



# Health Hunters

## Newsletter

A service of the Riordan Clinic, cofounded in 1975 by Olive W. Garvey and Hugh D. Riordan. The Riordan Clinic is a not-for-profit 501(c)(3) corporation. Go to [www.riordanclinic.org](http://www.riordanclinic.org) to make your tax deductible donation today or visit us at 3100 N. Hillside, Wichita, KS 67219.



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## Child Disorders: A Deeper Perspective of ADD/ADHD

by Jennifer Kaumeyer, ND

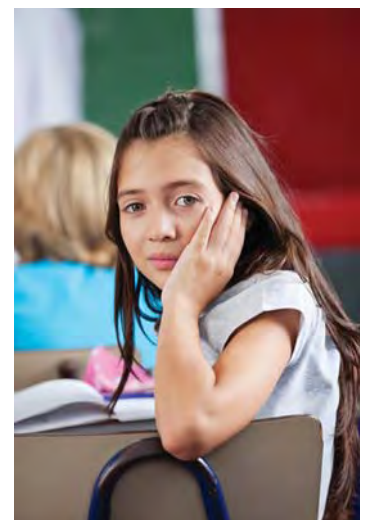
If you look at the research, currently the cause of ADHD is “unknown.” Many articles you will read overly express that it is a chemical imbalance and that it is NOT caused by “bad” parenting. I don’t believe it is caused by “bad” parenting either as the cause goes much deeper than that. I believe these sources stress this point mainly because they want to promote drug therapies and because we Americans never want to believe any of our bad experiences are ever our fault. That’s natural!



What parent really wants to think they may have played a role in creating this problem in their child? Pointing fingers and placing blame sure isn’t going to help the issue. So if ADHD/ADD is a chemical imbalance, then the question is, “What causes the imbalance?” I hardly think the cause is unknown. Dr. Hugh Riordan once said, “Once you know it is impossible to not know, you are changed forever.” We know the cause; we just choose to ignore it because it is easier than making changes. I am a victim of

this myself. So what is the cause? There is not one cause of course, but I will say most of the contributing factors do revolve around the issue of modern life and technology and how our society has created an environment where children cannot thrive. Why have we done this?

The conclusion of many research trials points to the child’s environment as being a contributing cause to the ADHD symptoms. I completely agree with this. Genetics may make one more susceptible, but it’s the “toxic” environment that leads to the chemical imbalance and behavioral problems in children. The problem that we Americans have is not quite understanding what a toxic environment is because “toxic” has become the norm. So unless we start thinking more deeply and take a step back to look at the big picture, this epidemic will continue (along with the current epidemic of cancer and autoimmunity). This isn’t an article of blame or rant but rather one to spark some thinking amongst us all, so hopefully “we the people” who have let this world become toxic will also begin to make the changes toward health, even if it’s one individual at a time.



I had an epiphany about four years ago one afternoon while I was home folding laundry. My four month old son, Lincoln, was playing in an “exersaucer” I had bought to both contain  
*Child Disorders: A Deeper Perspective of ADD/ADHD continues on page 2...*



## Letter from the Editor:

Childhood is a time of playing, learning, socializing, and exploring mixed with feelings of happiness, wonder, angst, and resilience. Early child development plays an active role in all of these areas. When there is a breakdown in either social and communication development or self control the picture of what is considered a typical childhood is altered.

Two such disorders, autism and attention deficit hyperactivity disorder (ADHD) seem to be sharing the national spotlight of serious early developmental disorders.

Just looking at both disorders it would appear that they are very different. However, beyond the surface, the picture grows more complex and interesting. This issue of the *Health Hunters Newsletter* dives deeper into the intricacies of the two disorders and offers natural suggestions for treatment.

Thank you for reading our newsletter!

**Amanda Hawkinson**  
Editor

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*Note: For more information on the connection between ADHD and Autism you can visit the [Simons Foundation Autism Research Initiative website](#).*

and entertain him. I thought the exersaucer was pretty cool with all the buttons, noise makers, and flashing lights. I remember, so clearly, sitting there listening to it talk and all the noise it was making. As time passed, I recall becoming so agitated by it; it was loud, annoying and far from being peaceful. I couldn't focus or concentrate on anything while that toy was making noise. At that moment a light bulb went off in my head. If that toy is bothering me, how is my poor son handling that chaos? If it is a stress to me, it has to be a stress to his little body. I thought to myself, he just came from my womb, a very peaceful environment, and now I'm surrounding him with toys that produce unnatural flashing lights, bright colors, multiple languages and loud music. That toy went from "cool" to "corrupt" very quickly. After that day I went out and bought the old fashioned tinker toys for my little Linc. No more obnoxious, stress producing toys for my son.



These new computerized, fancy toys are marketed as if they will help with brain development and make our kids smarter than Einstein, but they are actually hindering their development by creating stress responses in the body, very similar to the one I was experiencing. Hands and feet are enough entertainment for babies.

While these toys can be helpful to parents, I think too often we begin to rely on modern technology and we use it out of balance. Unfortunately, for many children, these toys become babysitters. And while yes, the parent lets that happen, it's our society and our culture that puts so many demands on the parent, and the parent just cannot do "it all."

During these early years of brain development, I believe that nature is not flawed when it comes to the growth of the brain. Of course there are random mistakes nature will make, but they will never be an epidemic—only human influence will cause these. The following are some potential causes of ADHD, and when reversed or avoided they have been shown to decrease the symptoms of the disorder. As you read through them, think about how our society has created this epidemic in our children, not directly but through a domino effect of events. "It takes a village to raise a child," according to an old African proverb. If this is true, then that means our village is responsible for the health of our children; if our children are sick, then the health of the village needs to be examined.



### Dietary Interventions

First of all, there is the issue of breast-feeding. Numerous studies reveal "partial protection" against the development of ADHD if breast-fed. There is no ONE cause of ADHD; the cause is a combination of factors thru an accumulation of events. So if ANY protection is shown through research, then I would most certainly put a lot of weight on that finding. Let's all encourage the natural act of breast-feeding and not be so squeamish about it.

Nutrient deficiencies have been documented to be a factor for ADHD, especially calcium and magnesium. Please note that it is very difficult for our bodies to absorb calcium from homogenized milk, and most kids do not eat the other high calcium / magnesium foods such as almonds, avocados, kale, spinach, and bean sprouts. Did you know a half a cup of almonds or a cup of cooked turnip greens has as much calcium and is a more

bioavailable form than milk? There are plenty of other deficiencies experienced by children due to lack of nutrient intake as well as depletion. Our bodies use up nutrients during stress, which is increased due to our toxic environment.

### Toxic Environmental Chemicals

Our babies' poor livers are in overdrive detoxing all of the chemicals that they are exposed to in our daily environments. These exposures begin in the hospital, especially in babies born by C-section



# Patient Profile: Child Disorders-Autism

by Chris Brannon, RN

For most people, verbal communication and social interaction are tools used in their everyday lives. If you were not able to be effective with these abilities, what would you do? How would you communicate? Autism is a diagnosis that incorporates these challenges.

During an initial patient visit in 2012, a parent brought her child to the Riordan Clinic for another opinion for a previously prescribed treatment. Utilizing a physical exam and evaluation of labs and past treatments, a plan was devised. The patient was started on glutathione, methyl b12, zinc, and was scheduled for specialized chiropractic care. Within the course of 2 months the patient returned to the clinic with reports of improved behavior, compliance, sleeping patterns, and OCD being non-prevalent.

With the help of these supplements the body was able to detoxify the liver (toxicity is thought to be a cause of autism) and start this patient on the road to improvement. The parents were astonished with the child's new ability of saying the mother's name! What an incredible success story.

To find out more about how our medical team can help you or to make an appointment, call **316-682-3100** and start your journey to better health.



whose first contact with our world is sterile gloves and whom do not receive all the great "probiotics" from the birthing canal. Babies are placed to rest in cute pajamas and on top of mattresses that are coated in flame retardants—all known to be carcinogenic. In 2004, I was unable to purchase a crib mattress without these chemicals unless ordered from outside of the United States. Thankfully, that has changed. I still don't feel that the benefits outweigh the potential dangers with those chemicals—maybe this is a factor in "crib death" as well. Environmental chemicals cause oxidative damage in our

nervous system. Combine that with nutritional deficiency and it's a disaster waiting to happen. I understand we cannot remove all toxic chemicals from our daily lives. I certainly don't want anyone to become overly obsessive, because obsession and addiction will cause their own damages within the body. However, you can start removing the toxins over which you have control.

First are the chemicals in our **food**. There are thousands of food additives used in foods we eat. Try to at least avoid the top 14 I mention in my lecture, "The Danger of Food Additives." (Watch it from our archived lectures on our website or on our Youtube channel.) Also eat organic when available and affordable to avoid possible pesticides, animal growth hormones or antibiotics.

Next, take a look around your environment; notice all the unnecessary chemicals we bring into the home. Again, don't blame yourself after the fact, as blame is never helpful. Instead, choose to open your mind and realize you are a product of our society as well. Choose to make changes; the small changes will trickle down and create real lasting change and improvements in our world. A few common **household items** that are toxic are: Lysol, bleach, other synthetic cleaning products, air fresheners, hair spray, candles, volatile organic compounds (VOCs—found in paint), glues from new carpet, synthetic construction furniture (emit formaldehyde and other fumes), mold, perfume, pesticides, and perfluorinated chemicals (chemical used in microwave popcorn bags to keep oil from seeping through the bag. I advise to pop corn on the stove in a pot with butter or coconut oil. Kids LOVE to watch it pop and the best part—it's CHEAP!).

Be mindful of what you put on your (and your children's) skin. My 8-year-old said she is forced to use hand sanitizer at school. Hand sanitizer is wonderful when soap and water are not available. It's great when I was changing a dirty diaper and had NO access to soap and water, but it is important for schools to teach kids to wash their hands. Hand sanitizer is toxic with repeated usage. Our skin is the largest organ in the body—many people forget this. The skin acts as protection, thermoregulation, immune surveillance, and plays a huge role in the body's excretory system that keeps the stability of the body's internal environment. The last thing



we want to do is put chemicals on our skin, clog the excretory glands and prevent proper detoxification in the body. So avoiding chemicals in **skin care** products or avoiding skin care products all together would be a beneficial change to our overall health and may decrease the symptoms of ADHD. My patients sometimes don't believe me when I say I don't use any skin care products on a daily basis, except mineral powder. The key to good skin health is to address issues of the skin from the inside out, as well as cleaning up the environment. Start by avoiding the parabens, dyes, isopropyl alcohol, propylene glycol (active component in antifreeze—an aside: this is also in many items in the grocery store, especially the sweets and foods marketed to "diabetics"), mineral oil (petroleum), DEA/MEA/TEA, and fragrances in skin care products. Also note the products marketed as "fragrance free" are even more toxic—you will see laundry

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# Marie's Cafe And Bakery

at the Riordan Clinic

**Cafe Hours** 9:00 am – 3:00 pm M–F  
**Bakery Hours** 9:00 am – 3:30 pm M–F  
(Located on the lower level of the Riordan Clinic Supplement Store)

There are a couple different theories as to why children with autism can benefit from a gluten free diet. A gluten free/ casein free diet is one of many alternative treatments for children with autism.

At Marie's Cafe and Bakery we are always looking to aid our customers with their healthy dietary needs to help improve any disease or situation. According to the article, *Research update: Survey analysis of gluten and casein free diet in ASD population*, "The authors of the study concluded that parents who were the most rigorous in administering a GF/CF diet to their children are more likely to report improvements in health and ASD and social behaviors."

This month, Marie continues her fight for a healthy America. Join Marie at the Riordan Clinic for a Kid's Lunch Special:

## Lunch Special

### Kid's Lunch Special

Garden Salad with Chicken or Turkey, Fruit, and Iced Tea

**\$3.94**

Offer valid through August 31, 2013. Not valid with any other offer. Excludes tax and gratuity.

**"Caring for the whole person has always been our focus."**—Marie Hunt, Owner

Please visit our website for more information. [mariescafeandbakery.com](http://mariescafeandbakery.com)

3100 N. Hillside,  
Wichita, KS 67219  
316-927-4780 office  
316-927-4781  
dining room



detergent, baby wipes, etc. that are fragrance free. This may be overwhelming, but please rest assured that these are easily avoidable. In fact, you can make your own products and save a lot of money—this goes for the home care products as well.

### More Time in Nature

Babies and children, as well as adults, need to be in nature. Kids need to play outside and sometimes even take their shoes off and run through the grass.



Encourage your child to play outdoors as much as possible. Yes of course it is fun, but it is not just the psychological benefits that help the nervous system but rather the exposure to the Earth's electromagnetic waves that are very healing.

There are several studies that show less ADHD symptoms in children with adequate "green" exposure. The exact mechanism hasn't been fully understood, but I believe the findings are enough in themselves to start promoting more time with nature in our children's lives.

A big culprit in keeping our kids indoors... TV. We know that time spent in front of the TV at a young age increases the risk of ADHD in children. But, is it the time in front of the TV or the actual content and the visual tactics used in the children's television programs? For instance, Sesame Street uses rapid scene changes to capture the attention of the child. This can have deleterious effects on brain chemistry. The overstimulation can throw off the balance of the body's catecholamine system, the same system responsible for communication between nerves—the dopamine and norepinephrine of which you may have heard. The sad part is that a lot of research went into developing these programs for kids to capture their attention and keep it. The problem with these very skillful tactics is that chronic exposure makes the real world become slow and boring in comparison. We are training our kids' brains to expect that level of input in real life, and when it doesn't happen, the child becomes easily bored and inattentive. Combined with other toxicities and lack of nutrition, it's a disaster waiting to happen. I can't believe I sat my child in front of the "Baby Einstein" movies when she was a baby, but I didn't know then what I know now. You see, I am a victim of this as well.

### Emotional Wellness

No one has a perfect childhood, and even in "good" families, children may need help and direction with proper coping and healing skills. If parents are still dealing with their own baggage and emotional hang-ups (as most of us are), the child may benefit from an outsider helping him/her learn how to properly communicate emotional pain. In the best of families I often see a lack of emotional support for a number of reasons. Even a one-time event can create an intense emotional blockage that can live within them and later manifest as other disorders. This is crucial to the child's future neurological health, especially in preventing the ADHD symptoms from progressing further into anxiety and panic disorders.



The purpose of this article is to stimulate your mind and get you thinking. There are countless books and articles that discuss the treatment of ADHD without drugs and go into much more detail than I have in this article. I don't want to talk negatively about drug therapy, because in all honesty, the drugs do help with some of the symptoms. However, placing our kids on drugs will not fix the problem. In fact, the problem will still be there. If we do not treat the underlying causes, we are doing not only the child a disservice but the rest of our community and the world as a whole. Start with small changes and stick with them. It takes time to see an impact, but the results will be worth it.



# Riordan Clinic Research Institute

Attention deficit hyperactivity disorder (ADHD) affects approximately two million American children, and this condition has grown to become the most commonly diagnosed behavioral disorder of childhood. The cause of ADHD is generally acknowledged to be multifactorial, involving both biological and environmental influence.

Nutritional deficiencies, including deficiencies in fatty acids (EPA, DHA), the amino acid methionine, and the trace minerals zinc and selenium, have been shown to influence neuronal function and produce defects in neuronal plasticity, as well as impact behavior in children with attention deficit hyperactivity disorder. These nutritional disturbances or variations from reference values have been associated with behavior typical of ADHD.

Earlier this year, the Riordan Clinic Research Institute published a study that shows that a combination of these key nutrients (mentioned above) plus probiotics reduced stress and emotional problems in those with attention deficit hyperactivity disorder (ADHD).

The article, entitled "Metabolic correction for attention deficit/hyperactivity disorder: A biochemical-physiological therapeutic approach," can be viewed in its entirety on the Riordan Clinic website at [www.riordanclinic.org](http://www.riordanclinic.org).



## Check Your Health

**Do you know your nutrient levels?  
Are you taking the right supplements?**

Find out at Riordan Clinic's Semi-Annual  
Special Laboratory Testing Event and Supplement Sale  
**September 16 – 20, 2013**

**Save 45%**  
on our testing panels  
for a limited time only

**Save 25%**  
on all supplements  
on-line or in the  
supplement store

**SPECIAL  
OFFER**

**Save 55%**  
for you & a friend

Bring a friend (who has never participated in our event) and you BOTH save 55% off your panels. (Additional discount only applies if both parties complete a panel.)



**Call NOW to schedule  
your appointment.**  
**316-682-3100 or 1-800-447-7276**  
For more information, visit  
**[www.riordanclinic.org](http://www.riordanclinic.org)**



## Did you know?

### Hyperbaric Oxygen Therapy for Autism

The term "hyperbaric" literally translates to "increase pressure." It is a treatment modality that works by putting the patient in a special room and increasing the pressure of the gas around them and the gas that they are breathing. This increased pressure can actually signal the DNA in our cells to perform healing tasks that the body normally can't do. Hyperbaric Oxygen Therapy increases

oxygen levels in the tissues; enhancing neuron and brain cell repair processes, which are dependent on higher levels of oxygen as well as various nutrients. This therapy could help reverse brain damage by reviving the cells in the brain.

**We offer Hyperbaric Oxygen Therapy at the Riordan Clinic. Call 316-682-3100 or email [information@riordanclinic.org](mailto:information@riordanclinic.org) to find out more.**

# Invest in the Vision

# Complementary and Alternative Medicines for Autism

by Laurie S Roth Donnell, Master Herbalist and Holistic Health Practitioner

## Art "feeds the soul!"

The June *Health Hunters Newsletter* told you of our plans to upgrade the look and feel of the Dome interiors with more comfortable and welcoming furnishings in waiting areas. We are excited that we will also be showcasing Kansas artists whose work will hang in the Supplement Store, Clinic, and the Panorama Room. The project may expand to additional areas in the future. The artwork will add color to the interiors and is for sale. The Clinic will receive a portion of each sale, with the funds to be used for the Clinic's professional and public education efforts.

Different artists will be showcased every two months. Two of our current artists are:

- *Wil Fathi whose work hangs in the Panorama Room (where we host our Lunch & Lectures). The series of five paintings are done on plexiglass, with 30 or more layers on each to create an illusion of texture. Wil has a master's of fine arts degree from Wichita State University and teaches at both City Arts and Artist Central in Wichita.*
- *Lindy Wiese's acrylic landscapes are on display in Dome 1 and are characterized by using a pallet knife to bring out depth and color combinations. Lindy started painting ten years ago and has both a master's degree in counseling and a specialist's degree in education from Wichita State University. She has her studio at Artist Central in Wichita.*

We are grateful to Jo Zakas of Artist Central for her help in making this opportunity available for the enjoyment of co-learners and visitors to the Riordan Clinic. Stop in, take a look and let us know if you would like to make a purchase for your home or office.



If you have questions, contact  
Paula Smith at the Riordan Clinic at  
316-682-3100 or at  
psmith@riordanclinic.org.

Autism spectrum disorder (ASD) and autism are both general terms for a group of complex disorders of brain development noted in early childhood development. These symptoms are displayed in varying degrees, by difficulties with social interaction, verbal or nonverbal communication and the child engaging in repetitive behaviors. Numerous subtypes are merged into one umbrella diagnosis of ASD. There are numerous complementary and alternative medicines (CAM), commonly referred to as integrative medicine, providing natural approaches to many families caring for an autistic child.



Research suggests that between 30 and 95 percent of children with autism spectrum disorder (ASD) have been provided with complementary or alternative medical treatment. It is widely accepted that autism cannot be cured; therefore, many parents seek out alternative and complementary therapies. Below are several complementary and alternative therapies commonly recommended and readily available in today's market.

### Melatonin:

More than half of all children with autism spectrum disorder (ASD) struggle with sleep disorders through adolescence and adulthood. Melatonin is a naturally occurring hormone that helps regulate the sleep-wake cycle. Supplements have been found to improve sleep and reduce insomnia in children with autism in research studies funded by Autism Speaks. Vanderbilt University Medical School researcher Beth Malow, M.D., M.S., demonstrated in a pilot study that a nightly dose of melatonin helps children with autism and insomnia fall asleep. Twenty-four children, ages 3 to 9, completed the 14-week experimental treatment and required varied doses to fall asleep. Yet in all cases, a nightly regimen of melatonin (1 – 6 mg) helped with sleep onset within one week, it generally continued for the duration of the study. There were no significant side effects reported or observed by the participants.

Parents reported improvements in their children's daytime behavior and stress reduction. Melatonin can also reduce the symptoms of depression and vitamin D will assist to normalize sleep patterns—15 minutes of sun exposure/day is recommended.



### Omega-3 Fatty Acids:

Fatty acids are essential for the development and function of the brain. Several small studies have suggested that omega-3 fatty acid supplements may reduce autism-related symptoms such as repetitive behavior and hyperactivity, as well as improve socialization.

A 2011 study by Autism Speaks enrolled 27 children, ages 3 to 8, diagnosed with ASD and hyperactivity. Some of the children were given 1.3 grams of omega-3 fatty acids each day, disguised in a pudding cup. The other children received the pudding without the supplement. Over the course of 12 weeks, those who

Complementary and Alternative Medicine for Autism continues on page 7...



# Supplement Special

## 20% off

all Child Disorder (Autism, ADD/ADHD) Aids

received omega-3 fatty acids showed significantly greater improvements on validated measure of reduced hyperactivity (an improvement of 2.7 vs. 0.3 points on the Aberrant Behavior Checklist).



Sources of omega 3's: flax seeds, cloves, walnuts, oregano, Chinook salmon, cauliflower, scallops, mustard, cabbage, lettuce, broccoli, Brussels sprouts, squash, halibut, collard greens, spinach, kale, soybeans, shrimp, cod, strawberries, string beans, snapper, and tuna. Nutrition and whole foods play a key role everyone's health, but supplements are also a great alternative.

received omega-3 fatty acids showed significantly greater improvements on validated measure of reduced hyperactivity (an improvement of 2.7 vs. 0.3 points on the Aberrant Behavior Checklist).

### Vitamin Methyl B12:

A final popular CAM treatment involves injections of the vitamin methyl B12 and must be administered by your primary care physician or specialist. They suggest that this vitamin injection protects against oxidative stress (signs of which have been found in some children with autism). Dr. Hendren conducted a small study at UCSF, which associated the vitamin B12 treatment with improved social behaviors, language, and communication in 25 to 35 percent of participants.

As always, when seeking care, answers and remedies for a child that displays autistic behavior, consult your primary care physician regarding all treatments.

Contact the Author: Laurie S Roth-Donnell | [lauriedonnell@hotmail.com](mailto:lauriedonnell@hotmail.com)

### SOURCES:

[Journal of Autism and Developmental Disorders](#)  
[www.ucsf.edu](http://www.ucsf.edu)  
[www.ncbi.nlm.nih.gov/pubmed/21160435](http://www.ncbi.nlm.nih.gov/pubmed/21160435)

### Alms Bio:

Omega Therapy Vegan Blueberry Tart  
VOmegaVega  
Reg \$28.00 **SALE \$22.40**

Omega Therapy Plus Key Lime Pie  
VOmegaLime  
Reg \$29.00 **SALE \$23.20**

Omega Therapy Peach Cobbler  
VOmegaPeach  
Reg \$27.00 **SALE \$21.60**

### Readisorb:

Liposomal Glutathion  
VGlutDrink  
Reg \$50.40 **SALE \$40.32**

### Integrative Therapeutics:

Rhizinate (German Chocolate)  
VRhizChoco  
Reg \$12.50 **SALE \$10.00**

Rhizinate (SugarFree) - VRhiz  
Reg \$12.50 **SALE \$10.00**

### Klaire Probiotics:

Infant Formula Powder - Vlnfant  
Reg \$27.67 **SALE \$22.14**

Ther-Biotic Complete  
VTherBioLg  
Reg \$71.40 **SALE \$57.12**

### Biogenesis Nutraceuticals:

UltraLean Nutritional Beverage:  
Chocolate - VULeanCho  
Reg \$40.00 **SALE \$32.00**

Strawberry Banana- VULeanStrB  
Reg \$40.00 **SALE \$32.00**

Vanilla - VULeanVa  
Reg \$40.00 **SALE \$32.00**

It is important to know the purpose of your supplements. Before starting any supplement regimen consult your physician.



These prices are valid 8/1 - 8/31, 2013

# Autism Spectrum Disorders: The Brain Connection

by Anne Zauderer, DC

If you were to profile two children who were diagnosed with "autism," chances are each case would look very different. Some children with autism are verbal, others are not. Some have hyperactivity or obsessive compulsive tendencies, others do not. What is it that makes this condition appear similar, yet so different in children? All of the conditions on the autism spectrum have one similarity: functionally the child's brain is not operating correctly. It would be like having all of the appropriate hardware to run a computer, yet not all of the software has been downloaded correctly.

The brain is the only organ not fully formed at birth. Children are born with only about 25% of their total brain volume. (Otherwise babies wouldn't fit out of the birth canal!) Most of that volume is made up of neurons, which are the cells that make up our brain. As babies start to grow and learn new skills, they are not forming new neurons ... they are making connections between their existing neurons! This is known as neuroplasticity. This phenomenon is what allows us to constantly learn new skills throughout our lifetime. However, in the early stages



of development, babies are in hyper-drive as far as developing connections in their brains. Children will develop 90% of the connections between the two hemispheres of their brain by the age of 5. This is an extremely important time, developmentally, and the most important time to be vigilant in providing the proper diet and nutrition, stimulation, and activity, as well as avoiding toxins for children.

So what happens if the brain doesn't connect correctly? The connections our brain makes are

*Autism Spectrum Disorders: The Brain Connection continues on page 8...*

# Know Your Nutrients: Liposomal Glutathione

By Amanda Hawkinson

## What is Glutathione?

A naturally occurring protein (peptide), glutathione is made up of glycine, glutamine and cysteine. These amino acids act as an antioxidant and help with the body's detoxification functions and are essential for neurological functioning. Labeled a "key antioxidant" because of its anti-inflammatory properties, glutathione helps prevent oxidative stress.

## Why take Glutathione?

We have all heard of oxidation. This chemical mechanism is what causes rust in the outside world. Inside the body, it is referred to as oxidative stress because it causes damage to proteins that are essential for properly functioning cells and membranes. According to Redisorb (the manufacturer of our Liposomal Glutathione at the Riordan Clinic), "Oxidative stress refers to toxins produced inside the body (free radicals) and those from without, which are often caused by the environment (air pollution, heavy metals, cigarette smoke, radiation, drugs). Glutathione plays a critical role in defending cells against this oxidative stress. Therefore, a deficiency of glutathione plays a key role in aging and many disease states."

## Why Liposomal Glutathione?

The unique structure of liposomes helps to keep glutathione in its biologically active state. Whereas nutrients that are not in liposomes have to pass through the body's digestive system to be metabolized and then released into the bloodstream (with this method many nutrients are destroyed or compromised by stomach acid, which means the body does not get much of the nutrients it needed, if any at all), the liposomes offer a rapid release into the blood stream because of their ability to penetrate mucosal tissue.

Source: [www.redisorb.com](http://www.redisorb.com)

## Liposomal Glutathione Ingredients

(NO Alcohol), Reduced L-glutathione, Purified water

**Lecithin**—The liposomes in ReadiSorb Glutathione are derived from lecithin. The lecithin is an extract of soy oil, not protein.

**Glycerin**—Glycerin is used as a sweetener and preservative. It supports the stability of the liposomes and allows for the extended shelf life. Glycerin is a normal product of fat metabolism and is readily converted to glucose for metabolism.

**Potassium Sorbate**—A natural material used as a preservative to prevent yeast and mold growth. It is a form of sorbic acid, a naturally occurring fatty acid which is easily metabolized in the body. Potassium sorbate is used to preserve wine, baked goods and cheese.

Autism Spectrum Disorders: The Brain Connection continues from page 7...

extremely important. In fact, 85% of our genetic code is responsible for how our brain connects ... it's that important! For children who are on the autism spectrum, the "hardware" of their brain is completely normal, but they haven't downloaded the appropriate software or "connections" to operate it appropriately. Each child's brain connects a little bit differently. This is why there are a wide variety of combinations of symptoms associated with autism.



Since the idea of neuroplasticity holds true for everyone, the good news is, there are always things you can do to stimulate a child's brain to form those connections appropriately. The first step is to prepare the environment of the brain to heal. This includes identifying and eliminating any neurotoxic and/or inflammatory triggers and supplementing with the right doses of nutrients to support the body to heal. The next step would be to work with a healthcare provider who can give the child brain-based activities that will stimulate the brain to form the appropriate connections. The combination of these two things will put the child on track to achieve a more functionally balanced brain, which can help relieve some of the symptoms associated with autism spectrum disorder.

For more information on nutrient testing, toxic metal testing, food allergies and brain-based exercises, contact Dr. Anne Zauderer at the Riordan Clinic. 316-682-3100 Watch Dr. Anne's lecture, Brain Health: Managing ADD and ADHD without Medication, from the Riordan Clinic website ([www.riordanclinic.org](http://www.riordanclinic.org)) or our YouTube channel (<http://www.youtube.com/healthhunter1>).



View our lecture archive.

Visit our YouTube channel



## Health Hunters Newsletter

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## Lunch and Lectures: A Look Ahead...

### Please note that our schedule has changed.

- September 12, 2013** "17 Correctable Causes of Chronic Illness" with Riordan Clinic doctors. FREE. 12-1pm.
- October 31, 2013** "Check Your Health: Review Your Laboratory Test Results" with Riordan Clinic doctors. FREE. 12-1pm.
- November 14, 2013** "Conquering the Super Bugs (and how ultraviolet light may play a role)" with Dr. Jennifer Kaumeyer. \$10. 12-1pm.

Call 316-927-4723 to reserve your spot for any of the above lectures or email [reservations@riordanclinic.org](mailto:reservations@riordanclinic.org).

Dates, topics and titles are subject to change.

**Reservations required.**

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