



DEVELOPMENTAL DELAY RESOURCES

The ONE Resource Network Integrating Conventional & Holistic Approaches



*Wellness Health & Pharmacy:
Where Service Meets Quality*

This newsletter is made possible by a grant from Wellness Health & Pharmacy, Birmingham, Alabama

Wellness Pharmacy is honored to sponsor this issue of “New Developments,” dedicated to the late Dr. Bernard Rimland and his life-long commitment to the treatment and reversal of autism. Jaquelyn McCandless, MD, author of *Children with Starving Brains*, considers Dr. Rimland the ‘grand godfather’ of the biomedical movement and autism treatment.

Are you a health care professional or patient who takes a biomedical approach to autism, attention deficits, and other developmental delays? Do you want the convenience of one-stop-shopping? Look no further! **Wellness Health + Pharmacy** has closed the gap between filling traditional prescriptions and providing total patient care throughout the United States for over 40 years.

Wellness Pharmacy grounds all products and services in a foundation of proven science. Physicians rely on **Wellness** for pharmaceutical solutions when “patent” prescription medications inadequately address patient needs. Health care professionals trust **Wellness Pharmacy** for their chelation, hormone replacement, pain management, injectable, and thyroid needs. **Wellness** also carries a full range of over-the-counter nutritional supplements from 15 manufacturers, including Allergy Research Group, American Biologics, Cardiovascular Research, DaVinci, Kirkman, Klaire, MMSPro, Metagenics, Nordic Naturals, ProThera, and Thorne.

Wellness Pharmacy compounds products in a variety of strengths and delivery methods, including transdermal, oral, intravenous (IV), nasal, nebulized, and by suppositories. **Wellness Pharmacy’s** 14 pharmacists have extensive training in the customized preparation of supplements and prescription medications, using state of the art compounding equipment. Concerned about hypersensitivity and possible reaction? **Wellness** can provide samples of transdermal bases, at no charge, for pre-testing. **Wellness** regularly sends representative samples of all compounded items to independent laboratories that analyze them for sterility and quantity of the active ingredient.

Wellness Pharmacy is the only U.S. pharmacy that holds a patent on their unique method of preparation and storage of IV and inhaled glutathione, the body’s master antioxidant. Many physicians, including Florida neurologist David Perlmutter, MD, recommend glutathione treatments for a myriad of conditions, including autism, Parkinson’s disease, and chronic fatigue syndrome. **Wellness** can compound both inhaled and IV formulations, ensuring that the glutathione is properly absorbed.

More than just a pharmacy, **Wellness Pharmacy** sponsors numerous local and national non-profit organizations. Last year, **Wellness** exhibited at a dozen conferences for children with special needs. By attending these national meetings, **Wellness** is able to remain in the forefront of new medical research, and share significant new treatment ideas and information with physicians and their parents.

To continue Dr. Rimland’s work, **Wellness Pharmacy** has created a unique comprehensive autism support program that utilizes both nutritional and biomedical intervention. This program combines high quality products with a searchable online database of scientific literature. Go to <<http://www.wellnesshealth.com>> to research information by keyword or category.

Wellness Pharmacy has earned an impeccable reputation among patients and doctors worldwide. Everyone receives unprecedented customer service. A strong support staff and large product inventory helps physicians with challenging patient problems, and assures that orders get out the door on time. Any order received by 10 a.m. Central time ships the same day or first thing the next morning. Should you have any questions or concerns, a pharmacist is always available.

Make **Wellness Pharmacy** your one-stop for treating those with complex special needs. Contact them at 800.227.2627 or online at: mail@wellnesshealth.com.

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Executive Director's Column

by Patricia S. Lemer, M.Ed., NCC, M.S. Bus.



Honoring the Work of Bernard Rimland and Lorna Jean King

"Be the change you wish to see in the world." Ghandi

Psychology has seen many changes in thinking during the past 30 years since I have been a counselor. Few have had as profound an impact as the work of the late Bernie Rimland and Lorna Jean King. I do not know if these two icons ever collaborated. If they did, I am certain they would have seen eye to eye on the belief that autism is not a psychological disorder. Bernie recognized the nutritional needs and Lorna Jean the sensory needs of individuals with autism. Both believed that the only way to address autism was with a multi-disciplinary approach. It is upon that foundation that DDR was founded.

When DDR co-founders met in 1994, they decided to form a Professional Advisory Board of experts who could keep them informed about the latest treatment options for autism and other developmental delays. Two charter members were Lorna Jean and Bernie.

When DDR co-founders decided to hold their first conference in Washington, DC in 1995, Bernie and Steve Edelson, the new Director of the Autism Research Institute, were keynote speakers. When DDR held a second conference in 1996 in San Diego, Bernie, Steve and Lorna Jean were keynote speakers. Bernie declared the DDR conferences the very best he had ever attended. The old adage says that copying someone's idea is the highest form of flattery. Bernie modeled the now famous DAN! conferences after ours.

"Humble" and "generous" are words that come to mind when remembering Bernie and Lorna Jean. Everything they did was "for the kids," not to feed their own egos. Without regard to status, Bernie considered movie stars and small town parents his friends. He gave them equal time on the phone, seven days a week, often in the middle of the night in his tiny office, where he often fell asleep on the floor. In fact, the celebrity might be kept "on hold" while he completed a conversation with a parent of a newly diagnosed child.

"Fun" was also a part of these pioneer's vocabulary. Lorna Jean thoroughly enjoyed the activities she invented, using everyday items, such as straws. In her last days, she reminisced with occupational therapist Diana Henry, whom she mentored for many years, "We had such fun, didn't we?" Bernie's greatest pleasure came from connecting those who could benefit each other.

Lorna opened her heart, home, center, and school to occupational therapy students and practitioners alike. I was fortunate to visit myself, and was awed by the simplicity. When honored by the highest honor bestowed by the American Occupational Therapy Association, Lorna Jean was uncomfortable with the attention she received after delivering a brilliant lecture on the science of adaptive responses. Her ideas were uncomplicated, yet so profound: use an Ace bandage for deep pressure; set up obstacle courses in the living room for motor planning; place a hula hoop to define a child's space; pile pillows on top of a child and make a "sandwich" for calming.

Neither cared about material possessions. The first time I joined Bernie in a hotel dining room where he sat alone eating breakfast, I noted holes in the soles of both shoes when he crossed his legs. Lorna Jean dressed simply, never wishing to stand out. Neither notoriety nor awards were their goals. While both founded world renowned centers when autism was still called "childhood schizophrenia," they invested time, not money, in their beliefs that individuals with autism had untapped potential, could learn, and could change throughout their lifetimes. They gave families something money could not buy: hope.

An offshoot of DAN! is the "Autism is Treatable" project. Parents whose children improved or recovered because of DAN!-oriented treatment began spreading the word. Rimland made a DVD presenting this philosophy at the 2005 Fall conference in Los Angeles. It showcases some children with Master of Ceremonies Lou Diamond Phillips. Their stories are told in the book, *Recovering Autistic Children*. The DVD and book, along with a treatment manual, entitled *Autism: Effective Biomedical Treatments*, co-authored by Jon Pangborn, PhD and Sidney Baker, MD, are all available from the Autism Research Institute (ARI) at www.autismresearchinstitute.com.

DDR thanks the Rimland and King families for sharing their "stars" with the public. Both spouses were private and supportive. Bernie's remarkable wife, Gloria, gracefully handled his crazy schedule, while keeping their home running smoothly. DDR sends its deep condolences to Gloria and the three Rimland children. Lorna Jean's loving husband, Warren, wrote a beautiful poem for Lorna, close to her death:

TO MY LOVING WIFE, LORNA JEAN KING

Go out and look at the night sky
It is a sky with many stars – a dark sky.
It is a sky of starry sensory integration.
The twinkling little lights are happy children
– enlightened children – always twinkling.
The steady light stars are the planets, their parents.
The brilliant, shining stars are the teachers.
They spread their lights all over the heavens.
It is a universe of Sensory Integration
you have helped to create,
And its radiation will shine forever.

In addition to her husband, Lorna leaves two children and three grandchildren.

- To make donations in honor of Bernie, go to the ARI website.
- Lorna Jean can be remembered by donating to the CCNS 5430 W. Glenn Drive, Glendale, AZ 85301

These two wonderful people were the agents of change we all wish for our world. May we have the foresight to continue their important work.

DDR 2007 Directory Listing and Advertising

Is your DDR membership current? Pay dues by March 1st to assure inclusion in the 2007 Networking Directory. You can also advertise in the Directory in sizes ranging from a business card to a full page. To check membership status, or for advertising, contact us to take advantage of this great opportunity to reach thousands of families who need your products and services.

DDR Auction at Spring DAN! Conference in DC

DDR will hold its annual fund-raising auction on April 21st at the Defeat Autism Now! Spring conference in Alexandria, VA (see Upcoming Events). Call 800.497.0944 to make a donation.

Generation Rescue Researches Vaccines

Generation Rescue is surveying 17,000 children between the ages of 4-17 in nine California and Oregon counties to measure the incidence of ADD/ADHD, Asperger's, PDD-NOS, autism, asthma, and diabetes. The survey, conducted by a well-known national market research firm, will compare prevalence between children who have been vaccinated and those who have not. They need funding to underwrite this important project. You can make a donation at: <<https://ssl.charityweb.net/genrescue/>>.

Treating ADD without Drugs in New York

At last! Scientifically based alternatives to medication for kids who cannot sit still, concentrate and pay attention. On May 5th in New York City, Dr. Kenneth Bock, joined by Dr. Seth Pearl and others, will launch Bock's new book *Healing the New Childhood Epidemics: Autism, ADHD, Asthma, and Allergies*. This day-long workshop is for teachers, parents, therapists, and others who are helping kids with disabilities reach their potentials with proven interventions that work. See Upcoming Events for details.

Vaccine Wars Heat Up

David Kirby, author of *Evidence of Harm* debated Arthur Allen, author of *Vaccine: The Controversial Story of Medicine's Greatest Lifesaver* on January 13th in San Diego. The interview is available online at: <<http://www.evidenceofharm.com>>. Don't buy Allen's book! You will be irate when you read what he said about Bernie Rimland and Barbara Loe Fisher.

Newsletter Digest Revised

DDR's revised Digest, with a beautiful new cover, is a great resource for your parent support group, clinic, or special needs library. It includes 11 years of newsletters, all subject and name indexed to allow you to easily locate articles on everything from Acupuncture to Zinc. See enclosed order form to purchase.

S'Cool Moves Help Kids Learn

Want some new tools to keep kids attentive and focused for the rest of the school year? Learn S'Cool Moves! DDR is bringing author Debra Em Wilson to the East Coast for the first time. Her creative program combines the best of sensory integration, vision therapy, and Brain Gym techniques. S'Cool Moves are quick activities for teachers, parents, and others to use to warm kids up before tackling academics and other stressful subjects. Designed to complement, not replace occupational or vision therapy, many use music; all involve movement for brain integration. See Upcoming Events for details and locations.



Dr. David Perlmutter Keynotes DDR Conference

An enthusiastic crowd of parents and therapists crowded a conference center in Boca Raton, Florida in February to learn from world renowned neurologist David Perlmutter, MD. He communicated with amazing knowledge and humor how to keep the brains of everyone in the family healthy and well-functioning. DDR is grateful to the Life Extension Foundation <www.lef.org> for underwriting Dr. Perlmutter's talk. See booklist for Perlmutter's *The Better Brain Book* and *Raise a Smarter Child by Kindergarten*. For more, go to <www.drperlmutter.com>.

Dr. Sam Berne joins DDR Board

Author of *Without Ritalin* and DVD *From AD(H)D to Autism*, (see booklist), Santa Fe optometrist Samuel Berne is the newest member of the DDR Board. Berne is a leading expert in the role of visual dysfunction, aberrant reflexes and nutritional deficits in developmental delays. Dr. Berne lectures internationally on combining vision therapy, reflex integration, nutritional supplementation, and craniosacral therapy for those with autism and related disorders.

New York Lecture Series Continues

DDR is continuing trainings on how to keep healthy in a toxic world. Environmental toxicity expert Annie B. Bond enlightened a responsive group on January 30th. Sign up for her free newsletters on everyday solutions for healthy living at: <<http://www.care2.com>>. Health educator Annemarie Colbin will speak in March, and occupational therapist Lindsey Biel in May. See Upcoming Events.

Autism Numbers Increasing not Declining

The latest news from California is that the 3,385 full spectrum professionally diagnosed autism cases added to the system during the 2006 calendar year, represent a 16 percent increase over calendar year 2005. This statistic is bad news for those expecting a drop in numbers following the removal of thimerosal from most vaccines.

DDR in Utah

Many thanks to The Utah Parent Center and Baby Watch Early Intervention Program. In late January, DDR Executive Director Patricia Lemer delivered an evening lecture for parents on "Prioritizing Therapies for Autism and Other Developmental Delays" and a day-long workshop for early intervention specialists, "Vision: More than Meets the Eye." This collaboration grew from Ms. Lemer's presentations of these topics at the USAAA Conference in Utah last August. Thanks to Dr. Larry Kaplan of USAAA for introducing DDR to this enthusiastic group. Watch Upcoming Events for DDR's return to the area for further trainings.

New Developments is a quarterly newsletter published by **Developmental Delay Resources (DDR)**, a 501c3 not-for-profit organization whose mission is connecting families, professionals, and organizations and disseminating the most current information about possible causes, interventions, and preventions for developmental delays. Members of DDR support the inter-relationship of physical, cognitive, and social-emotional development in children whose delays include, but are not limited to, sensory-motor deficits, speech-language disorders, attention deficits, learning disabilities, pervasive developmental disorders, and autism. DDR seeks to educate the public about treatments that: address sensory-motor processing, including occupational therapy, vision therapy, auditory training, and perceptual-motor therapy; boost the immune system, including dietary modification, nutritional supplementation, homeopathy, and detoxification; address structural integrity, including osteopathy, CranioSacral therapy, and chiropractic; and encourage positive social-emotional relationships, such as communication therapies, FloorTime, and family therapy. **DDR is the only organization that integrates all these disciplines.**

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All material in **New Developments** is for information purposes only and is not to be substituted for professional advice from your health care provider.

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Honoring Dr. Bernard Rimland

Children with autism and their parents said goodbye to their best friend and greatest champion, when Dr. Bernard Rimland, Founder and Director of the Autism Research Institute (ARI), died on November 21st at the age of 78. Dr. Rimland's nearly fifty years of work on behalf of those with autism began with a single child: his own son, Mark, born in 1956.

Mark was a screaming, implacable infant who resisted being cuddled and struggled against being picked up. He also struggled against being put down. Rimland's pediatrician, Dr. Black, who had been in practice for 35 years, had never seen nor heard of a child like Mark. Neither Dr. Black nor Dr. Rimland, who at that time was three years beyond his Ph.D. in psychology, had ever seen or heard the word "autism."

Soon after Mark turned two, Dr. Rimland's wife, Gloria, remembered reading in college about children with symptoms like Mark's. Digging through a dusty box of Gloria's textbooks in the garage, Dr. Rimland saw the word "autism" for the first time. That discovery was the beginning of a quest that changed the autism world forever.

Knowing that Mark was a greatly loved child and that the "refrigerator mother" theory was both wrong and destructive, Dr. Rimland set out to discover all that was known about autism. He scoured libraries for articles on autism, including foreign articles he had translated, and found "not a shred of evidence" to support the hypothesis that bad parenting caused autism. What he discovered instead, was powerful evidence that autism was a biological disorder—a fact that seems obvious now, but was revolutionary at the time.

Doggerel for the 1996 Defeat Autism Now! Conference

by Sidney MacDonald Baker, MD

Let us all dress up like Rimland, PhD
I'll tell you how the look should be -
With ego in and outta the way
And chin and neck stuck out and in the fray
Where he takes short term rights
Or wrongs and puts 'em aside in lieu
Of long range goals he keeps in view
And insures no opportunity is missed
To stir things up - even get some folks pissed.
That's why Bernie's here just off the red-eye
To make sure our conversation flies
Like him with vigor quite enormous
And love and passion to inform us.
Today, tomorrow and tonight
At least to get the questions right.

Lets take a ride on River Rimland,
Follow Bernie's boat and him in
The class IV rapids of dissent
Through the gorge of critics' discontent.
- They would rather row a slower boat
And take a safer course and float
In waters deep and calm and clear
Where reflection alleviates the fear
That we could round a bend and find
That we are not completely double blind.

Let's follow Bernard bear and watch his motion
'Cross states, and countries, skies, and oceans
A creature with enormous habitat and range
His ecologic niche is shift and change
Where competition for sometimes scarce resources
Is provided by less progressive forces
Like some of us right here who came with doubts
As to what this conference may be about
And worried that perhaps some heresies
Might contaminate our reputes or our CV's.
Fear not, the doubters have their work cut out
Be prepared to speak, complain and shout
And bring to bear in his direction
The necessary heat of disaffection
The crucible that forges science hard
And nourishes our children's friend Bernard
Whose optimistic energy infects us
While he continues to expect us
To keep his tempo and intense resolve
To see autism's mysteries dissolve
In the solvent of our collective might
Or perhaps a single drop of insight
Distilled by someone here or somehow touched by us
Who have gathered here to think and to discuss
How perception, memory and recognition
Can get so sensitive that kids' cognition
Can get off track and make developing
So difficult for certain human beings.

Defeat Autism Now!

Bernie Rimland created Defeat Autism Now! (DAN!) by bringing together dozens of the world's leading researchers in different fields to create a state-of-the-art treatment plan and to prioritize research goals. A small first meeting grew into a worldwide DAN! movement that now includes huge standing-room-only conferences, major research projects, and hundreds of DAN!-trained physicians and health care practitioners. See Upcoming Events for the Spring DAN! conference in Rimland's honor, April 20-22nd in the Washington, DC area.

A Tribute to Lorna Jean King



Lorna Jean King, OTR, FAOTA, a pioneer in using sensory integration (SI) therapy for those with autism, childhood schizophrenia, and other “emotional” problems, was a member of the DDR Professional Advisory Board since its inception. A colleague of the late A. Jean Ayres, she founded The Children’s Center for Neurodevelopmental Studies (CCNS) in Phoenix, Arizona in 1978. Where others saw hopelessness, Lorna Jean saw hope. She achieved dramatic results by “helping children today build tomorrow’s dreams.”

The following is a reprint of her thoughts about sensory integration, culled from a 1996 interview conducted by Stephen M. Edelson, PhD.

Q: What is the goal of sensory integration?

A: To facilitate the development of the nervous system’s ability to process sensory input. SI pulls together all sensory messages to form coherent information on which we can act. This normal process is disrupted in autistic individuals, 85-90% of whom have SI problems.

Q: Please comment on the relationship between behavior and sensory needs.

A: Behavior is communication. Observing what triggers the behavior, we can modify the environment and help the child learn self-calming techniques that improve behavior.

Q: What should parents look for when deciding whether to have their child evaluated?

A: The child who is unusually fearful of movement, or who lacks normal fear of falling, may have vestibular difficulties. A hypersensitive child is also a candidate. This child may over-react to noise or light touch. He may dislike cuddling, having his hair combed or washed, or being bathed or dressed.

Q: What advice do you give parents of a recently diagnosed child?

A: MOVE! Encourage climbing, walking, and swinging. Massage children who are hypersensitive to touch with lotion or powder, or give an extra-long rub down after a bath to help overcome oversensitivity. Many activities you would normally do with ordinary children are needed in much larger quantities by the child with autism or other dysfunction.

Q: What senses does SI therapy involve?

A: SI therapy works with all the senses, but the vestibular, tactile, and proprioceptive senses are most important. They are the largest sources of input and are connected to everything else. For example, the vestibular system and the visual system are very closely associated. Often, a child’s ability to coordinate his eye movements will improve as he receives enough vestibular input.

Hearing is also very important. One promising therapy is Auditory Integration Training (AIT), which aims to balance the reception of auditory input so the child won’t be hyper-responsive to sound. With AIT, many children show increases in language and decreases in sound sensitivity, although some show no improvement.

Q: What behaviors result from SI therapy?

A: A decrease in tantrums and fears, and increased eye contact and interaction. Also, less hypersensitivity to light touch, better use of discriminative touch to learn, and more appropriate responses to heat, cold, and pain.

Q: How much therapy is necessary?

A: Usually, more is better. In some schools, a therapist may see a child for 30 minutes, once or twice weekly. This helps, but improvement is slow. If we start intensive treatment with a preschooler, then the child improves faster.

Q: Is one ever too old to benefit from SI therapy?

A: No. Throughout life, the nervous system develops by making new neuronal connections. As some connections disappear through disuse, others form as a result of new experience. We’ve had good results with teenagers and adults.

Q: How about handling problems at school?

A: Many school problems can be dealt with effectively by simply changing the environment. Sitting on a ball or T-stool provides extra vestibular and proprioceptive input, which helps the nervous system organize and process information. The child can then attend. If a child is upset, offer a large box lined with pillows, and a book or tape. Respite from a potentially stressful situation is more effective than “time out.”

Q: How about the home environment?

A: Therapists can teach parents calming techniques, such as rocking, swinging, or wrapping the child in a big quilt for a few minutes. Basically, parents need to find what works with their particular child.

Q: Please describe your Center.

A: It is a non-profit corporation and school, providing the most advanced neurodevelopmental therapeutic methods for autistic and other developmentally delayed children and adolescents. It is an integrated program that combines OT, speech, and music with academics. Visit the website at <<http://www.thechildrenscenter.org>>.

See the enclosed booklist for these and other publications on sensory integration:

- *Raising a Sensory Smart Child* by Lindsey Biel and Nancy Peske. This definitive handbook has sections on nutrition, picky eating, and vision therapy. See Upcoming Events for a talk by the author.
- *Sensational Kids* by Lucy Jane Miller, the premiere researcher on sensory processing disorder, and the founder of the Kid Foundation.
- *Sensory Integration and the Child*, a revised and updated 25th anniversary edition of the original book, complete with a chapter on autism and with practical tips for parents.

To quote occupational therapist and DDR Professional Advisory Board member, Diana Henry, “Although we have lost a wonderful inspiring teacher, mentor, and friend, Lorna’s passion for education, pursuing research, and providing opportunities for families to receive therapy services emphasizing sensory integration, will remain with us forever. As we must move forward, her legacy will continue to inspire us all.”

On the Shoulders of Giants: Lorna Jean King and Bernard Rimland

by Stephen M. Edelson, Ph.D., Director, Autism Research Institute (ARI)

Lorna Jean King and Bernard Rimland, two legendary pioneers in the field of autism, recently passed away within weeks of each other. Like so many other parents and professionals, I feel a tremendous sense of loss. I am extremely fortunate that I worked with both of these remarkable individuals for many years.

While an undergraduate at UCLA, I first learned about autism. When working as a therapist, and conducting research on self-injurious and stereotypic behaviors, I questioned whether these and other symptoms of autism could be due to non-behavioral reasons. I shared my ideas with Dr. Ivar Lovaas, another autism giant; he introduced me to Bernie Rimland. Little did any of us know that this would be a defining moment in my life.

I was only 19 years old when I first met Dr. Rimland, and he was about fifty. Despite Dr. Rimland's status as a leading figure in the autism world, he graciously spent hours talking with me and took me under his wing, an act he repeated hundreds of times over the years with other professionals and parents. I am grateful for Dr. Rimland's generosity of time then, as it was the start of a lifelong personal and professional friendship.

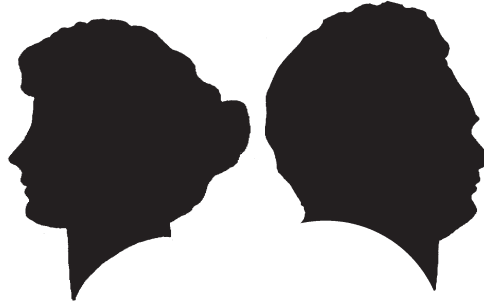
Dr. Rimland, like me, believed in applied behavioral analysis (ABA); he also felt strongly that biomedical and sensory interventions were effective in treating autism. This notion was revolutionary at a time when doctors blamed mothers – and sometimes fathers – for causing their children's autism, by subconsciously rejecting them. No one thought recovery was possible. Today's parents may not realize that in only the early 1960s, the leading treatment for autism was psychotherapy.

Dr. Rimland set forth his revolutionary ideas about the biological basis of autism in his groundbreaking book *Infantile Autism*. This classic, that singlehandedly destroyed the myth that “refrigerator mothers” cause autism, was a strong influence on me as I studied cognition in graduate school.

I became convinced that autism cannot, and should not, be explained using a simple paradigm. Rather, it is a complex disorder in which behavior is a result of thinking (i.e., attention/cognition), and thinking results from sensory input (e.g., vision, hearing, touch).

The clarity of an individual's sensory input depends upon both environmental factors and the health of an individual's nervous system. This perspective has allowed me to integrate the behavioral, sensory, and biomedical approaches to autism.

After graduate school, I learned much more about the role of the sensory systems and biochemistry in autism. During that time, the mid-1990s, I was fortunate that Dr. Rimland invited me to do research examining the efficacy of various biomedical treatments, and to help organize the Defeat Autism Now! (DAN!) project.



I also began studying sensory problems in autism: the auditory, visual, tactile, and vestibular systems. That research led me to many other autism experts, including a woman who was another remarkable influence on me: Lorna Jean King.

Lorna Jean called me and introduced herself after reading my paper on self-injury as a form of self-stimulation. We spoke for over two hours, and she invited me to her school near Phoenix, Arizona. I was in awe of the brilliant and groundbreaking approaches she had developed to ameliorate autistic symptoms others had dismissed as “untreatable.”

I visited Lorna Jean King's clinic at least a dozen times, presented lectures to staff and clients, and conducted research with her. We spent many hours discussing sensory problems in autism, especially the importance of the vestibular system. Her visionary ideas contributed greatly to my own work and philosophy by helping me see the crucial role of sensory integration in calming and alerting children with autism. I learned that with sensory treatments came improvement in the ability to attend and learn.

One of the highlights of my career was speaking at continuing education conferences with Lorna Jean King, Temple Grandin, and others for four consecutive years in the 1990s. Each one of us would give two presentations, and we had plenty of time to exchange our current thoughts on autism. I felt honored to be included with these experts, and came away excited and energized by their ideas and insights.

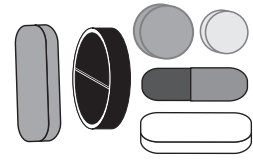
Over the years, as I became increasingly involved in the work of the Autism Research Institute, I developed an even deeper appreciation of Dr. Rimland's astronomical contributions to the field of autism. He was involved in almost every aspect of research on autism causes and treatments, including genetics (he conducted the first twin study).

A multi-volume encyclopedia would be necessary to summarize his half-century of contributions to the field. Bernie taught me to see the big picture, to question what is accepted by the establishment without any scientific support, and to do whatever possible to help those affected with autism and their families.

In accepting the position of Director of the Autism Research Institute, I am aware that I am, to paraphrase Isaac Newton, “standing on the shoulders of a giant.” Dr. Rimland revolutionized the field of autism, bringing hope to an entire world of children once dismissed as “hopeless.”

Bernie Rimland and Lorna Jean King will always be with us. Their dedication to the field of autism was unsurpassed, and their passing leaves a void that cannot be filled. Their life-long work has influenced thousands of professionals, and impacted hundreds of thousands of children with autism now, and will in the future. I am enormously grateful that they were an important part of my life, and hope that I can honor their memories in my own work.

Dr. Rimland's Favorite Supplements: Vitamins B6 & C, Magnesium and DMG



Dr. Bernard Rimland, to whom DDR is dedicating this newsletter, became famous for challenging the “refrigerator mother” theory of autism, and replacing it with the theory that autism is a biological disorder, which could be partially treated by nutritional supplements. Here are some of his favorites.

Vitamin B6 and Magnesium

Dr. Rimland stated that, “No biological treatment for autism is more strongly supported in the scientific literature than the use of high dosage vitamin B6.” In fact, eighteen studies have shown conclusively that high dose vitamin B6 confers considerable benefits to about half of all children and adults with autism who use it. Mild side effects such as irritability, sound sensitivity and bedwetting occur when B6 is taken without magnesium. Vitamin B6 in conjunction with magnesium results in better eye contact, less self-stimulatory behavior, more interest in the world, fewer tantrums and improved speech. For more on Magnesium, see Volume 11:2.

Dietary Sources of B6 and Magnesium

Bell peppers, greens, chicken, fish, pork, liver, kidney, whole grains, nuts, and legumes are excellent sources of B6. Magnesium can be found in leafy greens, avocados, beans almonds, Brazil nuts, cashews, pumpkin and sunflower seeds, whole grains, fish, kiwis, and molasses. While eating natural sources of B6 and magnesium is important, no one can get the therapeutic amount from food, even if they ate kale all day.

Dosing Vitamin B6 and Magnesium

An Autism Research Institute study found that the average amount of B6 necessary to be beneficial is around 8 mg of B6 per pound of body weight per day. For most children in the study, daily dosage levels of B6 ranged between 300 mg and 500 mg. The suggested dosage of magnesium is 3 or 4 mg per pound of body weight, up to 400 mg per day for adults. The upper limits advised for adults or those above 120 pounds is 1,000 mg/day. Another way to supplement magnesium is transdermally, through Epsom salt and magnesium oil baths.

In addition, several hundred mg/day of magnesium and a multiple-B tablet are recommended, to guard against B6-induced deficiencies of other nutrients. Kirkman Laboratories <www.kirkmanlabs.com> has developed a pleasant tasting chewable for children with the appropriate ratio of B6 to magnesium.

Dr. Rimland suggests that people start with one-quarter the target amount and increase slowly over a ten to fourteen day period. Minor side effects such as hyperactivity, nausea, or diarrhea can occur rarely if the dosage is too high or increased too quickly. B6/magnesium will often produce benefits within a few days.

If no improvement is seen in a month, termination is suggested. For more on vitamin B6, magnesium and other supplements for autism, read *Children with Starving Brains* by Jaquelyn McCandless. For the role of B6 and magnesium in ADD, read *The ADD Nutrition Solution* by Marcia Zimmerman. (See booklist.)

Dimethylglycine (DMG)

Rimland also enthusiastically endorsed the use of DMG for individuals with autism. DMG is a nutrient that contains an amino acid and/or protein. It is found naturally in animal and plant cells and in foods such as cereal grains, liver, and beans. The reported benefits of DMG are better eye contact, increased frustration tolerance, as well as a greater interest in speech and an improvement in speech ability. DMG has long been known to enhance the effectiveness of the immune system and improve the physical and athletic performance of humans and other animals.

Dosing DMG

DMG is available in capsule, liquid, and sweet-tasting dissolving tablets. Dr. Rimland recommends starting with 1/2 of a 125 mg tablet a day with breakfast for a pre-school child and 125 mg for a larger child. After a few days, gradually increase to one to four tablets a day for a child, and two to eight tablets per day for an adult. If hyperactivity occurs initially, which is rare, reduce the dosage. Continued hyperactivity after dosage reduction may mean that the individual needs folic acid. Try 800 mcg tablets of folic acid per 125 mg of DMG.

Proper dosages vary greatly for each individual, so a bit of trial and error is necessary. Dr. Rimland recommends trying DMG for two to three weeks before starting the B6/magnesium regimen. However, if a child is already on B6/magnesium, all can be taken concurrently, if no side effects are apparent.

Learn more about DMG from the McCandless book cited above, as well as from *Building Wellness with DMG* by Roger Kendall. This new title has chapters on DMG for cancer and heart disease, as well as for autism.

Vitamin C

Dr. Rimland was a strong supporter of Vitamin C for any condition, including cancer and autism. Because the “right” dosage of vitamin C varies, expert Robert Cathcart proposes the “bowel tolerance” method of determining an individual’s vitamin C requirements. In other words, administer as much vitamin C as the stomach can tolerate, before it becomes a laxative. For those in good health, the well-tolerated level tends to be about 10 to 15 grams of vitamin C per day. One study found that 8 grams benefited adolescents and adults with autism.

Supplements, not Drugs for Autism

After years of study, Dr. Rimland and others studying the biomedical treatment of autism have concluded that nutritional supplements such as the ones described above are far safer, and far more effective, than drugs. Unlike drugs which block or interfere with natural bodily processes, nutrients such as vitamin B6, magnesium, DMG, folic acid, and vitamin C permit or enhance these processes. As this information becomes more widespread, increasing numbers of parents are turning to these nutrients for their children with autism, and finding them extremely helpful.

UPCOMING EVENTS

- **Saturday, February 3, 2007 – Boca Raton, FL**
After the Diagnosis, Then What?
DDR sponsored all day seminar with workshops on diet, nutrition, biofeedback, chiropractic neurology, vision and auditory therapies.
Keynote Speakers: David Perlmutter, MD & Kelly Dorfman, MS
For more information and to register call 800.497.0944 or visit <www.devdelay.org>.
- **Saturday, February 10 – Sunday, February 11, 2007 – Mesa, AZ**
- **Friday, February 16 – Saturday, February 17, 2007 – Boise, ID**
The SI Tool Kit: Bringing Sensory Integration to Schools and Homes
Speaker: Diana Henry, OTR/L.
For more information and other dates visit <www.ateachabout.com>.
- **Friday, February 16 – Saturday, February 17, 2007 – Long Beach, CA**
Sensory Integration and Self Regulation
8th annual research symposium on the effects of neurobiology and sensory processing on behavior.
Contact Pediatric Therapy Network at 310.328.0276.
- **Saturday, February 17, 2007 – Washington, DC**
Growing the Whole Child
Annual St. Columba's Teacher Training Institute featuring local child development experts. For more information and to register, please call 301.320.3823 or visit <www.earlyworkstraining.com>.
- **Friday, February 23 – Sunday, February 25, 2007 – Seattle, WA**
How to Treat Autism and Other Neurodevelopmental Disorders
A self-help seminar for parents and practitioners with Dr. Dietrich Klinghardt.
For more information and to register, call 425.637.9339 or visit <www.neuraltherapy.com>.
- **Saturday, February 24, 2007 – Washington, DC**
- **Sunday, March 18, 2007 – Silver Spring, MD**
Family Constellations Workshops
Experience how trans-generational pain can affect today's families.
March workshop features Hunter Beaumont, Ph.D. as facilitator.
For more information and other dates, contact Mary Rentschler at 202.244.8280.
- **Saturday, March 3 – Sunday, March 4 & Sunday, March 11, 2007 – New York, NY**
Brain Gym 101
Presenter: Mari Miyoshi, OTR/L.
For more information or to register, contact Mari Miyoshi at 301.523.3477 or visit <www.braingym.org>.
- **Tuesday, March 6, 2007 – New York, NY**
The Role of the Parent in Healthy School Food
DDR sponsored lecture in our "Creating Healthy Environments at Home & School" series. Tell your PTA president!
Speaker: Annemarie Colbin, Ph.D.
For more information and to register, call 800.497.0944 or visit <www.devdelay.org>.
- **Friday, March 23 – Sunday, March 25, 2007 – Vienna, VA**
The 8th Annual McLean Bible Church Accessibility Summit
For more information and to register call 703.770.3822 or visit <www.AccessibilitySummit.org>.
- **Saturday, April 14, 2007 – Kensington, MD**
- **Sunday, April 15, 2007 – Baltimore, MD**
S'cool Moves for Learning
Join DDR and Debra Wilson for this exciting workshop combining Brain Gym and sensory integration techniques.
For more information contact DDR at: 800.497.0944 or go to <www.devdelay.org>.
- **Tuesday, April 17, 2007 – Rockville, Maryland**
Development of Oral-Motor/ Speech Skills
Presented by: Diane Lewis, CCC/SLP and Bobbi Wade, CCC/SLP.
For more information or to register call 301.913.9009 or email <able2004@hotmail.com>.
- **Friday, April 20 – Saturday, April 21, 2007 – Youngwood, PA**
- **Friday, April 27 – Monday, April 30, 2007 – Tysons Corner, VA**
The Greenspan Floortime Model
Speakers in PA: Jake Greenspan & Tim Bleeker.
For more information and to register visit <www.arcwestmoreland.org>.
Speakers in VA: Stanley Greenspan & Serena Wieder.
For more information and to register visit <www.stanleygreenspan.com>.
- **Friday, April 20 – Sunday, April 22, 2007 – Alexandria, VA**
DAN! 2007 Spring Conference
A tribute to the late Dr. Bernard Rimland, founder of the Autism Research Institute.
For more information and to register visit <www.danconference.com>.
- **Friday, April 27 – Saturday, April 28, 2007 – Cleveland, OH**
How Does Your Engine Run? The Alert Program for Self-Regulation
To register & for other dates call 877.897.3478 or visit <www.AlertProgram.com>.
- **Saturday, May 5, 2007 – New York, NY**
Treating Autism, AD(H)D & Allergies without Drugs
DDR sponsored all day seminar with workshops on diet, nutrition, vision and auditory therapies, sensory integration, chiropractic neurology and more!
Keynote Speakers: Kenneth Bock, MD & Seth Pearl, DC, CCN.
For more information and to register, call 800.497.0944 or visit <www.devdelay.org>.
- **Saturday, May 12, 2007 – Waltham, MA**
A Comprehensive Approach for Healing & Recovery for Autism, PDD & AD(H)D
A mini conference sponsored by The Great Plains Laboratory.
For more information and to register contact Sarah Wickens at 913.341.8949.
- **Sunday, May 13 – Saturday, May 19, 2007**
The Bahamas Vision Retreat
Organized by: Samuel Berne, OD, FCOVD.
For more information and to register, call 505.984.2030 or visit <www.holisticvision.org>.
- **Tuesday, May 15, 2007 – New York, NY**
The Sensory Smart Home and School
DDR sponsored lecture in our "Creating Healthy Environments at Home & School" series.
Speaker: Lindsey Biel, MA, OTR/L.
For more information and to register, call 800.497.0944 or visit <www.devdelay.org>.

Developmental Delay Resources

www.devdelay.org

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