



ADHD and Chiropractic Clippings

New Research Sheds Light on Chiropractic and ADHD

Recent research reporting on improvement in a 3 ½ year old boy undergoing chiropractic care reveals that chiropractic may play an important role in managing children with ADHD and related neurodevelopmental disorders.

FOR IMMEDIATE RELEASE

PR Log (Press Release) – Mar 05, 2009 – The research, reported in the Journal of Pediatric, Maternal & Family Health – Chiropractic

<http://www.chiropracticpediatricresearch.net> includes a review of the literature supporting the role of chiropractic in children suffering from a number of disorders that share their origin with ADHD.

“Research is revealing that there is a relationship between abnormalities in the spine, the nervous system and brain” stated Dr. Pamela Stone-McCoy, lead author of the paper. “Basic science research shows that the proper development of the brain relies on proper structure and movement of the spine from an early age.”

Research has shown not only that the developing brain relies on normal structural integrity and joint movement, but that complex neurochemical communication and pathways involved in helping humans to “feel good” are tied into spinal biomechanics and their related neurological pathways.

“It makes perfect sense when you think about it” stated Dr. Lisa Przybysz, a co-author on the paper. “We see this shocking increase in the diagnosis of ADHD and other behavioral disorders at the same time that we see a huge increase of sedentary behavior in our children.”

As pointed out in the paper, researchers believe that the increase in the diagnosis of such disorders as ADHD, pervasive developmental disorder, Tourette’s Syndrome, obsessive compulsive disorder and other neurodevelopmental disorders, have their root in a “perfect storm” of abnormal spinal development coupled with cultural changes.

“Not only does television watching, computer use, computer games and lack of exercise cause an increase in obesity and diabetes in our children” remarked Dr. Matthew McCoy, a chiropractor, public health researcher and editor of the journal that published the study, “These habits are also stunting the development of our children’s brains.”

According to McCoy “Children’s nervous systems need the constant stimulation of movement in order to develop and function properly. Abnormal position or movement of the spinal vertebra can develop and this can lead to nerve interference. It is this interference, called vertebral subluxations, that chiropractors correct.”

The child reported on in the study suffered from a number of health challenges including birth trauma, ear infections, and balance problems. With their child suffering from poor school performance and difficulty interacting with others, the parents sought chiropractic care in order to avoid resorting to medication. After just one month under chiropractic care the child began to improve. His grades and general health improved and he continues to receive chiropractic care on a regular basis. The authors of the study call for more research on the role of chiropractic care in these types of disorders.

About The Journal of Pediatric, Maternal & Family Health - Chiropractic

The mission of the JOURNAL OF PEDIATRIC, MATERNAL & FAMILY HEALTH – Chiropractic (JPMFH) is to disseminate to its reading audience peer-reviewed research and other information dealing with the concepts of health, wellness, and vertebral subluxation as they relate to children, mothering and families. It is devoted primarily to serving the chiropractic profession, other health care providers, the scientific and scholarly communities, and the public at large.

<http://www.prlog.org/10193883-new-research-sheds-light-on-chiropractic-and-adhd.html>

Coffman Chiropractic Life Center

Chiropractic Helps ADHD, A Case Study

The scientific periodical, the Journal of Pediatric, Maternal & Family Health, published a case study in the March 2009 issue documenting the improvement with chiropractic care of a 3 and a half year old boy who had been diagnosed with Attention Deficit / Hyperactivity Disorder (ADHD).

Authors of this case study report that experts now consider Attention Deficit / Hyperactivity Disorder (ADHD) to be the most commonly encountered neurobehavioral disorder of childhood. They report that some studies show a 4%-12% occurrence rate among school-aged children with boys being three times more likely to be diagnosed with ADHD than girls. They note that medically, ADHD is treated using psychostimulant drugs, such as Ritalin. They note that these drugs can cause a decrease in the ADHD symptoms but that the side effects may outweigh the benefits.

Side effects from drugs used to treat ADHD include but are not limited to: growth rate reductions, cardiovascular effects such as an increase in blood pressure and heart rate, insomnia, reduced appetite, anorexia, stomach aches, sleep disturbances, and dizziness. It has also been reported that most of the high profile school shootings were performed by boys who were on long-term medication for ADHD.

A chiropractic examination involving several procedures such as thermography, muscle testing, posture analysis, and range of motion was performed on the young boy in this case study. The presence of vertebral subluxation was made and a course of specific adjustive care was initiated. The care initially involved adjustments for 3 times a week for three weeks followed by one visit per week for the 8 following weeks. In addition to chiropractic care to reduce vertebral subluxation the mother was advised on decreasing food additives and sugar.

The outcome of chiropractic care for this young boy was very encouraging as both the boy's parents and teachers reported improvement in the boy's attention and energy levels following the initiation of chiropractic care. They also note that his grades have improved. His mother reported that he was able to win a chess tournament due to his improved ability to pay attention. The boy's mother noted that at the point of chiropractic care at the writing of this study, her son would show an increase in hyperactivity if she waited longer than two weeks to get him adjusted. At the writing of this case study, the young boy remained under chiropractic care at a frequency of twice monthly. Most notably, and perhaps most important, the case study reports that this 3 and a half year old boy is no longer on any related drug therapies.

Dr. Pamela Stone-McCoy, lead author of the paper noted, "Research is revealing that there is a relationship between abnormalities in the spine, the nervous system and brain. Basic science research shows that the proper development of the brain relies on proper structure and movement of the spine from an early age." Dr. McCoy went on to explain, "Childrens nervous systems need the constant stimulation of movement in order to develop and function properly. Abnormal

position or movement of the spinal vertebra can develop and this can lead to nerve interference. It is this interference, called vertebral subluxations, that chiropractors correct."

<http://coffmanchiropractic.com/templates20/article/1847.html>



Chiropractic may help manage Tourette's, ADHD & OCD

Tuesday 13th October, 2009



[Chiropractic](#) may play an important role in managing neurodevelopmental disorders such as Tourette's syndrome, according to new research.

The research included a review of the role chiropractic plays in supporting children suffering disorders that share their origin with Tourette's including [ADHD](#) and [obsessive compulsive disorder \(OCD\)](#).

Tourette's syndrome is a condition that affects the nervous system and causes involuntary physical and verbal tics (movements and sounds).

Lead author of the research Dr. Pamela Stone-McCoy said: "Research is revealing that there is a relationship between abnormalities in the spine, the nervous system and brain.

Basic science research shows that the proper development of the brain relies on proper structure and movement of the spine from an early age."

Researchers believe the increase in disorders such as Tourette's, ADHD and OCD are rooted in abnormal spinal development and in order for the nervous system to function properly there must be constant stimulation of movement. Abnormal positioning or movement of the vertebrae can lead to interference called 'vertebral subluxations' and chiropractors look to correct this.

Recently, a 20 year-old woman with motor and vocal tics since the age of three underwent chiropractic treatment and was revealed as having vertebral subluxation. Over the course of a year's chiropractic she experienced significant improvement in the severity and frequency of her tics and was able to function better throughout the day.

Researchers have called for further research into chiropractic, vertebral subluxation and its effects on neurodevelopmental disorders.

<http://www.gotosee.co.uk/healthnews/2009/10/chiropractic-may-help-tourettes-adhd-ocd/>

Chiropractic Treatments for ADHD

Published: 11/06/2009, Last Updated: 11/06/2009

By **LocateADoc.com Medical**

Attention deficit hyperactivity disorder (ADHD) in children and adults is often treated with Ritalin, a stimulant medication that helps improve brain activity and increases focus and concentration. However, some health experts believe that chiropractic therapy may be just as effective at improving the lifestyle of ADHD sufferers as prescription drugs. According to the American Chiropractic Association, some children who have been diagnosed with ADHD can benefit from a non-drug treatment that improves focus and makes it easier for them to concentrate for longer periods of time.

[Link Between Chiropractic Treatment and ADHD](#)

[Chiropractors](#) and chiropractic neurologists have found several patterns in the brain activity and spinal health of ADHD patients. According to Dr. Robert Melillo, a chiropractic neurologist, “Motor activity—especially development of the postural muscles—is the baseline function of brain activity. Anything affecting postural muscles will influence brain development. Musculoskeletal imbalance will create imbalance of brain activity, and one part of the brain will develop faster than the other, and that's what's happening in ADHD patients.” (Source: [ACA Today.org](#))

ADHD often triggers a number of behavioral problems and interferes with the learning process. These cognitive difficulties can often be traced to a neurological imbalance that may result in postural problems, extreme sensitivity to touch, sensitivity to certain sounds and tremors. In some cases, the imbalances can trigger migraines, headaches and other neurological problems.

When the spinal column is adjusted with chiropractic treatments, many of these neurological problems simply disappear. Chiropractic treatments release tension and blocked energy around the spine so that the neurons can communicate more effectively. When the brain and the spine are communicating clearly, the energy flow can improve thinking, focus and memory for the long-term. This process may also help reduce anxiety, stress and other negative effects commonly associated with spinal misalignment.

[Managing ADHD with Chiropractic Therapy](#)

In addition to getting regular chiropractic, people suffering from ADHD may consider making certain lifestyle changes. The American Chiropractic Association encourages parents and individuals with ADHD to do the following:

- Eat mostly organic foods with as few pesticides or herbicides as possible
- Remove excess sugar from the diet
- Avoid excessive preservatives and additives
- Stop using pesticides and artificial products around the house
- Maintain a dairy-free and gluten-free diet to reduce risk of allergies
- Engage in natural relaxation activities on a regular basis

Other Benefits of Chiropractic Therapy

Some of the other key benefits of [chiropractic](#) therapy include:

- Increased feelings of well-being
- Improved posture
- Better memory
- Improved sleep
- Reduced dependency on other prescription medications
- Reduced sensitivity to pain
- Improved functioning of joints and muscles

Doctors of [chiropractic](#) are trained to treat a number of neurological problems using non-invasive techniques and treatment modalities. If you or your child has been diagnosed with ADHD, you may be able to manage the symptoms of the disorder better with regular chiropractic treatments. A chiropractor will conduct a full spinal examination, nutritional analyses, and offer several treatment options to restore you or your child to good health. Set up a consultation with your chiropractor to find out what your treatment options may be.

<http://www.locateadoc.com/articles/chiropractic-treatments-for-adhd-2028.html>



Chiropractic Care May Help Children With Learning Disorders And Dyslexia

Article Date: 20 Jan 2007 - 0:00 PST

A recent study, published in the Journal of Vertebral Subluxation Research (JVSR), suggests that chiropractic care may offer significant benefits to children suffering from learning disabilities and dyslexia.

The research was conducted by Swiss chiropractor Yannick Pauli, DC, president of the Swiss Chiropractic Pediatric Association, who specializes in the care of children suffering from learning and behavioral disorders.

"This review critically assessed eight previously published studies involving a total of 160 children," Dr. Pauli explained. "Although the results remain preliminary and more research is needed, the evidence strongly suggests that chiropractic care may help various cognitive abilities that are essential to learning."

Learning disorders and dyslexia affect between three and ten percent of school-aged children in the United States. Individuals with these disorders often suffer from low self-esteem, diminished motivation, loss of interest in school and problems in social functioning, and academic difficulties.

Pauli noted that the same areas of neurological dysfunction that can lead to learning disabilities and interfere with learning can also interfere with life skills, sport activities, and family and peer relationships.

"Learning disorders and dyslexia are increasingly recognized as a neurodevelopmental disorder," he stated. "Children suffering from those problems have parts of their brain that are not functioning adequately or are even delayed in their development. Among those dysfunctional areas is a small part located at the back of the brain called the cerebellum. The cerebellum plays a vital role in learning. It helps the brain coordinate and integrate the various sensory information, as well as to increase the processing speed of the brain."

Numerous factors can affect the proper development of the brain, including maternal [stress](#) during pregnancy, traumatic birth, poor diet, and sedentary lifestyle.

Pauli stressed that, contrary to popular belief, chiropractic is not restricted to [back pain](#) in adults. "The only source of constant stimulation to the brain comes from the spine and the postural muscles constantly adjusting to the force of gravity," he explained. "If

the daily physical stresses of life cause misalignments in the spine -- called vertebral subluxations by chiropractors -- the brain is not adequately stimulated. This can cause problems throughout the body."

He added that chiropractic adjustments, even when no back problems are evident, can improve the function of the spine and strongly stimulate nerve pathways to the cerebellum and other parts of the brain. "In the case of children, this may, in turn, help brain functions necessary for learning," he said.

Matthew McCoy, DC, editor of JCSR, commented that "this study is an exciting first step. It shows the beneficial effect of chiropractic care and may offer hope for thousands of suffering children."

This study is part of a larger effort undertaken by chiropractors to document and assess the potential benefits of chiropractic care in the field of learning disorders and other so-called mental disorders such as [ADHD](#), obsessive-compulsive disorders and even [autism](#)."

JCSR is a peer-reviewed scientific journal devoted to subluxation-centered chiropractic research affiliated with the World Chiropractic Alliance, an international organization representing doctors of chiropractic and promoting the traditional, drug-free and wellness-oriented form of chiropractic.

An abstract of the research report is available at <http://www.jcsr.com>.

JCSR is a peer reviewed scientific journal devoted to subluxation-based chiropractic research, affiliated with the World Chiropractic Alliance (WCA), an international organization representing doctors of chiropractic and promoting the traditional, drug-free and non-invasive form of chiropractic as a means of correcting vertebral subluxations that cause nerve interference.

World Chiropractic Alliance (WCA)
Chandler, AZ 85224
United States
<http://www.worldchiropracticalliance.org>

<http://www.medicalnewstoday.com/articles/61111.php>

Higher death rate discovered among kids on ADHD drugs

The Washington Post

Published: Tuesday, June 16, 2009

WASHINGTON -- Children taking stimulant drugs such as Ritalin to treat attention-deficit hyperactivity disorder are several times as likely to suffer sudden, unexplained death as children who are not taking such drugs, according to a study published Monday that was funded by the Food and Drug Administration and the National Institute of Mental Health.

While the numbers involved in the study were very small and researchers stopped short of suggesting a cause and effect, the study is the first to rigorously demonstrate a rare but worrisome connection between ADHD drugs and sudden death among children.

Doctors have speculated about such a connection in the past because stimulants increase heart rate and have other cardiovascular effects. Physicians are currently advised to evaluate patients for cardiac risks before prescribing the drugs, and FDA officials said Monday that those guidelines do not need strengthening in light of the new study.

About 2.5 million children in the United States take ADHD medications such as Ritalin and Adderall.

FDA officials said Monday that given the seriousness of ADHD and the rarity of sudden death -- which strikes fewer than 1 in 10,000 children -- the benefits of the drugs outweigh their risks. Agency officials urged parents to discuss concerns with doctors rather than deciding on their own to discontinue a child's medication.

The study's lead author, Madelyn Gould, a professor in child psychiatry and epidemiology at Columbia University, said she agreed with the FDA's advice.

"This study reports a significant association or 'signal' between sudden unexplained death and the use of stimulant medication, specifically methylphenidate," the study researchers concluded, referring to the chemical name of Ritalin.

Since an experimental study comparing the risk of sudden death among children taking medications with those not taking medications would have had to include millions of children to generate a useful scientific result, Gould and a number of colleagues conducted what is known as a matched case-control study: They obtained information about 564 children in the United States who died suddenly and inexplicably between 1985 and 1996.

For every such child, the researchers then found another child closely matched in terms of age, sex and other variables who died in a traffic accident; taking a stimulant drug is unlikely to have played any role in a child getting killed in an accident.

If stimulant drugs had nothing to do with sudden, unexplained death, then the number of victims on stimulant drugs who suffered such deaths and the number of victims on stimulant drugs who died in traffic accidents ought to have roughly been the same.

But Gould found that 10 children in the group that suffered sudden, unexplained death had been taking stimulant drugs, whereas only two children in the group killed in traffic accidents were taking such medications.

<http://www.heraldnet.com/article/20090616/NEWS02/706169881>



ADHD Drugs increase sudden death risk

Posted on Tuesday, June 23, 2009 (EST)



According to a new research, stimulant medications commonly prescribed to treat Attention Deficit Hyperactivity Disorder (ADHD) are associated with an increased risk of sudden death. Photo Credit: AFP

According to a new research, stimulant medications commonly prescribed to treat Attention Deficit Hyperactivity Disorder (ADHD) are associated with an increased risk of sudden death.

June 23, 2009, (Sawf News) - According to a new research, stimulant medications commonly prescribed to treat Attention Deficit Hyperactivity Disorder (ADHD) are associated with an increased risk of sudden death.

The number of deaths, however, is very small. Other side effects of ADHD medication include headaches, sleep disorders, and a blunted appetite.

As many as 2.5 million children in the United States take ADHD stimulant medications, say the researchers. Many teens and even some adults take them for non-approved uses, such as improving focus and enhancing performance at work or at school.

The study found that the children and teens taking ADHD stimulant medications were seven times more likely to die suddenly than their peers.

"What we found -- to our surprise -- is that even if you take out confounding factors, the association between stimulant use and sudden death was still significant," said study author Madelyn Gould, a professor of clinical epidemiology in psychiatry at Columbia University/New York State Psychiatric Institute in New York City. "I'm confident the association is real and significant, but it's very rare. I don't want our findings to change prescribing patterns or for a parent to change their willingness to use stimulant medications if they're called for, but physicians should monitor patients with any new medication you give a young person."

Gould also confirmed that after ruling out factors such as a history of known cardiac problems; known causes of death, such as asthma or an accidental death; and other conditions, such as sickle cell anemia or cerebral palsy, only 10 sudden, unexplained deaths in children were recorded who were taking stimulant medications.

"Stimulants do increase blood pressure, and there have been reports of them changing heart rates," noted Gould.

Though the findings show a very small number of sudden deaths, the U.S. Food and Drug Administration have directed physicians to carefully factor in family history of heart problems or sudden deaths and perform a thorough physical exam before starting youngsters on ADHD medications. If any concerns arise, the child should be referred for an EKG (a heart rate test) or an evaluation by a pediatric cardiologist before medication is prescribed.

According to another report, stimulant drugs stunt children's growth. Children who never took stimulants were three quarters of an inch taller and 6 pounds heavier on average than children who took medication for three years.

If your child is on these drugs and there isn't any problem then there is no need to worry. Parents should not stop a child's medication abruptly just because these drugs pose greater risk to children who have some kind of heart disease.

<http://www.sawfnews.com/Health/58590.aspx>

ADHD medications 'making kids suicidal'

Melbourne, Oct 13 : **The use of ADHD drugs is turning children as young as five into psychotics, a new [study](#) has revealed.**

Many of them have attempted suicide or are severely depressed while on the controversial drugs.

According to reports from the Therapeutic Goods Administration, at least 30 children have had severe psychotic episodes and wanted to kill themselves.

The number of serious reactions to ADHD drugs has doubled in three years, up to 827.

However, the true extent of the side effects is unknown, with many doctors and parents under-reporting the impact.

Child experts have cast doubts on the use of heavy stimulants. They believe that the drugs, including the failed adult anti-depressant Strattera, could be masking true psychological problems of children.

It is difficult to know whether the drugs are causing a [child](#) to become suicidal or if the tendencies already existed, said Dr Jon Juriedini, head of the Department of Psychological Medicine at Adelaide's Women's and Children's Hospital.

"It is difficult to say whether a drug is good or bad based on the adverse reactions," the Daily Telegraph quoted him as saying.

"However when a drug such as Ritalin or Strattera is not proving to be beneficial . . . you need to weigh up the side effects and ensure you don't get adverse reactions. There's very poor evidence that they are effective in anybody," he added.

"I think the medication has some side effects that increase suicide. If the underlying cause for a child's behaviour is something else like trauma or depression then (ADHD) masks the fact that kids need some other form of support," Childhood Foundation CEO Dr Joe Tucci said.

<http://www.newkerala.com/nkfullnews-1-130143.html>



Chiropractic Adjustments Helping Kids With ADHD

Apr 23, 2007 11:29 pm US/Eastern

by Dr. Mallika Marshall

BOSTON (WBZ) — During softball games, Newton freshman Sophie Bell focuses on getting her opponents out. But just a few years ago, she couldn't concentrate on that or anything else.

"School was getting more difficult and she was having a harder time keeping up," said mother Megara Bell.

Sophie started taking medication, the most accepted treatment for attention deficit disorder. But there were side effects.



◀ 1 of 1 ▶

[Click to enlarge](#)

Dr. Rosen adjusts Sophie Bell
in his Wellesley office.

WBZ

"All I remember was being really shakey," said Sophie.

Sophie's family wanted an alternative so they turned to Dr. Martin Rosen, a Wellesley chiropractor.

Rosen believes ADHD can start with a misalignment in the spine which affects the body's balance and ultimately how the brain functions.

"It's irritating, so they start to move and they start to fidget in their seat. The system starts to fire off nerve endings and the constant firing will look very much like hyperactivity," said Dr. Rosen.

In many patients, chiropractic adjustments can solve the problem.

"Just clearing out the nervous system imbalance will allow the brain to reboot itself," adds

Rosen.

Megara Bell noticed a difference immediately.

Within months of starting chiropractic treatment, Sophie was able to stay focused on homework and stop taking her medication completely.

"I was on task and doing things...and I felt really great," said Sophie.

More studies are now being done on this alternative treatment.

Best-selling author and ADHD expert Ned Hallowell says he's open to new options.

"What I say to my patients is look, I'll learn along with you. As long as it's safe and it's legal, let's look into it," said Dr. Hallowell.

Sophie and her family can't believe the results.

"It was not just the difference in school, it was the difference in all the other things that she does. She does have her guitar and practices every day which I think is amazing," said Megara.

Treatments vary from patient to patient but they usually start with several sessions a week for six weeks. Sophie only needs periodic maintenance adjustments.

Chiropractic treatment is covered by health insurance.

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<http://wbztv.com/specialreports/Chiropractic.Adjustments.ADHD.2.586689.html>



[Dr. Robert Wrieden DC PLLC Chiropractic Blog](#)

Chiropractic Care Helps Child with ADHD

Posted 03:05 PM May 31, 2009

A recent article published in *The Journal of Pediatrics, Maternal and Family Health*, March 2009, reports the case study of a 3-year old male patient who had been diagnosed with Attention Deficit Hyperactivity Disorder (ADHD).

The child's mother indicated that her son's birth was traumatic and complicated, including a fractured left clavicle during birthing. The boy showed signs of ADHD from the age of two, including falling out of bed as many as three times a night and having a history of ear infections and respiratory problems. The child's pre-school teacher referred him to a psychologist because of temper tantrums and biting incidents with other children.

"The usual medical treatment for children diagnosed with ADHD is a psycho-stimulant drug, like Ritalin," said Norwich-based Dr. Robert Wrieden, D.C. "This type of treatment is reported to be about 70% effective, but there are serious side-effects of these drugs, like stunted growth, insomnia, loss of appetite, dizziness, stomach aches, and, in some instances, heart and blood pressure problems."

In the case of this 3-year old, the mother wanted to try chiropractic care as a way to avoid using the drug regimen usually prescribed. The examining chiropractor, using a non-intrusive device known as an Insight Subluxation Station, conducted thermal scans of the child's spine and found the existence of a *subluxation* in the child's upper cervical area.

"A subluxation is a misalignment of the spine that disturbs normal nervous system function," said Dr. Wrieden. "Many chiropractors, including myself, have this technology that allows them to conduct thermal and Surface Electromyography (sEMG) tests to assist in locating where such conditions exist."

The patient underwent chiropractic care, including spinal adjustments, with frequency of care initially set at three times per week for the first three weeks, then once a week, then once every two weeks. After one month, the mother and teacher noted improved attention and less hyperactivity. The patient's thermal scans also showed improvement. The child remains on a twice-monthly plan of chiropractic care, with no drug therapy, and continues to show improvement.

"This is just one case study," explained Dr. Wrieden, and more studies are needed before any absolute conclusions can be drawn."

Dr. Wrieden's chiropractic practice features the Insight Subluxation Station. This technology is certified by the Space Foundation, which was co-founded by NASA, and is used by 8,000 chiropractors worldwide to measure nervous system health and performance.

<http://www.merchantcircle.com/blogs/Dr.Robert.Wrieden.DC.PLLC.607-336-7030/2009/5/Chiropractic-Care-Helps-Child-With-ADHD/245803>

Chiropractic Care Helps Child with Attention Deficit Hyperactivity Disorder

Posted Jan 03 2010 4:58pm

An article published in *The Journal of Pediatrics, Maternal and Family Health*, March 2009, reports the case study of a 3-year old male patient who had been diagnosed with Attention Deficit Hyperactivity Disorder (ADHD).

The child's mother indicated that her son's birth was traumatic and complicated, including a fractured left clavicle during birthing. The boy showed signs of ADHD from the age of two, including falling out of bed as many as three times a night and having a history of ear infections and respiratory problems. The child's pre-school teacher referred him to a psychologist because of temper tantrums and biting incidents with other children.

"The usual medical treatment for children diagnosed with ADHD is a psycho-stimulant drug, like Ritalin," said Harrisburg, NC based Chiropractor, Dr. Andrea Dobrich. "This type of treatment is reported to be about 70% effective, but there are serious side-effects of these drugs, like stunted growth, insomnia, loss of appetite, dizziness, stomach aches, and, in some instances, heart and blood pressure problems."

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<http://www.wellsphere.com:81/life-as-a-doc-article/chiropractic-care-helps-child-with-attention-deficit-hyperactivity-disorder/983332>



Chiropractic instead of drugs for ADHD: study links stimulant use to sudden death; media and current research suggest chiropractic is a safe alternative

By Crownfield, Peter W.
Publication: Dynamic Chiropractic
Date: [Wednesday, July 29 2009](#)

A study published in the American Journal of Psychiatry suggests certain stimulant medications used to treat attention deficit hyperactivity disorder (ADHD) may cause sudden, unexplained death, (1) adding to previous reports emphasizing the potential dangers of such medications. (1-2) Combined with recent research from the International Pediatric Chiropractic Association (ICPA) suggesting the benefits of chiropractic care for ADHD sufferers and a CBS Early Show segment following the study's release that mentions chiropractic and other natural options, drug-free management of this complex condition may be one small step closer to becoming reality.

Funded by the U.S. Food and Drug Administration (FDA) and the National Institute of Mental Health, a branch of the National Institutes of Health, evaluated stimulant use in 564 children and teenagers ages 7-19 who died unexpectedly, but had no known history of life-threatening illness or defined cause of death, such as homicide or accident (the study group); and 564 age-matched children/teens who died in motor vehicle accidents (the control group).

Comparing the two study groups, researchers found that a significantly higher number of children/teens in the study group had taken methylphenidate prior to their death compared to the control group. Methylphenidate is the generic form of brand-name ADHD drugs such as Ritalin and Concerta.

In their conclusion, the authors state: "This study reports a significant association or 'signal' between sudden unexplained death and the use of stimulant medication, specifically methylphenidate. While the data have limitations that preclude a definitive conclusion, our findings draw attention to the potential risks of stimulant medications for children and adolescents." They add: "Although sudden unexplained death is a rare event, this finding should be considered in the context of other data about the risk and benefit of stimulants in medical treatment."

Jeanne Ohm, executive director of the ICPA, commented on the findings in an official press release, noting that "[p]revious evidence related to the side effects of these drugs have kept us wary of their justified use for many years. We are pleased to finally see these concerns made public so parents are aware of the potential consequences of these drugs and can make informed decisions accordingly." (2)

In its press release, the ICPA noted that last year the American Heart Association recommended children with ADHD undergo cardiac screening tests prior to taking stimulant drugs for their condition and called for research to assess the potential risk of sudden death. Moreover, according to the Gould study, there have been case reports of stroke and myocardial infarction in patients taking Ritalin within therapeutic ranges. While the FDA asserts that the benefits of these medications outweigh the risks and says there were problems with the study's methodology--particularly that the numbers were small; only 10 children in the study group were found to be taking stimulant drugs, compared to two children in the control group--it also says current guidelines recommending physicians evaluate for cardiac risks before prescribing ADHD drugs need to be strengthened. (3)

A Washington Post article (3) discussing the study paraphrases Benedetto Vitiello from the National Institute of Mental Health, who believes the findings have relevance despite the study limitations: "[G]ould's study underscores that ADHD drugs are not innocuous. Indiscriminate prescription of the drugs for general behavioral problems and the growing number of healthy teenagers and adults using the drugs to boost mental performance could have deadly consequences."

Where can children with ADHD turn besides potentially dangerous medications? Chiropractic care, says the ICPA in its release, referencing a recent study titled "The Chiropractic Care of Patients With Attention Deficit Disorder: A Retrospective Analysis." According to the ICPA, the study, which has been accepted for publication, "shows promising results for children under chiropractic care." Dr. Ohm also references "Adverse Effects Associated With Chiropractic Care for Children," accepted for publication by a "major biomedical journal," which reports only "minimal and minor adverse effects associated with care."

The CBS Early Show's June 15 "Healthwatch" segment also recommended chiropractic care as a potential treatment option for children with ADHD. (4) In a segment titled "ADHD Drug Warning," medical correspondent Dr. Jennifer Ashton told CBS anchor Julie Chen, "There have been studies that have shown complementary or alternative therapies [such as] chiropractic care or dietary changes can be beneficial in some children who are on ADHD medication ... either in place of or in conjunction with [medication]." Dr. Ashton also emphasizes the risks associated with ADHD drugs, stating that they can have "potent effects on the body," including elevated heart rate and blood pressure, which she says may account for the connection between stimulant use and sudden death (what she refers to as sudden cardiac death) seen in the study.

The CBS segment mentions that 4.5 million children and adolescents in the U.S. have been diagnosed with ADHD, an estimated 2.5 million of whom are taking medication for their condition. With those staggering numbers and the latest research suggesting the potentially lethal dangers of prescription drugs in mind, all parents and patients should be aware of natural alternatives such as chiropractic care and weigh the risks vs. benefits associated with ADHD medications.

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BY PETER W. CROWNFIELD, EXECUTIVE EDITOR

<http://www.allbusiness.com/medicine-health/diseases-disorders/12684793-1.html>

Common Plastics Chemicals Phthalates Linked to ADHD Symptoms

ScienceDaily (Nov. 19, 2009) — Phthalates are important components of many consumer products, including toys, cleaning materials, plastics, and personal care items. Studies to date on phthalates have been inconsistent, with some linking exposure to these chemicals to hormone disruptions, birth defects, asthma, and reproductive problems, while others have found no significant association between exposure and adverse effects.



Child's cup. Phthalates are important components of many consumer products, including toys, cleaning materials, plastics, and personal care items. Researchers found a significant positive association between phthalate exposure and ADHD, meaning that the higher the concentration of phthalate metabolites in the urine, the worse the ADHD symptoms and/or test scores. (Credit: iStockphoto)

A new report by Korean scientists, published by Elsevier in the November 15th issue of *Biological Psychiatry*, adds to the potentially alarming findings about phthalates. They measured urine phthalate concentrations and evaluated symptoms of attention-deficit/hyperactivity disorder (ADHD) using teacher-reported symptoms and computerized tests that measured attention and impulsivity.

They found a significant positive association between phthalate exposure and ADHD, meaning that the higher the concentration of phthalate metabolites in the urine, the worse the ADHD symptoms and/or test scores.

Senior author Yun-Chul Hong, MD, PhD, explained that "these data represent the first documented association between phthalate exposure and ADHD symptoms in school-aged children." John Krystal, MD, the Editor of *Biological Psychiatry*, also commented: "This emerging link between phthalates and symptoms of ADHD raises the concern that accidental environmental exposure to phthalates may be contributing to behavioral and cognitive problems in children. This concern calls for more definitive research."

The U.S. Centers for Disease Control and Prevention, in the Summary of their 2005 Third National Report on Human Exposure to Environmental Chemicals, state that "very limited scientific information is available on potential human health effects of phthalates at levels" found in the U.S. population. Although this study was performed in a Korean population, their levels of exposure are likely comparable to a U.S. population.

The current findings do not prove that phthalate exposure caused ADHD symptoms. However, these initial findings provide a rationale for further research on this association.

<http://www.sciencedaily.com/releases/2009/11/091119101042.htm>

How Chiropractic can Help ADD/ADHD

Posted Nov 04 2009 10:02pm

By [Dr Duncan DC](#)

The video posted suggested that chiropractic may help people with ADD/ADHD, but it doesn't say how. In fact it only mentions it in passing after explaining some of the dangers of the drugs used to treat such conditions. So [here](#) is a collection of some of the research. A single study by Mississippi State University found that specific chiropractic treatment improved results in the majority of ADD/ADHD sufferers. You can find that study [here](#). Of course more research is needed, but so far medication has only been shown to keep ADHD controlled, not cure it. Chiropractic care has shown actual improvement without the risks of medication.

How does chiropractic treatment accomplish the improvement. [Dr. Robert Melillo](#), a chiropractic neurologist said, "Motor activity—especially development of the postural muscles—is the baseline function of brain activity. Anything affecting postural muscles will influence brain development. Musculoskeletal imbalance will create imbalance of brain activity, and one part of the brain will develop faster than the other, and that's what's happening in ADHD patients." He also pointed out that "True ADHD patients have other signs — tics, tremors, balance or postural problems, or unusual sensitivity to touch, movement, sights, or sounds."

Doctors of chiropractic and chiropractic neurologists don't treat ADHD they treat dysfunction in the spine and body. The brain is stimulated by this stimulation of weakened function through adjustments. The body is aided in healing it's self decreasing the imbalances. So instead of filling the gap with drugs the body may become dependent on, the brain is able to develop where it was otherwise weak through stimulation caused by chiropractic adjustments.



While chiropractic may provide a good treatment for many suffering from these conditions mechanical stimulation is not the only answer and dietary or life changes should also be included in treatment. Processed food containing food dyes, sugar, preservatives,

additives, and pesticides or other chemicals should be avoided. Elimination diets can be used to determine if there is a particular food that provokes negative responses in that person. Food has a chemical effect on our bodies just like medication does. Other life changes such as exercise and identifying learning patterns will also be beneficial.

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<http://stanford.wellsphere.com/complementary-alternative-medicine-article/how-chiropractic-can-help-nbsp-add-adhd/860037>



New Research Sheds Light on Chiropractic, Speech & Learning Disorders

Recent research reporting on improvement in a 4 year old boy undergoing chiropractic care reveals that chiropractic may play an important role in managing children with speech and learning disorders.

Atlanta, GA, November 22, 2009 --(PR.com)-- The research, reported in the Journal of Pediatric, Maternal & Family Health – Chiropractic, includes a review of the literature supporting the role of chiropractic in children suffering from a number of disorders that share their origin with learning and speech delay.

“Research is revealing that there is a relationship between abnormalities in the spine, the nervous system and brain” stated Dr. Ben Lerner, lead author of the paper. “Basic science research shows that the proper development and function of the brain relies on proper structure and movement of the spine from an early age.”

Research has shown not only that the developing brain relies on normal structural integrity and joint movement, but that complex neurochemical communication and pathways involved in helping humans to “feel good” are tied into spinal biomechanics and their related neurological pathways.

“It makes perfect sense when you think about it” stated Dr. Sheri Lerner, a co-author on the paper. “We see this shocking increase in the diagnosis of things like ADHD, learning and other behavioral disorders at the same time that we see a huge increase of sedentary behavior in our children.”

According to Dr. Matthew McCoy, a chiropractor, public health researcher and editor of the journal that published the study, “Researchers believe that the increase in the diagnosis of learning disorders, ADHD, pervasive developmental disorder, Tourette’s Syndrome, obsessive compulsive disorder and other neurodevelopmental disorders, have their root in a “perfect storm” of abnormal spinal development coupled with cultural changes.

These changes include an increase in television watching, computer use, computer games and lack of exercise causing an increase in obesity and diabetes in children. “Together with the abnormal spinal development these habits are simply stunting the development of our children’s brains” stated McCoy.

In the case reported on in the article the initial application of chiropractic was followed by nutritional advice which included eliminating sugar and grains from the patient’s diet. Correction of the neurological interference was the first priority however.

According to Lerner “Children’s nervous systems need the constant stimulation of movement in order to develop and function properly. Abnormal position or movement of the spinal vertebra can develop and this can lead to nerve interference. It is this interference, called vertebral subluxations, that chiropractors correct.”

The child reported on in the study suffered from a number of health challenges including speech so impaired that others could not understand him. Frustration and anger ensued when the child started school and still did not speak. Efforts at speech therapy left the parents wanting for other answers and so they sought chiropractic care. Immediately following the first chiropractic adjustment the patient began speaking and putting together full sentences that were coherent and understandable. He was also able to recognize his written name for the first time following the first adjustment. He has since started to color with crayons and he can now understand and follow verbal directions. Prior to care he was emotionless but he now smiles and cries appropriately. The authors of the study call for more research on the role of chiropractic care in these types of disorders.

<http://www.pr.com/press-release/194809>

Study: Chiropractic Care Helps Adults with Attention Deficit Disorder



ADD/ADHD Sufferers May Now Find Relief Without Medication

On Sept. 4, the World Chiropractic Alliance (WCA) announced in a [press release](#) that a pilot study conducted by Dr. Yannick Pauli, the director of the Centre Wellness NeuroFit in Lausanne, Switzerland, found that chiropractic care may help adults with concentration problems associated with attention deficit and attention deficit - hyperactivity.

The National Institute of Mental Health (NIMH) states that the primary characteristics of Attention Deficit Disorder (ADD) and Attention Deficit - Hyperactivity (ADHD) include inattention, hyperactivity, impulsiveness or a combination thereof. Generally, these symptoms appear early in a child's life, but because many normal children exhibit them, a qualified professional should make an appropriate diagnosis before it's assumed a person has either ADD or ADHD.

According to the WCA, there is sufficient research to conclude that the ability to concentrate is affected in several different disorders, including ADD, ADHD, traumatic brain injuries, dementia, Alzheimer's disease and Parkinson's disease.

The WCA says that between 1 and 6 percent of adults and 3 and 10 percent of children suffer from ADHD in the U.S. The NIMH estimates that between 3 and 5 percent of American children have ADHD; that amounts to approximately 2 million children. Teens and adults who suffer from ADHD have greater risks associated with daily living and general activities. For example, studies have found that ADHD sufferers have higher rates of car accidents, increased risk of substance abuse, greater risk of failing in school, greater difficulty managing money and increased chances of divorce. Typically, ADD and ADHD symptoms are treated with medications or drugs known as stimulants.

Dr. Pauli is a chiropractor specializing in wellness neurology. In his study, he used an objective measure of attention, called a continuous performance test, rather than a specific diagnosis for ADD or ADHD. He explained the performance test is "a computer-based evaluation that objectively measures various parameters of attention." He said the system is the same one used by some neurologists and psychiatrists "to find the exact dosage of medication they are going to prescribe for attention deficit sufferers."

Dr. Pauli explained the study: "We used objective outcome measures to evaluate attention in nine adult patients before and after two months of wellness chiropractic care. All patients experienced significant improvement in concentration and 88% normalized parts of the test. Although the results are preliminary and more research is needed, the outcome of the study suggests that patients suffering from attention deficit benefited from chiropractic care."

Dr. Paul said the spine is as much about neurology as it is about "biomechanics." He said that the articulations and muscles of the spine are rich in "mechanoreceptors" (sensors that send information to the nerve system). He explained that each time the spine is worked with or manipulated, it activates neurological circuits "in the direction of the brain" and brings "the nerve system into balance."

Dr. Pauli said that chiropractic manipulation affects the brain's cerebellum, a small area at the back of the brain that has been shown to involve attention. "If the cerebellum does not function at par, the rest of the brain becomes somewhat clumsy and by activating the spinal receptors and balancing the cerebellum, we help the brain function better," he said.

In summation, Dr. Pauli said of his study that the "preliminary results suggest that attention can be improved naturally with chiropractic. As a chiropractor specializing in wellness neurology, I understand that the spine is as much about neurology as it is about biomechanics."

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Drug-Free Remedy For Child Brain Disorders

Nina Sparano Technology Reporter

7:25 PM MDT, August 11, 2010



GOLDEN - In a time where video games have replaced a game of kickball or a walk in the park has created a generation of disconnected kids.

Experts say our sedentary lifestyles have developed an imbalance in a child's brain creating a whole host of developmental problems. There is a center in Golden that's helping kids with brain-based problems without the use of medication.

"It's like really cool you get to like reading. I love reading!"

Five months ago 8-year-old Brendan Lavine had a hard time sitting still. In fact, according to his mother Hope he wouldn't have been able to sit down for this interview.

"Just could not stop, could not stop moving. Just could not focus for anything 15 seconds," Hope says.

At 5, Brendan was diagnosed with severe Attention Deficit Hyperactivity Disorder. "He basically wasn't going to be allowed to attend kindergarten unless he was medicated. Which was heartbreaking," his mother says.

Three years later, Hope and her husband came to the Brian Balance Achievement Centers in Golden to correct a growth imbalance in Brendan's brain.

According to Dr. Tamara Eslich, our sedentary lifestyles developed by Television and video games have created and imbalance in children's brains.

"Kids can't focus they can't pay attention they can't regulate their own behaviors, regulate their emotions," says Dr. Eslich.

Researchers say kids who spend most of their time in front of a screen develop brain-based problems.

"When one side matures much faster rate, if the left side (of the brain) is much stronger these are the kids that are labeled with Autism, ADD, ADHD, Asperger's Syndrome, Tourette's Syndrome and Obsessive Compulsive Disorder."

A lack of movement and interaction she says, can lead to behavioral issues.

"They're in their own world, watching those screens increasing the left side of the brain so there is this hemispheric imbalance because of that screen time," Dr Eslich adds. She says brain balancing helps to rewire a child's brain.

"We kick start the weak side so now the two sides can now connect."

Experts say the imbalance is reversible without the use of medication. Brendan went to the center three times a week. For three months he practiced motor and sensory skills and academic skills. His mother Hope says the changes are astonishing.

"He can honestly sit there, sit down and look at me and here what I'm saying and look me in the eye. In the past we could never get him to sit down."

"I made a lot of new friends like since the first day of this school," Brendan says.

"He says he's happy for the first time in his life. I'm mean, how you put a price on that?" says Hope.

<http://www.kwgn.com/news/kwgn-icafe-brain-txt,0,4259739.story>



Chiropractic provides drug-free alternative to traditional medicine

Posted Online: June 10, 2010, 10:36 am

Press release submitted by Traci Nelson, D.C.

New Study Raises Red Flags Concerning Increase in Opioid Prescriptions and Overdoses

BETTENDORF -- If you are taking a prescription painkiller long-term for pain, you are not alone—but should be concerned and seek out drug-free relief.

About 3 percent of the U.S. population, or nearly 8 million Americans, are being prescribed opioids such as oxycodone, morphine and Vicodin for back pain, headaches and other chronic pain conditions, according to a government-funded study published in a January 2010 medical journal, *Annals of Internal Medicine*. And even more alarming, deaths from prescribed opioids more than tripled in the U.S. from 1999 to 2006.

"The threat to patient safety is too great to allow current pain management and opioid prescribing practices to remain as they are," White House Office of National Drug Control Policy Deputy Director A. Thomas McLellan, PhD, writes in an editorial published along with the study in the journal.

Patients can turn to chiropractic for a drug-free alternative to medicines. A doctor of chiropractic can develop a treatment plan that may combine more than one type of treatment, such as spinal manipulation, mobilization or massage, as well as procedures such as electric stimulation, rehabilitative exercises, acupuncture, advice on nutrition, and suggestions for posture modification—instead of medications and surgery.

"Chiropractic actually treats the cause of the pain rather than the symptoms," says Dr. Nelson. "Painkillers are a temporary fix that masks the problem, where chiropractors diagnose the cause of the pain and develop a treatment plan to solve the problem."

Two studies highlight the effectiveness of chiropractic for two common, chronic pain conditions: back pain and headaches.

A 2003 study published in the medical journal *Spine* found that manual manipulation provides better short-term relief of chronic spinal pain than does a variety of medications. And a report released in 2001 by researchers at the Duke University Evidence-Based Practice Center in Durham, N.C., found that spinal manipulation resulted in almost immediate improvement for those headaches that originate in the

neck, and had significantly fewer side effects and longer-lasting relief of tension-type headaches than a commonly prescribed medication.

"With so much in the news about painkiller addictions and accidental overdoses, we've seen an increase in patients who are concerned and want drug-free pain relief," continues Dr. Nelson. "Chiropractic is very effective in treating many types of chronic pain, but also effective in treating other ailments such as ear infections, asthma, colds and flu, reducing the need for antibiotics."

Chiropractors can provide patients with ways to boost their immune systems and guard against staph and other bacterial infections, in lieu of taking antibiotics—reducing the risk of antibiotic resistance.

"Beyond finding noninvasive and drug-free relief for traditional back and neck pain, many of our patients have recovered from recurrent ear infections and other bacterial infections through chiropractic care," says Dr. Nelson. "Even ADHD patients have seen promising results with non-drug treatments that focus on postural muscles, nutrition and lifestyle changes that affect brain activity. With today's chiropractic treatment plans, patients really do have an alternative to taking antibiotics for infections and medications for pain."

On June,23, 2010, Nelson Chiropractic in Bettendorf will celebrate 11 years in practice with Patient Appreciation Day. To honor their patients and support the community, Dr. Traci Nelson, Dr. Lindsay Gall, Dr. Amanda Friemel and Dr. Justin Seifert will donate all their services on that day to existing patients. New patients will be seen the entire week of June 21-26. "We want to remove the financial barrier for starting chiropractic care as we thank our patients for taking care of their spines.", says Dr. Nelson..To schedule an appointment, call 359-9541.

<http://qconline.com/archives/qco/display.php?id=496649>

Fish oil helps schoolchildren to concentrate

May 30, 2010

US academics discover high doses of omega-3 fish oil combat hyperactivity and attention deficit disorder

Children can learn better at school by taking omega-3 fish oil supplements which boost their concentration, scientists say.

Boys aged eight to 11 who were given doses once or twice a day of docosahexaenoic acid, an essential fatty acid known as DHA, showed big improvements in their performance during tasks involving attention.

Dr Robert McNamara, of the University of Cincinnati, who led the team of American researchers, said their findings could help pupils to study more effectively and potentially help to tackle both attention deficit hyperactivity disorder (ADHD) and depression. The study, reported in the *American Journal of Clinical Nutrition*, is important because a lack of DHA has been implicated in ADHD and other similar conditions, with poor maternal diet sometimes blamed for the child's deficiency.

ADHD affects an estimated 4%-8% of Britons and can seriously impair a child's education because they have trouble concentrating and are often disruptive in class. A lack of DHA has also been associated with bipolar disorder and schizophrenia.

"We found that, if you take DHA, you can enhance the function of those brain regions that are involved in paying attention, so it helps people concentrate," said McNamara. "The benefit is that it may represent an intervention that will help children or adults with attention impairments."

The researchers gave 33 US schoolboys 400mg or 1,200mg doses of DHA or a placebo every day for eight weeks. Those who had received the high doses did much better in mental tasks involving mathematical challenges. Brain scans showed that functional activity in their frontal cortex – which controls memory, attention and the ability to plan – increased significantly.

The results, and fact that many people eat too little fish to get enough DHA through their diet, meant it could help all children to improve their learning, added McNamara. "The primary benefit is to treat ADHD and depression, but it could also help people with their memory, learning and attention," he said.

<http://www.guardian.co.uk/science/2010/may/30/fish-oil-supplement-concentration>

Pesticides may increase risk of ADHD in children

Children with higher-than-average levels of a common metabolite were twice as likely to have ADHD than were those whose levels were undetectable.

By [Christine S. Moyer](#), amednews staff. *Posted May 31, 2010.*

During consultations for children with attention-deficit/hyperactivity disorder, pediatrician Ari Brown, MD, said physicians should discuss links between pesticide exposure and ADHD.

A new study published online in *Pediatrics* May 17 found that the risk of having ADHD increases in children who have higher concentrations of dialkyl phosphate metabolites. The metabolites indicate exposure to organophosphates, pesticides that affect the nervous system, according to the Environmental Protection Agency.

Parents of children with ADHD "often ask me if there are any foods their children should avoid. ... They want to try things besides just giving their child medication," said Dr. Brown, who works in a seven-physician practice in Austin, Texas. "I would add this [study] to the list of things to discuss during consultations about ADHD. ... A lot of parents will be asking about it."

Researchers examined data on 1,139 children age 8 to 15 who were part of the National Health and Nutrition Examination Survey between 2000 and 2004. Of the participants, 10.4% met the diagnostic criteria for ADHD.

Pesticide exposure was measured with a single urine test for six dialkyl phosphate metabolites. Researchers found that 93.8% of the children in the study had at least one detectable metabolite.

4.5 million children age 5 to 17 had been diagnosed with ADHD as of 2006.

One of the most commonly detected metabolites, dimethyl thiophosphate, was found in 64.3% of children studied. Those with higher-than-average levels of this metabolite were two times more likely to have ADHD than those whose levels were undetectable.

"The findings are suggestive of an association of these pesticides and ADHD-like symptoms in children," said study lead author Maryse Bouchard, PhD, a researcher in the Dept. of Environmental and Occupational Health at the University of Montreal. She is also a researcher at the CHU Sainte-Justine Hospital for Children in Montreal.

But she cautioned that additional studies that include multiple urine samples to measure long-term exposure to pesticides are needed to support that exposure to pesticides is linked to ADHD.

The study did not identify the source of the metabolites. But researchers speculated that the children were likely exposed to pesticides and insecticides used on produce or in the environment.

ADHD on the rise

As of 2006, 4.5 million children age 5 to 17 had been diagnosed with ADHD, according to the most recent data available from the Centers for Disease Control and Prevention. New diagnoses rose an average 3% annually between 1997 and 2006.

Seattle pediatrician Catherine Karr, MD, PhD, and colleagues at her practice have noticed an increase in the number of children with ADHD. The question, she said, is whether physicians are better at diagnosing ADHD or the disorder is increasing among children.

"This study helps us better understand what factors might influence a child to develop ADHD. ... And maybe, if we take some of these [factors] away, we won't have so many children diagnosed with this disorder," said Dr. Karr, assistant professor of pediatrics at the University of Washington School of Medicine and adjunct assistant professor of environmental and occupational health sciences at the university's School of Public Health. She also is a member of the American Academy of Pediatrics' Council on Environmental Health.

She said the AAP is developing policy statements that will address the effects of pesticides on children's health and on organic food. The statements are expected to be released in 2011.

"One thing we point out [in the statements] is that currently, medical education is pretty inadequate in all things environmental," Dr. Karr said. "Pediatricians should be better informed on the health implications of pesticides."

<http://www.ama-assn.org/amednews/2010/05/31/prsb0531.htm>

Food coloring may increase hyperactivity in children

June 15, 7:17 AM - [Ann Arbor Health News Examiner](#) - Tina Szybisty

Recent news reports are suggesting that food coloring may be exasperating hyperactivity symptoms in children with ADD/ADHD and maybe even children without these diagnosis.

However, these concerns are not anything new. *The Lancet, Pediatrics* and the *Journal of Pediatrics* have reported on this before over the last decade or so. The problem is pinpointing the "mode of action" which simply means **how** do they increase hyperactivity once entered into the body.

One news station mentioned that Great Britain has already removed red food coloring and replaced it with a paprika extract, considered a more natural form of food coloring. If research proves these claims it could give new meaning to red velvet cake which requires a large amount of red food coloring to give it its red velvet appearance.

<http://www.ADDitudeMag.com> contains an article from as far back as 2008 that suggests a quick test to perform at home that may shed some light on your child's focus after consuming food coloring (you should discuss this with your physician first):

- Avoid all drinks and foods that contain US Certified Red #40, Blue #2, Yellow #5 (Tartrazine), Yellow #6 (Sunset yellow) and the preservative sodium benzoate for 1 week.
- Assess your child's behavior, take notes.
- After 1 week, mix a couple of drops of artificial food coloring into a glass of water and have your child drink it. Most households contain these artificial food colorings or you can purchase them in the baking aisle of most Ann Arbor (Washtenaw) and Livingston County grocery stores and discount chains.
- If you do not see a change in your child's behavior after a few hours, repeat the process by having him/her drink a second glass.
- Observe behavior and take notes.
- Discuss with your physician.

Here are some tips for avoiding or limiting dyes in your foods:

1. Avoid "fruit drinks" and soda pop. Have water, 100% juice and natural sodas instead.
2. Bake from scratch as much as possible. Avoid artificial flavorings as well such as vanillin.
3. Colorful cereals, yogurts, prepared gelatin mixes, popsicles and candy have food coloring. Check the ingredients list.

4. Prepared marinades and sauces also may contain food coloring. Again, make a habit of checking the ingredients list.
5. Certain toothpastes, mouthwashes and medications (OTC and RX) contain food coloring.
6. Become involved in whatever Ann Arbor grocery store you tend to shop at the most by suggesting they carry more products that are dye-free. Or commend them for already doing so.

This is just another example of how we need to re-invent eating-on-the-run. Our lives probably won't get less busier and always cooking from scratch may not be a possibility. Therefore, we need to be responsible consumers and read the ingredients list. Once we get into this habit it will become second nature.

<http://www.examiner.com/x-36081-Ann-Arbor-Health-News-Examiner~y2010m6d15-Food-coloring-may-increase-hyperactivity-in-children?cid=exrss-Ann-Arbor-Health-News-Examiner>



Do video games cause attention problems in kids?



By Frederik Joelving

NEW YORK | Tue Jul 6, 2010 12:23am IST

NEW YORK (Reuters Health) - Long hours in front of the television, whether channel surfing or gaming, could make it difficult for kids to concentrate in school, psychologists said Monday.

While researchers are still divided on the issue, the findings jibe with most earlier work on the effects of television watching in kids, they said.

"What we don't know at this point is why TV and video games really would cause attention problems," said Douglas A. Gentile, who worked on the study.

Gentile, who runs the Media Research Lab at Iowa State University in Ames, added that too much screen time had also been linked to increased aggression and, perhaps less surprisingly, expanding waistlines.

He said the new study, published in the journal *Pediatrics*, was the first to follow over time how video games may impact kids' concentration skills.

While the research doesn't directly prove that long screen time causes the psychological issues, "we know that earlier television watching was not caused by later attention problems," Gentile told Reuters Health.

The researchers followed a group of more than 1,300 school-age children, who, assisted by their parents, logged their TV and gaming hours over a year. They then asked teachers to answer

questions about how the children behaved in school -- whether they had difficulty staying on task, for instance, or often interrupted others.

Even after accounting for attention problems when children entered the study, those who watched a lot of TV or played a lot of video games had slightly more problems concentrating on schoolwork.

Specifically, those children who spent more than two hours per day in front of the screen -- the limit recommended by the American Academy of Pediatrics -- increased their odds of exceeding the average level of attention problems by 67 percent.

Extreme cases of attention difficulty sometimes lead to a diagnosis of attention-deficit/hyperactivity disorder (ADHD), which between three and seven percent of school-age children suffer from. The researchers did not diagnose any kids with that condition, however.

They also tested undergraduate students, this time using psychological questionnaires designed to reveal ADHD, such as the Adult ADHD Self-Report Scale.

In these students, exceeding two hours of daily screen time doubled their risk of landing above average in attention problems, although they weren't diagnosed with ADHD.

Gentile said the impact of TV and video games depended on lots of factors, and wasn't necessarily dramatic.

"Not every kid is going to be influenced to the same amount," he said. "No one thing causes our behavior. It's a combination of all the pushes and pulls that we get -- the media is just one variable."

Miriam Mulsow, an expert in ADHD who was not involved in the study, said she did not think TV or video games could cause attention problems or ADHD.

"There are parents out there who are doing the best they can, but are working multiple jobs and can't afford child care," said Mulsow, of Texas Tech University in Lubbock. "What worries me is that those parents will think they cause their children to have ADHD. I don't think that's the case, and I don't think those parents should feel bad."

However, she added, "if a child has a tendency toward attention problems then sitting in front of the TV not getting enough exercise would exacerbate it."

She said she agreed a child shouldn't be allowed to watch more than two hours of TV a day. "I didn't even allow my kids to watch that much," she told Reuters Health.

Gentile said the findings also send a positive message to parents whose kids are plagued by attention problems.

"This study perhaps gives parents a first line of defense because (screen time) is something they can control," he said. "The research suggests that parents actually are in a more powerful position to help their children than they realize."

SOURCE: link.reuters.com/baw75m Pediatrics, online July 5, 2010.

Pediatrics, online July 5, 2010. <http://in.reuters.com/article/idINTRE6640MQ20100705>

Dietary Choices May Influence ADHD Risk In Children

August 9, 2010 by [Personal Liberty News Desk](#)

Results of a new Australian study suggest that a child's dietary habits may increase or reduce their risk of developing attention deficit hyperactive disorder (ADHD).

For the study, a group of nutritionists from Perth's Telethon Institute for Child Health Research analyzed the eating habits of more than 1,800 adolescents.



Children who often consumed processed and fried foods high in saturated fat, total fat and sodium were placed in the "Western" diet group. Adolescents who ate a nutrient-rich diet loaded with fruits, vegetables, fish and whole grains made up the "healthy" diet group.

Over the course of the study, a total of 115 children were diagnosed with ADHD, with the majority of these individuals being boys.

After taking into account several risk factors—including social and family influences—the research team found that children who consumed a Western-style diet had double the risk of being diagnosed with the disorder, compared with those that ate foods rich in omega-3 fatty acids, folate and fiber.

"We suggest that a Western dietary pattern may indicate the adolescent has a less optimal fatty acid profile, whereas a diet higher in omega-3 fatty acids is thought to hold benefits for mental health and optimal brain function," said lead author Wendy Oddy.

However, "it may also be that impulsivity, which is a characteristic of ADHD, leads to poor dietary choices such as quick snacks when hungry," she added.

<http://www.personalliberty.com/news/dietary-choices-may-influence-adhd-risk-in-children-19913584/>

Junk food link to ADHD in children

KATHERINE FENECH

July 30, 2010

Perth researchers have linked attention-deficit hyperactivity disorder with "western-style" diets in teenage sufferers.

The Telethon Institute for Child Health and Research study examined the diets of 1800 adolescents, categorising them as either eating a healthy mix of fruit, vegetables, whole grains and fish or the "western-style" highly-processed, fried and take-away foods.

The report found those on a "western" dietary pattern may be eating more food additives, flavours or colours, which could lead to hyperactivity or changes to chemicals that control parts of the brain dealing with attention and concentration.

But the Institute's leader of nutrition studies, Associate Professor Wendy Oddy, said the type of study undertaken meant researchers couldn't be sure if "poor diet leads to ADHD or whether ADHD leads to poor dietary choices and cravings".

They spoke to teenagers involved in the Raine Study, which assessed pregnant women in 1989 and collected information about their children as they grew up.

The findings, which will be published in the *Journal of Attention Disorders* and is currently online, showed teenagers who lived on a diet of highly-processed foods more than doubled their risk of being diagnosed with ADHD compared to healthy eaters.

"We looked at the dietary patterns amongst the adolescents and compared the diet information against whether or not the adolescent had received a diagnosis of ADHD by the age of 14 years," Dr Oddy said.

Parents were asked if their child had ever been diagnosed with the disorder by a qualified health professional and then research assistants checked a diagnosis had been made. Overall 115 teenagers from the group had ADHD.

Researchers took into account variables such as the family's financial situation, whether the mother smoked while pregnant and the amount of food the teenagers ate and the exercise they did.

The study backed up previous research that found boys had a higher chance of developing the disorder and those who exercised at least twice a week decreased the odds of an ADHD

diagnosis.

"When we looked at specific foods, having an ADHD diagnosis was associated with a diet high in takeaway foods, processed meats, red meat, high fat dairy products and confectionary," she said.

"We suggest that a Western dietary pattern may indicate the adolescent has a less optimal fatty acid profile, whereas a diet higher in omega-3 fatty acids is thought to hold benefits for mental health and optimal brain function."

The possible absence of "micronutrients" in the western diet could result in "suboptimal" brain function in teenagers, the report states.

It went on to say that adolescent ADHD sufferers were predisposed to choose unhealthy foods to snack on.

Dr Oddy said while this study suggests that diet may be implicated in ADHD, more research is needed to determine the nature of the relationship.

Source: [watoday.com.au](http://www.watoday.com.au)

<http://www.smh.com.au/wa-news/junk-food-link-to-adhd-in-children-20100729-10xjc.html>

Synergistic Effect of Prenatal Tobacco and Early Lead Exposure on ADHD

Pauline Anderson

November 26, 2009 — Children who were exposed to prenatal tobacco smoke and have high blood lead levels are more than 8 times more likely to have attention deficit/hyperactivity disorder (ADHD) than youngsters with neither of these exposures, according to a new study.

The study results suggest that the combined effect of prenatal tobacco and childhood lead exposure is more than just the sum of the 2 separate exposures; rather, there is a synergistic effect that is even greater than what would be expected if the individual exposure risks were multiplied.

The authors estimate that more than one third of ADHD cases can be explained by the combination of these 2 exposures.

The study should be a wake-up call for women planning to become pregnant, said the study's lead author, Tanya Froehlich, MD, MS, from the Department of Pediatrics at Cincinnati Children's Hospital Medical Center in Ohio. They should not only quit smoking but plan to reduce as much as possible their child's exposure to lead, she said.

The study was published online November 23 in *Pediatrics*.

Wake-Up Call

For the study, Dr. Froehlich and colleagues used the National Health and Nutrition Examination Survey, a multistage, nationally representative survey of the US population in 2001 to 2004. The sample included 2588 children aged 8 to 15 years.

Using caregiver responses to the National Institute for Mental Health Diagnostic Interview Schedule for Children, researchers determined that 8.7% of the sample met gold standard diagnostic criteria for ADHD, as defined by the *Diagnostic and Statistical Manual of Mental Disorders, 4th Edition*. This is equivalent to 2.4 million American children.

To assess prenatal exposure to tobacco smoke, researchers asked caregivers whether the child's biological mother smoked at any time while pregnant. Children who were exposed to tobacco prenatally were more than twice as likely to meet ADHD criteria compared with children who were not exposed (adjusted odds ratio [AOR], 2.4; 95% confidence interval [CI], 1.5 – 3.7).

To ascertain current blood lead concentrations, researchers used graphite furnace atomic absorption spectrophotometry. They categorized these levels into tertiles of low, medium, and

high exposure (high exposure was 1.3 µg/dL or more). Compared with children in the lowest tertile, those in the highest tertile were at significantly higher risk for ADHD (AOR, 2.3; 95% CI, 1.5 – 3.8).

"We're showing this effect of lead even at very low exposures," commented Dr. Froehlich, adding that this level is significantly below the limit of 10 µg/dL currently designated by the Centers for Disease Control and Prevention.

When these 2 exposures were added together, the risk for ADHD shot up dramatically. Those who were exposed prenatally to tobacco and who were in the highest tertile of lead exposure had a greater than 8-fold increased likelihood of ADHD (AOR, 8.1; 95% CI, 3.5 – 18.7).

Dr. Froehlich explained that both prenatal tobacco and childhood lead exposure perturb the brain dopamine pathway, which is known to be disrupted in ADHD. Animal studies have shown that nicotine exposure in utero causes decreased brain dopamine metabolism. Experiments that involved adding lead to brain cell cultures found decreased dopamine neuron length, as well as decreased dopamine uptake by brain cells.

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If you have a building that has 1 crack in the foundation, it may be somewhat weakened, but things may dramatically destabilize if you add another crack in the same area.

” **Cracks in Foundation**

In describing this synergistic effect, Dr. Froehlich explained that tobacco and lead exposure effectively provide a "double hit" to the brain dopamine system. She likened the 2 exposures to cracks in the foundation of a building. "If you have a building that has 1 crack in the foundation, it may be somewhat weakened, but things may dramatically destabilize if you add another crack in the same area."

If you have a building that has 1 crack in the foundation, it may be somewhat weakened, but things may dramatically destabilize if you add another crack in the same area.

The authors estimated that 38.2% of ADHD cases among 8- to 15-year-old children might be attributable to prenatal tobacco exposure, lead concentrations of more than 1.3 µg/dL, or both. This corresponds to 900,000 cases of the estimated 2.4 million cases of ADHD in this age group nationwide.

These exposures are very real: A 2004 population-based study found that about 15% of women in the United States smoked during pregnancy. As for lead, an estimated 1.8% of US children had blood lead levels above 10 µg/dL in 1999 to 2002, and almost 14% had levels of 5 to 9 µg/dL.

Even though lead was removed from paint manufactured in the United States in 1978, it is still found in the paint of older houses, in old pipes, in some children's toys manufactured in other countries, and in some ceramic serving dishes, Dr. Froehlich told *Medscape Psychiatry*. "Lead was also in gasoline for quite some time," he added. "As a result of having been in so many products, lead is in the soil in many areas, so kids can absorb or ingest it after playing in the soil."

The authors estimate that the number of ADHD cases would be reduced by 25% if exposure to lead were reduced. Similarly, a reduction to prenatal tobacco exposure could result in 21.7% fewer cases of ADHD.

Enforce Laws

To reduce the risk that their baby will develop ADHD, women who are planning a pregnancy or who have the potential to become pregnant should quit smoking. As for reducing exposure to ADHD-related toxicants later on, society as a whole could do more to "enforce laws making landlords clean up the lead that's in the housing stock that they rent to people," said Dr. Froehlich.

Where there are lead pipes, families should let the water run for a bit before taking a drink from the tap. Kids should be especially vigilant about hand washing after playing outside in soil, or in areas in the home where there may be lead dust from old paint or old window sills or casings. Parents should also be aware that children who are deficient in iron and calcium tend to absorb more lead.

One of the limitations of the study is that it cannot actually prove that these exposures cause ADHD, the authors note. The study cannot rule out, for example, that genetic factors or confounding factors such as prenatal alcohol exposure, may explain the relationship between these exposures and ADHD. In addition, the study's assessment of prenatal tobacco exposure was based on caregiver reports that did not take into account dose response or timing effects.

When asked for a comment on these findings, Glenn J. Kashurba, MD, a child and adolescent psychiatrist in Somerset, Pennsylvania, said the study is important because it shows that prenatal tobacco and lead exposure are independent risk factors for ADHD and that combined exposure is even more dangerous.

"Any study that calls attention to the significant negative consequences of tobacco, lead, and other prenatal toxins can decrease the risk of problems for children and families in the future," he told *Medscape Psychiatry*.

The authors have disclosed no relevant financial relationships.

Pediatrics. Published online November 23, 2009.

<http://www.medscape.com/viewarticle/713067>



Panel: ADHD drugs for kids need hallucination warning

By Rita Rubin, USA TODAY

Posted 3/22/2006 12:43 PM Updated 3/22/2006 9:47 PM

GAITHERSBURG, Md. — A Food and Drug Administration advisory committee recommended Wednesday that the agency add information about a possible risk of hallucinations in children to the labels of attention deficit/hyperactivity disorder drugs.

The committee also urged the FDA to develop a consumer-friendly medication guide explaining to parents that they should talk to their child's doctor about stopping the medication should hallucinations occur.

The panel said the "MedGuide" also should note that ADHD drugs may increase the risk of aggressive behavior, although that can be a component of the disorder itself. And the guide should note that the drugs might increase the risk of heart attack, stroke or sudden death in patients who have undiagnosed heart problems.

Current labeling for the ADHD drugs — Adderall, Focalin, Concerta, Metadate, Methylin, Ritalin and Dexedrine — does not mention the possibility of hallucinations in patients who had no history of them and had taken the usual dose.

"We read case upon case of these children who do experience these hallucinations," Rosemary Johann-Liang of the FDA's Office of Drug Safety told the committee. "That is something that really struck all the reviewers."

Johann-Liang said it's unlikely that the ADHD drugs are simply unmasking a previously undiagnosed psychiatric disorder that would explain the hallucinations.

The panel did not feel that the risk of hallucinations warranted a "black box" warning, the strongest type of warning, said Pediatrics Advisory Committee chairman Robert Nelson of the department of anesthesia and critical care medicine at The Children's Hospital of Philadelphia. In 2004, Nelson's panel did recommend a black box warning about suicidal behavior in children and adolescents who take SSRI (selective serotonin reuptake inhibitor) antidepressants. In that case, he said, there was only "marginal" evidence that the drugs were effective in that age group.

"In this case, you have overwhelming evidence of efficacy," Nelson said, adding that a black box might unnecessarily scare parents away from treatment.

The panel discussed whether ADHD drugs increased the risk of suicidal thoughts in children and adolescents, a possibility that Kate Gelperin, medical epidemiologist in the FDA's drug safety office, said could not be ruled out. But the panel did not advise adding that risk to their labels. Thomas Laughren of the FDA division that reviews psychiatric drugs said studies have found that 15% to 20% of adolescents in the general population report having suicidal thoughts.

The ADHD drug Strattera already has a black box warning about suicidal thoughts because of evidence from clinical trials, but no other ADHD drug label carries any information on suicidal thoughts.

Robert Temple, director of the FDA center that evaluates psychiatric drugs, said the agency is likely to follow the panel's advice.

http://www.usatoday.com/news/health/2006-03-22-adhd-label_x.htm



Food Additives May Make Kids Hyper

Artificial Colors, Additives Boost Hyperactive Behavior in Toddlers and Children, Study Shows

By [Kathleen Doheny](#)

WebMD Health News

Reviewed by [Louise Chang, MD](#)

Sept. 6, 2007 -- Artificial coloring and preservatives in food can increase hyperactivity in kids, a new British study shows.

Researchers from the University of Southampton in the U.K. evaluated the effects of drinks containing artificial colors and additives on 3-year-old and 8- and 9-year-old British kids and found that the additives made hyperactive behavior worse -- at least up to middle childhood.

The link between such food additives and hyperactivity has been long debated. "The importance of our work is that effects have been found for 3-year-old and for 8- and 9-year-old children in the general population, not just for those diagnosed with attention deficit hyperactivity disorder ([ADHD](#))," says Jim Stevenson, PhD, professor of psychology at the university and a co-author of the study, published online Sept. 6 in *The Lancet*. "The size of the effects is similar to that found for children with ADHD."

But a U.S. expert said that scientific evidence overall does not point to a definitive link between additives and hyperactivity. He said it is premature, based on these study results, to suggest a public policy change. But the U.K. Food Standards Agency, which funded the study, has already revised its advice to parents about what to feed their children.

The U.K. Study

The researchers evaluated the effects of different "cocktails" of beverages containing artificial food colors and other additives in 153 3-year-olds and 144 8- and 9-year-olds from the general population. In all, 267 of the 297 children completed the study and were evaluated by teachers and parents for behavior changes after drinking the trio of beverages.

The children drank two types of beverages with food additives commonly found in sweets, beverages, and other foods, and then a placebo drink (one with no additives). One mix had artificial colorings, including sunset yellow (also called E110), carmoisine (E122), tartrazine (E102), ponceau 4R (E124), and the preservative sodium benzoate. Another beverage mix included the current average daily consumption of food additives by the two age ranges of children and included quinoline yellow (E104), allura red (E129), sunset yellow, carmoisine, and sodium benzoate.

Teachers and parents evaluated behaviors after the children drank each type of beverage, and the older children also were tested on their attention spans.

Study Findings

The older children's behavior was adversely affected by both of the mixtures with additives, compared with placebo, Stevenson's group found.

The younger children had more hyperactivity with the first mixture compared with placebo, but their responses to the second beverage varied greatly.

Perspective and Reaction

About 2 million children in the U.S. have ADHD, according to the National Institutes of Health.

The link between food additives and hyperactivity in children has been debated for many decades, says Roger Clemens, DrPH, a professor of pharmacology and pharmaceutical sciences at the University of Southern California School of Pharmacy and a spokesman for the Institute of Food Technologists.

More than 30 years ago, a physician named Ben Feingold proposed a [diet](#) free of additives and other substances to calm behavior in children.

The U.K. study findings about the adverse effects of food additives are narrower than those found by Feingold, Stevenson tells WebMD. "Feingold made a very wide-ranging claim about many additives and also salicylates (a group of chemicals related to [aspirin](#) but also found in foods) adversely affecting children's behavior," he says. "We have shown an adverse effect for a specific set of food colors plus sodium benzoate, a preservative."

While the most recent study has found a link, Clemens contends that "the totality of the evidence indicates food additives, such as those cited in the [*Lancet*] paper, do not contribute to hyperactivity. While this study finds a link, most recent studies do not."

Stevenson disagrees. "The better studies conducted since the mid-1980s confirm that the removal of certain food additives can reduce hyperactivity in children diagnosed with ADHD," he tells WebMD.

Children's reactions to diet do vary, Clemens tells WebMD, and some children may react to additives and colors.

What's a Parent to Do?

Is it worth trying to remove the additives from a child's diet? "It may not hurt, but it may not help," Clemens says.

Meanwhile, the U.K. Food Standards Agency issued new advice after the study was published, advising parents of children who show signs of hyperactivity to cut out the additives studied in the recent research.

Changing the diet is not a cure-all, Stevenson says.

<http://children.webmd.com/news/20070906/food-additives-may-make-kids-hyper>