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Can A Poisoned Environment Play A Major Role in a Child's Ability to Learn?

It is no wonder that our children are the sickest the world has ever seen in the history of the human species.

We continually poison our environment with the 60,000 chemicals in use today (with 2,000 new ones developed every year). We drop 4 billion tons of these chemicals on our world. Elements such as mercury, aluminum, and arsenic, which are known to cause chronic toxicity to human beings, are building up to dangerous levels in our bodies.

Thanks to modern technology, we have created a world that is alien to the human species, one to which- our biochemistry has increased difficulty adapting. When we cannot adapt, we begin to show various signs of

illness or disease; this means we are no longer in equilibrium within ourselves and between ourselves and our environment.

For the past several years, parents have become increasingly concerned about their children's learning difficulties. Yet this was not a major problem for children growing up in the 1700s or the early 1800s. As late as 1950, according to a study by Dr. Lendon Smith, there was one child in each classroom with Attention Deficit Hyperactivity Disorder (ADHD). Today, it is more like five or six. The answer to this problem is not more band-aid drugs like Ritalin or intense psychotherapy. The answer is to find out why ADHD is on the increase.

ADHD is an epidemic of the post-industrial revolution era, like the other chronic diseases of our world such as multiple sclerosis (MS), lupus, cancer, chronic fatigue (CFIDS), etc.

Traditional medical approaches to these chronic ailments have not been particularly effective in changing anything about these illnesses or their progress. During my 19 years of practicing pediatrics, internal medicine, and gynecology as a family physician, I became thoroughly disillusioned with the approach I had been taught to use because, except for acute illnesses, very rarely did anyone get well. That is why I embarked on a journey of discovery to try to find the "magic bullet" which would explain this gnawing enigma.

I learned that traditional medicine did not seek to find the root cause for these diseases, which behaved far differently than bacterial and viral infections. Instead, we were told to employ band-aid approaches to chronic diseases such as MS, rheumatoid arthritis, CFIDS, lupus, scleroderma, cancer, Lou Gehrig's disease, ulcerative colitis, etc.

Worse, we fell flat completely when we attempted to deal with the chronic illnesses of children: chronic infections, eczema, asthma, learning disabilities (like ADHD), etc. Why? Because there is no clear answer, no "magic bullet," no simple solution found in virus or bacterium. We are all biochemically *individual*, and these illnesses related to the failure of the individual to adapt to our increasingly alien planet. Each one of us reacts differently to the 60,000 chemicals surrounding us daily. Our ability, or in these cases, inability, to adapt to these chemicals sets these diseases in motion, not some unknown virus.

A learning disability is defined as "a disorder in one or more of the basic psychological processes involved in understanding, or in abnormal language spoken or written, which results in an imperfect ability to listen, think, speak, read, write or spell." Specific examples of the characteristics of a child with a learning disability include: short attention span; poor memory; inability to follow directions; difficulty distinguishing between letters, numbers and sounds; inappropriate responses; restlessness; saying one thing but meaning another; discipline difficulties; inability to change;

poor listening or memory skills; inability to follow multiple directions; difficulty telling time or right from left; difficulty naming familiar things or people; difficulty sounding out words; reverse letters, reads, writes poorly; poor coordination; difficulty understanding words or concepts; late speech development; late gross or fine motor development; impulsiveness.

On paper, that sounds fine, but I have to ask the question "why" whenever I encounter a process that calls out to be explained. Is this a disorder of the psychological process? Isn't a psychological process one which has at least some neurochemical origins. For that matter, everything that relates to the mind has at least some basis in the chemistry of the brain. Therefore, could a learning disability be the result of a chemical imbalance in the brain? And why is there all this abnormal neurochemistry now? Why wasn't there all this abnormal neurochemistry in 1790?

The human species has not changed genetically in one million years (that is how long it takes for genetic change). Thus, it must be a change in the environment in which we live since "we" are the same as we were in 1790. So what are the changes that have taken place since that time, and how do they relate to the inability of our children to learn today?

Look at what we need to survive: air, water, and food. These characteristics of our environment have all changed dramatically in the last 200 years. Prior to the industrial revolution, there was very little about the environment that was harmful to the health of the world's inhabitants except the other living things that could hurt us: predators, bacteria, fungi, viruses, etc.

Then, 200 years ago, we began to escalate the pace of our living on all fronts. To do that, we needed to develop methods of energy production. We found ways to produce new items using chemicals. The birth of the chemical industry was borne of our need to live better, move faster, and beautify our environments.

As a result, in 200 years, we have produced trillions of tons of chemicals utilizing mercury, lead, cadmium, arsenic, and aluminum to work in our industries. Take a look at these "heavy" metals and how ubiquitous they are in our world. Then look at what symptoms they can cause when they accumulate in the body. Many of them affect the brain, and thus, they can play a role in learning difficulties.

All of these chemicals and heavy metals contaminate our food, our air, and our water. If an individual's detoxification system works efficiently, he can clear a fair amount of these toxic agents and not have a problem. But if there is a large burden, even the best system does not work well enough and the individual gets sick. If an individual's detoxification system is impaired due to genetic or nutritional defects, the body will simply store large amounts of these toxic agents.

My search lead me to this finding-there are three reasons why some children have difficulties learning while most do not: genetics, nutrition, or environmental toxins.

We cannot say much about the genetic aspect except that we have observed that there can be a genetic "predisposition" for immune system abnormalities leading to sensitivity (allergic) problems, which in turn are related to learning disabilities. For example, if a three year old child has a genetic enzyme defect, he/she may need six times the normal amount of vitamin B6 to accomplish the same neurochemical processes as a normal child. This affected child may develop a significant learning disability because of this lack of Vitamin B6, even though the parent is giving him a vitamin with some B6 in it.

The nutritional aspects of learning disabilities are quite diffuse and complex because of the "individuality factor." Our food supply has been bastardized by the food industry, starting at the farm site and carrying right through to the factories that process the foods. The farmer does not grow organic foods, so chemicals contaminate the food. The farmer uses soil over and over, depleting the minerals. The food manufacturing plants process the food so it is able to withstand a long shelf life. All of this did not happen in 1790. Thanks to all these processing techniques, foods have lost a large percentage of their nutrient value.

What happens as a result of the farmer and food processor's techniques is we eat a product which is alien to our systems. Poor food supply leads to poor fuel for the neurochemical processes necessary for learning.

Finally, there is the immediate environmental impact on children and their ability to learn. It has been said that the air in our world today has 30% less oxygen in it than the world in which pre-historic man lived. Do you think this might have an impact on the learning abilities of our children? This, of course, is in addition to the trillions of tons of chemicals and heavy metals we put in our bodies through the air. If nothing else, it certainly had a damaging impact on our molecular systems.

We place our children in classrooms for eight hours, five days a week. In those 40 hours, they breathe in chemicals from carpets, paints, pesticides, toxic cleaning fluids, furniture, office machinery, etc. In addition, most schools are contaminated with molds to add another major burden to the child who is not adapting well to his/her environment. And if the school building is more than 25 years old, you can add in the asbestos factor.

Therefore, alien chemicals, heavy metals, and contaminated air and water can cause an individual child's immune system to become damaged. This can cause sensitivities to certain foods, chemicals, preservatives, and molds. As a result, the child may develop a learning disability.

Food which lacks appropriate nutrients - thanks to poor farming techniques and food processing for long shelf life-in essence starves a child's brain of what it needs to function properly. These nutrient deficiencies can also result in learning disabilities.

In looking at the various causes of learning disabilities, we see that the incidence breaks down as follows:

- Genetic only: *Rare*
- Birth injuries: *Rare*
- Previous infections: *Rare*
- Accidents: *Rare*
- Dysfunctional home with stressors: *Common*
- Biochemical aberrations (nutritional): *Common*
- Toxic Dysfunction: *Common*
- Allergic (sensitivity) syndrome: *Most Common*

Specifically, studies have found correlations between certain toxic agents / nutrient deficiencies and learning disabilities. These include:

- Calcium deficiency and ADHD
- High serum copper and ADHD
- Iron deficiency can cause irritability and attention deficits
- Magnesium deficiency is characterized by fidgeting, anxiousness, restless, psycho- motor inability, and learning difficulties
- Malnutrition in general is related to learning disabilities; the child does not have to look malnourished, a fact forgotten in affluent countries
- Dyslexic children seem to have abnormal zinc and copper metabolism-low zinc and high copper
- Iodine deficiencies have been linked to learning difficulties

Traditional medicine would have us make a diagnosis using the signs and symptoms, and then find a therapy to fit the diagnosis. But this *can never work in complex chronic illness*. You must know why the process exists in order to stop it. The current modes of treating ADHD is drug therapy (Ritalin) along with calmness training, endurance training, activity level training, etc. All these are band-aids for the signs and symptoms. Why not find out why and fix it?

The easy way out for schools is to treat the symptoms. This certainly allows the child sometimes to function in the school environment, but at whose expense? Addictive "brain" drugs and tedious control measures have been shown to lead to teenagers and adults who do not function well in our society.

Several studies over the last 20 years have focused on the learning disability characterized by hyperactivity (ADHD). What we have discovered is that in the majority of cases caused by an immune defect and

sensitivities to food additives, preservatives, chemicals, or inhalants, when we correct the sensitivity abnormality, the hyperactivity disappears. This is accomplished by both immunotherapy and dietary interventions.

So what is the environmental approach to dealing with these problems? First we take a comprehensive environmental history, documenting chronology, environment, nutrition, allergies, family, toxic exposures, and normal living characteristics. We conduct both a physical exam and an extensive laboratory evaluation (testing nutritional deficiencies, occult infections, heavy metal build-up in the body, toxic chemicals, and sensitivity testing).

Armed with these results, we can focus on the individual's imbalances, deficiencies and toxicities. We can prescribe individualized nutritional supplements, correct the defects caused by excess heavy metals, outline an avoidance diet, implement environmental controls, and start Enzyme Potentiated Desensitization (EPD-an immunotherapy vaccine), to start the child back on the road to overcoming learning disabilities like ADHD, rather than just masking the problem and hoping it can be "drugged" away.

I have taken care of many children with learning disabilities, and my colleagues, like Dr. Doris Rapp, have been doing it for over two decades. We have shown that by following the therapeutic and philosophical guidelines I have described, it can make for a "new child" who can function at or near full potential.

The following are among a few of the cases I have treated. I use them here as examples:

R.F.

- 8 year old male (son of pediatrician and psychologist)
- Mother-allergic
- Infancy: colic; didn't sleep through night until age 4-1/2; hyperactivity from first few months
- Infections: recurrent ear infections; chronic sinus problems
- Age 2: asthma
- Ages 3-5: Violent, hostile, unmanageable; chronic sleeping problems
- Treatment Ages 3-7: Ritalin, Dexedrine; several side effects from both. Cylert increased his rage
- First seen 9/93: food cravings; stomach pain; bad breath; nasal congestion; wheezing; headaches; nightmares; mood swings; hyperactivity; attention deficit; behavior disorder; hostile; short attention span; sound sensitivity; eczema
- Laboratory findings: mild mercury burden; mild lead and aluminum burden; overgrowth Candida and citobacter in colon.
- Allergy testing-positive skin testing to: bakers yeast; brewers yeast;

- chicken; cows milk, egg yolk; wheat; molds; feathers;
- formaldehyde; metabosulfite; polyester; oats; onion; peanuts; pork;
- rice; soy; tomato; trees; MSG; fluoride
- Therapy: nutritional support; Diflucan; Biocidin; environmental controls; EPD immunotherapy
- Course: the EPD has made a world of difference; 90% improved "on all fronts"

N.A.

- 7 year old female
- Gestation: very active (overly so)
- Mother-allergic
- Breast fed
- First year: up all night for six weeks; colic
- Ages 2-5: leg aches; coughs; frequent ear infections; chronic nasal problems; sound sensitivity; increased odor sensitivity; ADHD; worse in damp areas; worse around cats
- Tested by allergist at age 5: *none found*
- Laboratory findings: maldigestion; high aluminum burden; very high T-4, T-8 ratio; decreased NK cells; decreased IgG subclasses; amoebas found in stool; hyperaminoaciduria
- Allergy testing-positive skin testing to: bakers yeast, apricot, wheat, rye; mold, cows milk, rice, strawberry, carob; chocolate; egg white soy; note: never finished testing
- Therapy: nutritional; Diflucan; Biocidin; EPD immunotherapy
- Course: a wonderful response to EPD with loss of almost all hyperactivity; still has some ADD; presently working on this patient with further testing

T.M.

- 5 year old male
- Gestation. very active, especially with certain foods
- Infancy: severe drooling; colic; irritable; hyperactive
- Ages 2-4: severe hyperactivity; eczema
- Miscellaneous symptoms: itching skin; reaction to foods; urgency; hoarseness; impulsive; mood swings; short attention span; enuresis; worse indoors; certain stores make him worse; odors both him; worse on rainy days
- Laboratory findings: anemia, low uric acid, lymphopenia; low CD4 count; renal damage; maldigestion; mineral deficiencies; *aluminum toxicity*
- Allergy testing-positive skin testing to: bakers yeast; broccoli; corn; cabbage; green beans; goats milk; honeydew; celery; cigarette smoke; sodium sulfite; salicylate; dust; oats; pork; rice; rye; soy; tomato; cinnamon; squash; formaldehyde; EDTA; mold
- Therapy: nutritional supplements; dietary elimination, rotary; chelation

- Course: patient is doing relatively well, but the chelation has a long way to go to remove all the aluminum; will begin EPD soon

If schools and parents continue to follow the same old precepts of the fathers of medicine and psychology (who wrote and taught in a different era when our world was very different), the outlook for children with learning disabilities looks quite dismal. We have added great toxic complexities to our world and the "fuels" we put into our bodies. To ignore environmental factors when considering learning disabilities is foolish. Worse, we could be causing our children permanent difficulties, reaching far beyond when they leave school.

In forty-five years, there has been a 500% increase in the number of ADHD children. Relate this to the same type statistics for breast cancer in women. Could the environment be a factor here? Do you think we can change the future?

If we do not make drastic changes in our production of toxic chemicals and the use of toxic heavy metals, we probably will dispose of our "human race" in the next thousand years. What can you do today? Clean up your personal world, of course. Find out *why* you have a specific problem and fix it! Don't ever let the doctors tell you "we do not know why." Do not let the schools drug your children. Only you can force the medical establishment to change its "modus operandi".

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NOTICE: This information is provided for educational purposes. Any medical procedures, dietary changes, or nutritional supplements discussed herein should only be undertaken on the advice of a qualified physician.

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