New Developments
New angles on developmental delays
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The ONE Resource Network Integrating Conventional & Holistic Approaches

Executive Director's Column

Becoming a Grandmother

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

Viewing the Relationship between Medical, Societal, Educational and Environmental Changes to an Epidemic of Autism Spectrum Disorders

Yesterday I become a grandmother when Penelope Joy Day arrived in this world. What a miracle! Her perfectly formed body and its pre-programmed functions amaze me. Within minutes she opened her eyes, sucked like a pro, and showed us her startle reflex. So little, yet so complicated.

My wonderful daughter did everything right. Her planned pregnancy was technologically monitored and managed. Prior to conception, she switched to non-toxic pest control, checked her thyroid function and completed a detoxification program. During the long nine months, she ate mostly organic, gluten- and dairy-free, practiced yoga and Pilates, and avoided nail salons. Her husband gave her foot massages went grocery shopping. They knew they were having a daughter; learned about vaccines, and purchased toxin-free baby bedding. She had acupuncture. During labor, the midwife and doula were awesome.

This precautionary behavior is necessary because of all I have learned from my work in the past 35 years about the role The world has changed! I did none of these things. Yet I gave birth to a healthy, beautiful, intelligent, emotionally strong daughter. How was that possible?

What follows is an overview comparing standard practices a generation ago to those now, with common sense guidelines for healthcare professionals, educators, and parents to balance out unforeseen obstructions to development. With conservative estimates at one in six children having delays requiring intervention, we are forced to consider prevention.

Medical Practices

Managed care: Last generation's family doctor was a friend who came to the house. Today's doctors are a part of a huge managed care conglomerate, where they spend an average of seven minutes per patient.

Physicians must train nurse practitioners to take thorough histories and do developmental screenings. Ask what children are eating, drinking and breathing, and how much sleep, screen time and exercise they are getting. Encourage healthy diets, sufficient sleep, good hydration and daily exercise. Stay current on emerging research in autism and related disorders. Attend holistic, multidisciplinary biomedical meetings, such as the Defeat Autism Now (DAN!) conference.

Vaccines: Today's children are mandated to receive over 50 vaccines before entering school, compared to a single shot for smallpox 50 years ago. The incidence of autism and attention deficits has increased parallel to the number of vaccines. The long-term effects of thimerosal and other toxic ingredients such as aluminum and formaldehyde are unknown.

Immunize responsibly. Use only thimerosal-free, single valent vaccines. Space out shots, allowing the body to recover in between. If parents ask for a modified vaccination schedule, cooperate, rather than chastise. "Ask Eight Before you Vaccinate." Never vaccinate a sick child, or one on or just coming off of antibiotics, Take a previous vaccine reaction seriously. Refrain from using acydaminiphin as an antidote to a reaction, as it sucks up any of the baby's glutathione, which assists in removing toxic metals. Draw blood titers before giving boosters. Schools require proof of immunity, not proof of shots.

Antibiotics: Consider natural alternatives to antibiotics and stimulant medications. We now suspect that these powerful drugs are "dumbing down" our immune systems and triggering yeast overgrowth in the gut.

Research shows the efficacy of herbal, dietary and homeopathic treatments for ear infections, colic, asthma, constipation, diarrhea, eczema and other childhood ailments, which almost always occur early on in children later diagnosed with autism.

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The Environment and Society

Environmental toxins and food additives: In the past 50 years, air, water and soil have become contaminated, and MSG, aspartame, artificial colors, flavors and preservatives have crept into most foods. Kids consume sodas, colored cereals and baked goods, which have virtually no nutritional value. The "Body Burden" study by the Environmental Working Group showed how many cancer-causing toxins "healthy" people are harboring in their bodies.

Label reading is now an inherent part of grocery shopping. Take daily measures to prevent exposure to and rid young bodies of environmental toxins. Eat organic, fresh fruits and vegetables, drink bottled water and detoxify with saunas and herbs. Use no-VOC paint and other non-toxic materials for renovations, cleaning and art materials. Assure that schools have no asbestos or lead paint. Use natural flooring instead of carpet with chemicals that off-gas for years. Buy or make your own natural cleaning products.

Increase in fast food and eating out: Today, most of us eat an average of only three meals a *week* together at home, compared to three meals a *day* 50 years ago. Drive through chain restaurants, eating in the car on the way to and from lessons, microwavable pre-packaged and frozen entrees, have replaced the need for a kitchen. Children are missing out on not just natural foods, but the experiences that accompany them.

Eat one meal a day together …and in the car doesn't count! Serve a varied menu of organic and home-cooked food. Experiment with ancient gluten-free grains like millet, quinoa and amaranth. Make soup. Buy cookbooks; take a cooking class. Turn off the television and computer; do not answer the phone. Let kids take their time to accept or not eat what is put in front of them. Don't force feed, prod, plead or bribe.

Safety concerns and technology: Babies today are moved through space in car seats, back packs and strollers. Game Boys, IPODs, DVDs, computer games and videos have replaced playing ball, checkers and Monopoly, and building forts,. Kids go to malls instead of into the woods. Gone are the days when they would literally disappear into the neighborhood and come home when the street lights came on. Now they are connected by cell phones.

Allow children to crawl, walk and explore space. Limit screen time**,** and encourage warm and fuzzy alternatives, such as reading and singing, especially close to bedtime. Zoning out in front of a screen limits children's natural sensory needs to touch and move. Videos also implant the wrong kinds of images in the mind's eye. Games promote socialization, language, anticipation, strategizing, counting, sequencing and thinking.

Schools

Accelerated academic curriculum and early reading initiatives: "Leave no child behind" has hastened the teaching of reading and writing to a generation of children who cannot sleep through the night, tie their shoes or speak in complete sentences. Kindergarten now looks like first grade. Our youngest students are expected to "sit still and pay attention." If they can't, we label them "learning disabled" or as having an "attention deficit disorder." Many still have poor control over their own bodies, let alone pencils and scissors. Some stare out the window for visual relief, or wiggle and squirm to keep alert.

Make sure that children are fully five-years-old before entering kindergarten. Give those with summer and fall birthdays "the gift of time" to develop foundational skills before introducing academics prematurely. A tremendous amount of learning precedes reading and writing. Make sure children have good motor control of both the upper and lower parts of their bodies before making them sit still and pay attention. Extra time in pre-academic pursuits avoids unnecessary labeling, testing and individualized educational plans for those who will catch up, if allowed to be kids.

Recess, P.E. art and music: Developmental specialists recognize that movement is food for the nervous system. Young bodies need "free" play to learn how to control their bodies spontaneously and to use their imaginations as much as they need a nutritious breakfast. Computer lab and foreign language classes in elementary school are inappropriate. Music and art lessons along with competitive group sports can wait.

Teachers must incorporate movement activities into the school day with Brain gym or other "warm-ups," such as "One Minute Moves" from S'Cool Moves. Let kids play outside even in bad weather; connecting with nature is good for them. Daily recess and physical education are essential through middle school.

Families

Increase in 2 working parents with distance separating relatives: Out of financial necessity, stay-at-home moms are fewer. Stress inevitably arises from parents who are thinking about the kids while at work and work while at home. The most successful families have strict boundaries between the two parts of their lives. The rare family still has relatives nearby. Kids hardly know their grandparents, spending a few precious days a year with them in a whirlwind of ice cream, movies and Disneyland treats.

Sleep deprivation: Know anyone who is not sleep deprived? Many kids have disregulated and disrupted sleep, which interferes with their bodies' ability to heal. Sleep deprivation impairs metabolism, immune function and motor skills. It increases stress hormones, and cripples sugar metabolism. School-aged children need 10-12 hours of sleep a night, teenagers 8½ - 9 hours, and adults 7- 8½ hours. One study found that a majority of kids diagnosed with Attention Deficit Disorder (ADD) no longer qualified for that label once they caught up on their sleep.

Buy organic cotton clothing and bedding. Traditional pajamas and mattresses are coated with flame retardants that send toxic chemicals through the skin during sleep.

Establish day and night-time routines. Introduce time concepts to kids early. Use words like "next week, tomorrow, in 5 minutes." Keep the same sequence of events for meals, homework and bed-time rituals. Be stalwart in sticking to them, except in very special circumstances, such as on a birthday or holiday. Kids like the safety and security of routine. They do not push limits if they know you are serious.

We're all ecstatic to see the autism epidemic starting to decline. By incorporating some of the above antidotes to a changing world, everyone can work collaboratively in the best interest of today's children. The result will be happier, more functional families, more independent, recovered children, more productive schools, fewer burned-out teachers, more contented doctors and savings of millions of dollars in health and education. And best of all, my grand-daughter and yours will have a much safer and friendlier planet on which to grow up and prosper.

Renew Your Membership NOW

DDR's fiscal year runs September through August, to correspond with the school year. Even if you joined DDR mid-year, your membership has expired, because you either paid for a partial year, or we caught you up with the newsletters you missed. You should have received your renewal notice by either email or from the post office by now. Many thanks for paying your dues today so we don't have to bother you.

Stereo Sue

Check out *The New Yorker* magazine, June 18, 2006 for the remarkable story of Stereo Sue by psychologist Oliver Sacks. Susan Barry, Ph.D., Neuroscience Professor at Mt. Holyoke College, restored her two-eyed depth perception (stereo vision) by working with a developmental optometrist at age 48. She had undergone three surgeries as a child, and although each eye could see adequately, her eyes did not work together. After only two sessions using a combination of prism lenses and eye teaming exercises, the world "popped out" for Sue. So excited by the depth of her new world, Sue made her story public to help others know that it is never too late to be binocular.

"Toxic Dinners" Very Nourishing

Hearty "thank yous" to Bob Krakow, Sakiliba Mines, MD, and Holly Bortfield for their informative talks at DDR's annual "Toxic Dinners" in New York City and Washington, DC in June. In New York, about 30 DDR members and their guests listened attentively, as Bob explained the complicated politics behind autism legislation and how A-CHAMP, a new parent-driven political action group, (see below) is responding. In Washington, DC, another interested group learned about detoxification from Sakiliba Mines, MD and Holly Bortfield, parent activist. Dr. Mines elaborated upon exciting new medical treatments for removing poisons from the body. Holly regaled the audience with stories, offering many useful tips for avoiding toxins. Everyone agreed that this should be a bi-annual, not once-a-year event.

Champs for their Children

Advocates for **C**hildren's **H**ealth **A**ffected by **M**ercury **P**oisoning **(A-CHAMP)** announced their "WE ARE EVERYWHERE and we're not going away" campaign. With over 100 State coordinators and District leaders, their mission is to be a strong and unified voice for children with neurodevelopmental and communication disorders. Want to help by lobbying your local senators and congressional leaders? Contact them at <www.achamp.org>.

Food Allergy Gold Mine

Go to <www.foodb.com>, a food database that permits you to make your own profile of allergens, and then search for packaged products, grocery stores, and restaurants that have what you need. Categories include the usual, such as gluten, wheat, corn, peanuts, and soy, as well as the unusual, including banana, tomato, orange, and shellfish. You can also search for preservative-, color-, and MSG-free foods. Have fun!

Summer Workshops a Huge Success

Parents in Northern Virginia enjoyed several days of practical intensive workshops on reflexes, language development, vision, and nutrition in June and July. Mary Rentschler demonstrated how to evaluate whether a primitive reflex is still retained, and how to integrate it. Bobbi Wade kept everyone moving with her creative use of song and dance to elicit speech, oral, and written language. Kelly Dorfman spoke on "sensory nutrigration:" how sensory integration and nutrition interact. Patricia Lemer teamed with Tod Davis, OD to explain how vision impacts upon attention, behavior, learning, social emotional skills, and all aspects of development. Let DDR know if you would like to bring this dynamic team to your area.

Autism One Radio

Having trouble accessing "After the Diagnosis, Then What?" the Sunday evening show hosted by DDR Executive Director, Patricia Lemer? That's because Autism One canceled it and removed all archived shows. We hope to have some of the shows available for your educational listening on the DDR website soon.

Creating Healthy Environments for Children

The Program Committee has been busy developing a new and exciting series of workshops focusing on various aspects of environmental health. Check "Upcoming Events" for lectures in various cities on how to avoid toxins in cleaning and personal care products, building materials, clothing, and more. We are in the process of getting top speakers and will be informing a broader community about the importance of the environment in children's health. Let us know if you can help promote these talks at your schools and through Internet sources.

Schools Falsely Inform Parents Vaccines Mandatory

Back to school time brings advertisements for backpacks, notebooks, computers, and...vaccinations! Yes, public service announcements, funded by Big Pharma, start springing up in June for free vaccines, warning that you could be arrested for non-compliance. No state has a law saying that children must be vaccinated to attend public schools. Yet many parents report that district representatives are telling them that their children cannot "legally" come to school without their shots. You do not have to vaccinate your children. Options exist. To learn about the laws in your state, go to <www.nvic.org>.

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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SENSORY

Sensory Issues and the IEP

By Lindsey Biel, OTR/L

This article is adapted from an article in the September-October, 2005 issue of *Autism Asperger Digest*, a bimonthly magazine on autism spectrum disorders at <www.autismdigest.com>. Adaptation with permission of publisher.

Sensory problems — such as issues with touch, sound, movement, vision, and body awareness — frequently interfere with students' abilities to take advantage of their educational programs. If parents or teachers suspect that sensory issues are interfering with a child's function at school, they should request an occupational therapy evaluation.

While some strategies and accommodations can be worked out informally with cooperative teachers, others need to be negotiated with the school and added to the IEP to ensure compliance. An Individualized Educational Plan (IEP) is a legal document that spells out a child's levels of function and unique needs, and the school's obligation and plan to meet them. IEPs include long-term goals and short-term objectives, and are generally written annually with periodic reviews and modifications.

The law mandates only those related services such as occupational therapy, strategies, and accommodations that are written into the IEP for an individual student. While it may be quick and cost-effective for a parent to supply inexpensive items like a pencil grip or "chewy," the school must allow the child to use such devices — or a costly piece of assistive technology, behavioral strategy, or intervention — only if it is on the IEP.

Sensory Diet Activities to Implement During the School Day

Sensory diet (See Vol. 6:5,4) activities give a child's body the input needed to reach and maintain a calm, alert state, and may be added to the IEP. "Ingredients" should be individualized for each child and collaboratively developed with the school, parents, child, and therapists. The school OT may work directly with students in individual or group sessions, or join the classroom and work with the teacher to incorporate:

- **Warm-up activities that prepare the student for learning,** such as therapeutic deep-touch pressure (brushing), bouncing on a therapy ball, Brain Gym exercises, stretching, jumping jacks, and "heavy work" such as pushing or pulling. For example, a brushing session may benefit a child before art, and rolling over a therapy ball may ease the transition from the playground to the classroom.
- **Items that provide sensory input or "snacks,"** such as a vibrating pen, weighted or compression garment, ball chair or inflatable seat cushion, fidgets, or a "chewy."
- **Adaptive devices to stay calm, organized, and focused,** such as a sitting wedge, vibrating pillow, timer, or slant board. Keep adaptive devices generic to allow for changing sensory and academic needs.
- **Sensory strategies to avoid overload,** such as a short break from work or a designated "safe space" to retreat to for brief durations.

"Sensory Smart" IEP Strategies and Accommodations

Here are some strategies and accommodations that may help.

Touch: Firm touch to obtain attention; preferential positioning at the front of the classroom, the end of the line, and head of a table to avoid light touch by others; hand fidgets or chewable items for self-regulation.

Movement: A five-minute walk approximately once every 90 minutes; no loss of recess or outdoor time as punishment for inappropriate behavior; permission to sit on a cushion or positioner with back support during floortime.

Sound: Lunch in a quiet, low-stimulation environment; an FM unit to bring the teacher's voice to the foreground; advance notice for fire drills; headphones, earplugs, or earmuffs to reduce noise in the cafeteria, assemblies, recess, or fire drills, and to calm during "quiet time."

Vision: Permission to "block off" the visual sense by avoiding eye contact in order to attend to verbal instructions or when speaking; a picture or written schedule of daily activities; both oral and written instructions; prescription eyewear, prism lenses, sunglasses, and colored lenses.

Motor planning: Ample time to answer questions; extended time, a separate room, and/or answers recorded in any manner for test taking; a checklist or backpack check to assure all items are there; extra storage space to improve organization.

An Example of a "Sensory Smart" IEP Goal with Objectives

Long-Term Goal: Katie will stay focused and organized for 80% of the school day.

Short-Term Objectives: Katie will:
work at her desk, sitting in her chair using an adaptive seating device, for 10 minutes; use stretchable tubing for 15 minutes to avoid kicking the table; do "heavy work" such as carrying books or stacking chairs at least three times daily; remain on her floormat while listening to music through headphones during rest time; use her "safe space" to self-calm fewer than 10 times daily.

Be "sensory smart" when writing IEP goals and objectives.

Resources

For more on sensory diet activities, sensory strategies and accommodations, and practical solutions for home and school, read Raising a Sensory Smart Child: The Definitive Handbook for Helping Your Child With Sensory Integration Issues, by Lindsey Biel, OTR/L and Nancy Peske. (See booklist.) Also visit <www.devdelay.org> for sensory product resources.

Lindsey Biel *is a pediatric occupational therapist in New York City, and the co-author of* ***Raising A Sensory Smart Child****. Visit her website at* <www.sensorysmarts.com>.

10 Facts About Our Foods

by Betsy Hicks

Major changes in farming, food production, and processing have occurred over the past 50 years. The foods we eat today are not those our grandparents ate. Follow these guidelines to stay healthy.

1) Eliminate Pesticides and Fertilizers: Today, most high yield farms use toxic pesticides and nitrogen fertilizers, known causes of cancer and immune suppression. Previously, crops were rotated to replenish the soil with nutrients, and sprayed only when predators threatened production. Now, as standard practice, farmers fertilize to chemically add "nutrients", and spray plants twice: when they begin to flower, and again once they have bloomed. The pesticides thus grow into the plants, and no amount of rinsing can remove them.

Solution: Buy organic. Even better: buy from a local farmer at organic farmers' markets. Then you not only ensure that the food is pesticide free, but you support family farms, regional water sources, and the local economy.

2) Beware of Wheat and Dairy Products: Wonder why bowel and celiac diseases are on the rise? Farmers are using viruses and bacteria to produce genetically modified (GMO) wheat, corn, and other food products for higher yield and better toxin toleration. This process destroys the original DNA, resulting in foods our bodies do not recognize. Pasteurization kills not only bacteria in dairy products, but natural digestive enzymes that help break down milk proteins and sugars, as well.

Solution: Try ancient grains and raw dairy products. For those not concerned about the peptide effect from gluten and casein, spelt and kamut are healthy grains similar to original wheat, before it was genetically modified. They DO HAVE GLUTEN, and when grown organically, are loaded with nutrition. Other choices include organic amaranth, quinoa, teff, and rice, as well as wild rice, for those who cannot tolerate white or brown rice.

3) Say "NO" to Soy: Soy is not the "perfect food". It blocks fertility, decreases libido, and inhibits the enzyme protease, making digestion difficult, and flatulence inevitable. It is an incomplete protein, contributing to the lack of proper amino acids for many vegetarians who obtain much of their protein from soy. It can cause estrogen dominance, hormonal, digestive, and behavior problems.

Solution: Eat only natural and fermented soy products, such as edamame, miso, and tempeh. Avoid soy protein and soybean oil, frequently found in fast foods. Read Kaayla Daniel's *The Whole Soy Story* (see booklist).

4) Be Careful with Corn and Sugar: Farmers in the United States grew hundreds of varieties of corn a century ago. Genetic modification has left only a handful of types, and has robbed corn's flavor and health benefits. Corn and sugar, especially high fructose corn syrup, harbor the nasty bacteria that live in our digestive tracts. They suppress the immune system, feed yeast, thus causing an imbalance of gut flora, move into the liver, and eventually into the rest of the body.

Solution: Eat only organically grown corn and natural sweeteners such as agave, rice and tapioca syrup, and stevia in limited amounts.

5) Watch for Egg Pros and Cons: Eggs are a great source of protein, and can be tremendously healthy, but not for children with vaccine damage. Try egg elimination for 10 days. Possible behavioral or physical stress issues should be apparent when eggs are reintroduced. **Solution:** Eat only organic eggs from free range chickens. (See below.)

6) Know that Garbage In Delivers Garbage Out: Research proves that chemicals cause behavioral problems in children. Food colorings are derivatives of strong petrochemicals and coal tar. MSG, sodium nitrates, and artificial sweeteners, especially aspartame, are strong neurotoxins. Splenda®, which campaigns as the "natural side" of this sweetener, fails to tell you that sucralose is little more than bleached sugar. If you can't pronounce it, or if it didn't exist 100 years ago, eliminate it. **Solution:** Eat only natural foods. Read Blaylock's *Excitotoxins: The Taste That Kills.* (See booklist.)

7) Eat Green: All three meals must include deep green colors, essential to get minerals, and keep an alkaline pH in the stomach. Including something green for breakfast (lime Jell-O® doesn't count), makes the tummy feel good all day. Try Gates' "Breakfast Soup" in *The Body Ecology Diet.* (See booklist.) Most green vegetables don't feed gut bacteria. Limit the nightshade family, including peppers, eggplant, potatoes, and tomatoes (a fruit), which fuel protozoa and other harmful parasites. If you choose to juice your green, drink immediately, because oxidation destroys antioxidants rapidly.

8) Push Protein: Protein foods are especially important for growing children who desperately need amino acids to feed their neurotransmitters. Beans and nuts are wonderful protein alternatives to animal foods. Replace peanut butter (a mold carrier) with other nut and seed butters. Almond, pumpkin, sesame and sunflower butters are all delicious. Sprinkle seeds onto salads and nutritionally weak foods such as cookies or cereal. Rotate protein sources, with different meats, beans, nuts, and seeds each day to vary nutrients.

9) Choose Only Organic Chicken and Grass Fed Beef: Most conventional chickens contain arsenic. Stick to healthier meats, including natural turkey, ostrich, buffalo, and lamb. Eat only grass fed beef, which is as much as 70 times more nutritious than grain fed beef, which exposes the meat to deadly harmful bacteria, such as Mad Cow and E. coli.

10) Make Food a Priority: Shop, cook and dine with family and friends. Plant a vegetable garden; show kids which foods are fresh; give them jobs in the kitchen. Buy foods in their whole forms: heads of lettuce and cauliflower, whole potatoes, carrots with tops, and meat on the bone. Invest in quality herbs and spices, and add them yourself, instead of buying pre-seasoned products that are high in MSG, dextrose, and preservatives. Turn off the television and don't answer the telephone during meals; turn on classical music as a background for conversation. By making family meals a goal you will find that everyone will look forward uninterrupted time together.

***Betsy Hicks** is a diet counselor, and mother of a son with autism. She and her husband John run Pathways Medical Advocates in Southern Wisconsin, with 6 offices nationwide. Contact her at betsy@pathwaysmed.com.*

The Fluoride Deception

What toxin do our local governments add to drinking water, and do dentists paint on our kids' teeth? The same toxin that goes into canned pineapple, Coke, Pepsi, Rice Dream, and Sunny Delight. The one that Dow Chemical hopes soon to spray on wheat, processed foods, and dried eggs. The extremely caustic toxin used in rat poison and cockroach powder, that can burn flesh to the bone, destroy eyes, and sear lungs. What toxin is that? Fluoride! If David Kirby's *Evidence of Harm* made your hair stand on end, *The Fluoride Deception* by Christopher Bryson is a MUST READ! (See booklist for both.)

What Is Fluoride?

Most fluoride is found in hydrofluoric acid, a compound of the element fluorine. It is a chemical by-product of aluminum, steel, cement, phosphate, and nuclear weapons manufacturing. This fluoride is manmade and has no nutritional value. Hydrofluoric acid is used to refine high-octane gasoline, to make fluorocarbons and chlorofluorocarbons for freezers and air conditioners, and to manufacture computer screens, fluorescent light bulbs, semiconductors, plastics, herbicides, and toothpaste.

How Did Fluoride Invade our Water?

Most American cities have added fluoride to their water for so long that we hardly think about it. However, only about 2% of Europeans drink fluoridated water. France, Belgium, Japan, Italy, Scotland, the Scandinavian countries, and others either never added fluoride, or else stopped when they found out how harmful it was.

Up until the early 1930s, both the American Dental Association and the US Public Health Service agreed. Their research showed that fluoride could cause dental problems and damage the central nervous system. Ingestion of fluoride in drinking water and food conveys no benefit.

Then in 1931, Andrew Mellon, Secretary of the Treasury and founder of the Aluminum Company of America (ALCOA}, convinced the US Public Health Service, then under jurisdiction of the Treasury Department, that adding fluoride to drinking water would prevent tooth decay. Two ALCOA funded studies showing the safety of fluoride suddenly overrode thousands of scientific papers showing its negative affects. Without further testing, fluoride was added to public drinking water.

Initially, pure pharmaceutical grade sodium fluoride was added to drinking water. Today, 90% of public water contains industrial grade silicofluorides, byproducts of the phosphate industry, which also can contain toxic levels of arsenic.

What about Dental Fluoride?

Applied directly to teeth in tiny amounts, fluoride catalyzes repair of enamel that has suffered from acidic byproducts of bacteria in the mouth. However, definitive scientific literature over the past 40 years shows that fluoride interferes with tooth formation, causing discoloration and crumbling in a process known as dental fluorosis. Ingesting fluoride promotes, rather than prevents, tooth decay!

Dental fluorosis is a biomarker for systemic fluoride poisoning during early childhood, according to University of Toronto researcher Dr. Hardy Limeback. If, as chemist Dr. Paul Connett states, "teeth are windows to the rest of the body," many of our bodies are in trouble.

How does Fluoride Harm the Body?

Fluoride from air, water, and food accumulates in the body over the lifetime, damaging the bones, immune, musculoskeletal, respiratory, circulatory and digestive systems, thyroid, liver, and brain function. Collecting in fat cells, fluoride attacks and destroys essential protein compounds called enzymes. Each enzyme is uniquely shaped, allowing it to unlock a specific chemical reaction, just as a key of a specific shape unlocks a door. When fluoride enters the body, it hydrolyzes the hydrogen bonds that help each enzyme maintain its shape. With their shapes collapsed, the enzymes no longer fit their keyholes. The body treats these deformed proteins as foreign invaders, thus triggering an auto-immune response.

In 1977, Congress discovered that despite a quarter-century of endorsing water fluoridation, federal health officials had never cancer-tested fluoride. Later tests proved fluoride to be not only a carcinogen, causing liver and bone cancer, but also responsible for symptoms resembling Alzheimer's disease and attention deficit disorder.

Studies have also shown the following:

- Fluoride concentration of 1 part per million (PPM) increases tumor growth by 25% - (University of Austin);
- Fluoride is more poisonous than lead, slightly less poisonous than arsenic - (Clinical Toxicology of Commercial Products - 1984);
- Seven ounces of toothpaste contain enough fluoride to kill a small child - (Fluoride: The Aging Factor, p.14);
- Fluoride supplements are unsafe for children under three years old - (Canadian Dental Association Proposed Fluoride Guidelines, 1992);
- Fluoride accelerates aging. When enzymes lose their shape, they can't do their jobs, resulting in collagen breakdown, eczema, tissue damage, skin wrinkling, genetic damage, and immune suppression - (Austrian researchers, 1970s).

Dr. George Waldbott, who warned the public in the 1950s about the dangers of smoking and possible allergic reactions to penicillin, believes that like mercury, even extremely low concentrations of fluoride can do harm. Migraines, stiffness, and gastric distress all diminished in Waldbott's patients when they stopped drinking fluoridated water.

How Do You Protect Yourself and Your Family?

- Don't drink, make ice cubes, cook, or wash vegetables with tap water.
- Buy high quality commercial bottled water. Some bottled water is "purified" tap water, free of bacteria, but not fluoride. Avoid processed foods. Buy only organic produce.
- Put a high quality water filter on every faucet in the house. Ionizer Plus from High Tech Health (www.hightechhealth.com) is a good one. Unfortunately inexpensive carbon filters do not remove fluoride.

After reading *The Fluoride Deception*, your family will undoubtedly decide to throw out any toothpaste containing fluoride, and drink only safe unfluoridated water.

Two Important Laboratory Tests for Difficult Cases

By Kelly Dorfman, M.S., L.D.N., Nutritionist and Cofounder DDR

Test 1- The Smoking Gun for Mercury Toxicity

Most experts agree that mercury and other heavy metals damage the developing nervous system, and that exposure to environmental toxins can contribute to developmental delays. However, proving that a specific poison has harmed a particular child is extremely difficult. One reason is that isolating single factors is elusive when children are in daily contact with a multitude of pesticides, industrial chemicals, and solvents. Even in clear cases of overexposure, such as mercury loading from vaccinations, testing blood levels does not yield answers because the metals are stored in fat tissue, not blood.

At last, labs have the expertise to test blood or urine samples for molecular damage caused by a wide variety of toxins. For girls who are not toilet trained, or others whose disabilities make urine collection difficult, plasma blood levels are an option. The tests measure the presence of porphyrins, a chemical ring structure that the body uses to make hemoglobin. It is the "heme" of hemoglobin. Hemoglobin is a porphyrin ring with iron in the middle. Because of the presence of iron, blood, which contains hemoglobin, is red. Chlorophyll, in contrast, is a porphyrin ring, with magnesium in the middle, thus making it green.

Mercury and other toxins interfere with the production of porphyrin at specific places on the ring. The result is malformed or incompletely formed porphyrin that the body excretes because it cannot use it to build hemoglobin. Have you ever noticed that some children with delays appear unusually pale? That's because a defect in hemoglobin production from either inadequate iron or poor porphyrin genesis gives them pasty complexions.

Scientists believe that mercury interferes with porphyrin production at the fifth and sixth step, resulting in excretion of the unfinished porphyrin. The urine test detects specific incomplete, unusable porphyrins discarded before the disrupted step, such as pentacarboxy porphyrin (5-CP) and coproporphyrin (4-CP), which denote the presence of mercury. Other toxins disrupt production at other junctures, resulting in the elevation of different porphyrins.

In the United States, Lab Corp and Quest Laboratories both offer tests that measure porphyrins in blood plasma and urine. While both labs usually take insurance, they have limited experience with the test. Laboratoire Philippe Auguste in Paris has broader experience with the testing and provides clearer results. Send a urine sample by regular air mail and it takes a week to 10 days to process. Contact them at: contact@labbio.net. The cost at this writing is 90 euros (approximately $120) plus shipping.

Test 2- Avoiding Bad Drug Reactions

Many patients experience one of three types of bad reactions to a medication.

The mode of action can be wrong for the condition. For example, taking a medication for depression that works by raising serotonin when you unknowingly have high serotonin already will cause disassociation.

The mode of action is correct and a secondary problem develops in response to the therapy. Using antibiotics to treat bronchitis and then getting a yeast infection, is an example of this chain reaction.

Side effects result from poor processing and/or excreting of the drug. Incomplete and faulty detoxification of a substance can cause symptoms such as headaches, rashes, paradoxical responses (i.e. over-activity instead of sedation), and emotional swings. Recently, a boy took Celexa for sensory anxiety. Initially, the young man had improved sensory function, was happy and relaxed. Then overnight he became pathologically agitated and distressed because his body could no longer break down the drug.

Now we have a test that pinpoints which patients might have the third type of reaction. This test is especially important for children with autism spectrum disorders, who have weak detoxification systems. Because doctors are relying increasingly on medications as a part of biomedical intervention, they must prescribe medications using the "trial and terror method." Give the drug and watch nervously for bad reactions. The jury is not in yet on the efficacy of this trend, and parents should proceed with caution.

The body breaks down and excretes drugs through a series of steps. First, it identifies a chemical that is unnecessary. Then a group of enzymes called cytochrome P450 enzymes act on the medication or chemical and prepare it for excretion. A different P450 enzyme acts upon each drug to break it down. If a patient inherits a weak gene that creates a specific P450 enzyme, and then takes a drug that needs that enzyme, the drug will break down properly, but toxic by-products and serious side effects will result.

How does the test work? It measures the genes regulating a patient's P450 enzymes. Because pharmaceutical companies are now required to identify which cytochrome P450 enzyme processes each medication, a doctor can choose only medications that match a patient's high functioning detox pathways, thus avoiding side effects.

Several laboratories offer this blood test. The most complete and least costly is from Genova Diagnostics (formerly Great Smokies Diagnostic Lab). At $399 it requires a physician's order. Call 800-522-4762 or go to <www.GDX.net>.

For youngsters on several medications, GeneMedRx.com, a computerized subscription service collates the known drug detox pathways and genetic information. Since several medications can overwhelm even strong detox pathways if they use the same P450 enzyme, use this resource (free for a short time) to check if multiple medications are overloading a P450 enzyme, even without detox gene information.

The future is here. Exciting new laboratory tests can now tell if mercury is present, even if it is hiding, and prevent drug reactions by testing how an individual's unique detoxification system operates. For children with developmental delays, understanding individual differences in detoxification is critically important.

UPCOMING EVENTS

- **Saturday, August 26 – Sunday, August 27, 2006 – Framingham, MA**
  The Optometric Treatment of Autism
  Presented by: Paul Harris, OD
  For more information, call the OEP Foundation at: 949.250.8070.

- **Friday, September 8 – Sunday, September 10, 2006 – Burlington, VT**
  Vermont Mini DAN!
  Speakers include Elizabeth Mumper, MD and Maureen McDonnell, RN
  For more information go to <www.danconference.com>.

- **Friday, September 8 – Saturday, September 9, 2006 – Denver, CO**
  M.O.R.E.: Integrating the Mouth with Sensory and Postural Function
  Speakers: Patricia Oetter, MA, OTR/L and Eileen W. Richter, MPH, OTR/L.
  For more information, go to <www.pdppro.com> or call 651.439.8865.

- **Friday, September 15 – Saturday, September 16, 2006 – Portland, ME**
  Sensory Integration and Beyond: Power Tools for Treating Children
  Speakers: Patricia Oetter, MA, OTR/L and Nancy Lawton-Shirley, OTR
  For more information, go to <www.pdppro.com> or call 651.439.8865.

- **Friday, September 15 – Saturday, September 16, 2006 – Boston, MA**
- **Friday, September 29 – Saturday, September 30, 2006 – Philadelphia, PA**
  How Does Your Engine Run? The Alert Program for Self-Regulation
  Speakers: Sherry Shellenberger, OTR and Mary Sue Williams, OTR
  For more information, call TherapyWorks at 877.897.3478 or
  go to <www.alertprogram.com>.

- **Saturday, September 16 – Sunday, September 17, 2006 – New York, NY**
  The Gluten Free Revelation
  For more information about this and other cooking classes, call the Natural Gourmet Institute for Food and Health at 212.645.5170 or
  go to <www.naturalgourmetschool.com>.

- **Thursday, September 28 – Friday, September 29, 2006 – Casper, WY**
- **Friday, October 6 – Saturday, October 7, 2006 – Salt Lake City, UT**
  The SI Tool Kit: Bringing Sensory Integration to Schools and Homes
  Speaker: Diana Henry, OTR/L.
  For more information or to register, go to <www.ateachabout.com>.

- **Thursday, October 5 – Sunday, October 8, 2006 – Seattle, WA**
  Defeat Autism Now! Fall Conference
  Join the whole DAN! team at this bi-annual event and learn how children are recovering from autism.
  To see schedule of topics and speakers, go to <www.danconference.com>.

- **Friday, October 6 – Saturday, October 7, 2006 – Warwick, RI**
  Clinical Assessment and Practical Interventions for Praxis
  Speaker: Teresa A. May-Benson, ScD, OTR/L
  For more information, go to <www.pdppro.com> or call 651.439.8865.

- **Saturday, October 13, 2006 – Washington DC**
  Creating Healthy Environments For Children
  Day long seminar.
  To learn about topics and speakers, call DDR at 800.497.0944 or
  go to <www.devdelay.org>.

- **Tuesday, October 17, 2006 – May, 2007 – New York, NY**
  Creating Healthy Environments for Children
  The first of seven lectures in a year-long series.
  For more information about topics and speakers, call DDR at 800.497.0944 or
  go to <www.devdelay.org>.

- **Saturday, October 21, 2006 – Phoenix, AZ**
  Arizona Zoowalk and 5K Run for Autism
  This fundraising event will take place at the Phoenix Zoo.
  For more information, go to <www.WalkForASD.com>.

- **Wednesday, October 25 – Friday, October 27, 2006 – Toronto, Canada**
  Geneva Centre for Autism International Symposium
  Speakers include: Temple Grandin, PhD and Lucy Jane Miller, PhD
  For more information, go to <www.autism.net>.

- **Wednesday, November 1 – Friday, November 3, 2006 – Seattle, WA**
  Autonomic Response Testing (ART) and Autism
  Learn Dr. Dietrich Klinghardt's methods of checking on supplements and dosage and the latest in protocol and treatments. Call 425.637.9339 or
  go to <www.neuraltherapy.com>.

Developmental Delay Resources
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