutathione

- Genova Diagnostec
- LabCorp
- Methylenetrahydrofolate Reductase (MTHFR) Thermolabile Variant, DNA Analysis (test number 511238) (McCarthy and Kartzinel, pg. 213)
- Vitamin Diagnostic
- (Benefits 2/3s of ASD children)

Source: (McCarthy & Kartzinel, pg. 229)

Testing for Poop Issues

- Stool for blood
- Stool for c. diff toxins, a toxin from a bacteria names clostridium difficile
- Stool for culture and sensitivity (bacterial)
- Stool for fungal (yeast)
- Stool for ova and parasites
- Stool for quantitative fecal fat (how much fat is in stool)
- Stool for reducing substances (sugars in stool)
- Stool for white blood cells (WBCs)

Appendix: Testing continued

Testing for Yeast Issues

- Stool cultures: Genova Diagnostics (www.genovadiagnostics.com) or Doctors Data
- Urine Organic Acid: The Great Plains Lab (www.greatplainslaboratory.com)

Testing for Allergies, esp. Food

- Alletess Medical Laboratory (www.foodallergy.com)
- Immunolabs (www.immunolabs.com)
- LabCorp (www.labcorp.com)
- Quest Diagnostics (www.questdiagnostics.com)

Appendix: Testing (from Autism Research Institute) (Pangborn pgs 189-209)

Priority	Name of Test	Purpose and Notes
One	Blood Chemistry and CBC Analysis	A basic test that provides some physiological makers
Two	Stool Analysis	<p>It can show evidence of maldigestion, dysbiosis, and metabolic problems in the GI tract. Low chymotrypsin indicates pancreatic issues.</p> <p>Undigested meat and vegetable fibers show maldigestion. High fats show the need for lipase enzyme support.</p>
Three	Intestinal Permeability	Checks to see if substances like food and toxins are leaking out of the intestines into the blood stream.
Four	Ammonia	A blood test that measures ammonia. Excess ammonia can be a factor in headaches, irritability, tiredness, slurred speech, and diarrhea. It can also cause neuronal damage and loss in IQ and cognitive abilities.
Five	Food Allergy Tests	Food problems common in autistics. IgE shows immediate reactions and IgG is involved in delayed reactions.
Six	Urinary Peptide Measurements	It can show problems with dietary dipeptides anserine and carnosine, detoxified indolylacrylic acid, and exorphin peptides. (pg 193)

Appendix: Testing (from Autism Research Institute) continued (Pangborn pgs 189-209)

Priority	Name of Test	Purpose and Notes
Seven	Amino Acid Analysis	A number of reasons for this testing. It basically assessed dietary protein levels, maldigestion and malabsorption, assess folate, B6, and B12 levels/function, check magnesium, excessive yeast, and dysbiosis.
Eight	Organic Acid Analysis	Checks amino acids without nitrogen
Nine	Fatty Acid Analysis	Fatty acids play an important role and component of the cellular membranes, and assist with the transmission of messages between cells. It is found to be depressed in those with autism.
Ten	Element Analysis and Metallothionein	Measures the amount of phosphorous, mercury, arsenic, and antimony. It can measure these levels within cells, especially with magnesium. Hair analysis tests are not an accurate measurement of magnesium.
Eleven	Immune Testing	Immune cells are often found to be off balance in autism and additional testing is available.
Twelve	Genetic Testing	Genetic testing is the last one on this list, as the environment (food, air, water) plays a more important role.

2000	1992	6	6.7 (4.5-9.9)	1 in 150
2002	1994	14	6.6 (3.3-10.6)	1 in 150
2004	1996	8	8.0 (4.6-9.8)	1 in 125
2006	1998	11	9.0 (4.2-12.1)	1 in 110
2008	2000	14	11.3 (4.8-21.2)	1 in 88
2010	2002	11	14.7 (5.7-21.9)	1 in 68
2012	2004	11	14.5 (8.2-24.6)	1 in 69
2014	2006	11	16.8 (13.1-29.3)	1 in 59
2016	2008	11	18.5 (18.0-19.1)	1 in 54
2018	2010	11	23.0 (16.5-38.9)	1 in 44

Appendix: Statistics from the CDC, the number of children coming down with the autism spectrum disorder

Source:
<https://www.cdc.gov/ncbddd/autism/data.html>

Appendix: Vaccines Issues

- When it comes to vaccines, what we need to be concerned are the ingredients in these vaccines. There is a total of 23 ingredients found in vaccines. Three types of these ingredients are:
 - Adjuvants
 - Preservatives
 - Stabilizers
- Some of problem additives in vaccines are:
 - Mercury – As thimerosal was removed from vaccines, it was replaced by aluminum.
 - Aluminum – It can induce the production of IgE antibodies.

Source: McCarthy and Kartzinel, pg. 115

Conclusion

- In addressing the autism spectrum disorder, this is far from being a simple health condition. It affects multiple systems starting with digestion and detoxification. It helps to have the right type of testing, along with dietary changes and nutritional supplementation (from sources that know what they are doing).
- This problem is more common among the boys than the girls. Though, remember, girls can also come down with autism.
- There are physicians that can identify individuals who show evidence of harm from vaccinations.
- The issue of medical kidnappings when government officials remove children from their families because the families don't support vaccinations also warrants our concern. What happens if the child is forcibly vaccinated and develops autism? Are these public health officials being held accountable? Once a child has an official diagnosis of autism, no further vaccines should be allowed. Will our current health care system cover the protocols covered in this presentation?

Conclusion continued

- This is a health issue that warrants national attention. It also suggests very strongly on how the mandatory vaccinations can be extremely dangerous to this subgroup of children (and adults) with certain biological factors. When one in 44 children are being diagnosed with autism, this is a major public health problem as well as a major problem for public education. Both the CDC and legislators on all levels of government need to pay attention to this growing health problem. The numbers keep going up, the number of children being diagnosed with autism. It is a major problem for public education, when more of these students require special education services.
- Another question is how does our current health care system treat autism? Will there be coverage for nutraceuticals and as well as specialized testing?
- Questions arise about the relationship between BIG PHARMA which makes many of these vaccines and the CDC? When BIG PHARMA helps fund political campaigns for people running for public office, this represents conflict of interest issues.

Conclusion continued

- A seven minute office visit will not address the issues underlying the autism spectrum disorder. When Ritalin is prescribed, this doesn't address underlying issues addressing the child's biochemical status.
- A number of children have recovered from autism, with attention paid to their nutritional status, diet, and their environment, after receiving the appropriate biochemical testing.
- As more children have been diagnosed with autism, this has spurred a tremendous amount of effort into medical research. It is increasing our understanding of how our bodies function. What role can this research play in anti-aging medicine and other health issues?
- It is three factors that play a role in autism. They are:
 - One, environmental assault in the form of toxic substances
 - Two, role of nutritional status
 - Three, the ability to detoxify toxic substances