

## ■ Ritalin's maker tied to parent advocacy group

*USA Today* reports there is a little known financial link between the maker of Ritalin and the parent advocacy group Children and Adults with Attention Deficit Disorder (CHADD) that may be putting profit margins ahead of child safety.

Ciba-Geigy, the maker of Ritalin, admits to funding a portion of CHADD's \$2 million budget. The U.S. Drug Enforcement Agency (DEA) found nearly \$1 million in funding, growing from \$100,000 in 1991 to \$398,000 in 1994.

The DEA is concerned that the financial connection between the maker of the drug and the parent's advocacy group is "not well known by the public, including CHADD members that have relied upon CHADD for guidance."

Use of Ritalin has increased dramatically in the last few years to the point where the United States uses 85% of the Ritalin produced in the world. In 1994, manufacturers increased production of Ritalin by 62%. Profits from Ritalin have increased from \$50 million to \$108 million in recent years.

Not only is Ritalin use increasing but so is Ritalin abuse. Gene Haislip, DEA's head of diversion control says he found parents abusing their kids' prescriptions, kids selling to kids, illegal drug rings and illicit trafficking. A recent Texas study showed that more high school seniors were using Ritalin illegally than legally. Ritalin is among the top 10 drugs that are targeted for pharmaceutical thefts.

The DEA is also concerned that CHADD's recent lobbying efforts to have Ritalin reclassified may be motivated by Ciba-Geigy's interest in profit rather than the health of America's children. Currently, Ritalin is classified in the same category as amphetamines and morphine, all highly addictive. Reclassification would make the drug cheaper and more accessible. According to Haislip, "A lot of people don't know that Ritalin is like cocaine. It can be very dangerous and must be treated with respect." ▲

# Attention Deficit Hyperactivity Disorder (ADD/ADHD): Care, disorder questionable

According to the *Associated Press* on November 19, 1998, a National Institutes of Health committee reports that doctors still don't know how best to treat or even diagnose ADD/ADHD.

Dr. David J. Kupfer, chairman of the panel and professor of psychiatry at the University of Pittsburgh says, "There is no current validated diagnostic test for [ADD/ADHD]. He also pointed out that there are no studies that have examined the long term effects of common treatment drugs such as Ritalin.

Conclusions reached by the panel members include:

- Panel member Janis Ferre of the Utah Governor's Council for People With Disabilities said there's inconsistency in diagnosing ADD/ADHD. "This results in over-diagnosis and under-diagnosis."
- Panel member Donald Berry of the Duke University Medical Center criticized the lack of long-term effect studies on Ritalin and other strong, mind-altering drugs used in treating ADD/ADHD and said he thought **they are prescribed too often.**
- Panel member Dr. Robert Baltimore of the Yale University School of Medicine said, "**There is no gold standard for therapy, so it is difficult to look at the [current] prescribing practice and say what is appropriate or not appropriate.**"

Other conclusions were reached by the panel:

- Although Ritalin may correct some behavior problems, **there is no evidence that it helps children's academic performance.**
- There are no **independent, validated tests** for ADD/ADHD.
- Research that even establishes the validity of ADD/ADHD as a bona fide disorder "**continues to be a problem.**"
- Doctors and schools often do a poor job of communicating when treating ADD/ADHD and follow-up is often poor.

By way of commentary, this panel estimated that up to 5% of children are truly affected with ADD/ADHD, if indeed it even exists. Why then in some classrooms are upwards of **30% of the children** on Ritalin? Could it be that in many school districts the school gets additional money from the state for each child diagnosed?

If your child has been diagnosed with ADD/ADHD, you must seriously determine if you want a **questionable** disorder being diagnosed with **questionable** standards, being treated with **questionable**, high-powered drugs that have **questionable** long-term effects for your child. No doubt there's a better approach we could be taking.

Chiropractic Wellness Care helps normalize and balance the nervous system by removing subluxation interference that can create the disturbances seen in the supposed ADD/ADHD disorders. All children, not just those diagnosed with ADD/ADHD need to have their spines examined for subluxation interference ▲

## ■ Ritalin may cause long-term brain damage

For years, we have been told that Ritalin, the drug used on children with the dubious disorder Attention Deficit Hyperactivity Disorder (ADHD or ADD) is harmless. Now comes news in the August 22, 2001 issue of the *Journal of the American Medical Association* that Ritalin does indeed cause long-term brain damage similar to its chemical relatives cocaine and amphetamine.

Lead researcher, Prof. Joan Baizer of the University of Buffalo says, "clinicians consider Ritalin to be short-acting. When the active dose has worked its way through the system, they consider it all gone." She went on to say that this concept may be wrong, that their research "suggests that [Ritalin] has the potential for causing long-lasting changes in brain cell structure and function."

Amphetamine and cocaine activate genes in the brain that are responsible for addiction. This study showed that these same genes were activated after exposure to Ritalin.

"These data do suggest that there are effects of Ritalin on cell function that outlast the short term and we should sort that out," Baizer said.

In commentary, we agree. Despite research that proves over and over again that Ritalin is a dangerous drug, people who have a financial interest in seeing this drug inflicted on children say it is safe when used in small doses. Nonsense. Any drug which has much the same long-term action as cocaine and amphetamine (speed) cannot be safe to use in children no matter what the dose.

Since Ritalin and cocaine are functionally similar, see how this sounds: "Every morning we give our son a small amount of cocaine to help him pay attention in school. It's just a small dose and his grades have gone up!"

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## ■ Ritalin Acts Much Like Cocaine

The August 22, 2001 issue of the *Journal of the American Medical Association* reports that researchers have found that the drug Ritalin, used in children with the so-called disorder ADD/ADHD, has a more potent effect on the brain than cocaine.

The research was done at Brookhaven National Laboratory in Upton, New York. The study used brain imaging to discover that Ritalin, which has the same chemical profile as cocaine, occupied more of the receptor sites in the brain responsible for the cocaine “high” than cocaine itself did.

Cocaine is known to occupy about 50% of the receptor sites available. This study found that Ritalin blocks 20% more sites than cocaine. Lead researcher Dr. Nora Volkow said, “the data clearly show the notion that Ritalin is a weak stimulant is completely incorrect.”

In commentary, what can we say? Putting millions of children around the world on drugs that are chemically similar to and more potent than cocaine for a disorder that is questionable to begin with is extremely dangerous.

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## ■ Number of US kids on behavioral drugs triples

The May 2002 issue of the *Journal of the American Academy of Child and Adolescent Psychiatry* reports that the number of children using psychotropic medications for depression, various emotional/behavioral conditions and the dubious condition ADD/ADHD has tripled in the last decade.

Overall, 14 children per 1,000 were using the medications in 1987. By 1996, that number had increased to 39 children per 1,000.

Breaking the numbers down even more specifically, the researchers found that the number of children using Ritalin and Adderall, used for ADD, quadrupled from 6 per 1,000 to 24 per 1,000 between 1986 and 1996.

Children using antidepressants such as Prozac and Zoloft rose from 3 per 1,000 to 10 per 1,000 for the same time period.

Lead researcher Dr. Mark Olfson of Columbia University in New York City summarized the study by saying “An important challenge ahead lies in determining the appropriateness (and ultimately the effectiveness) of the care provided to a large number of children and adolescents who receive prescribed psychotropic medications each year.”

Commentary: We find this report appalling. The use of dangerous psychotropic drugs in children triples in a ten year period and the appropriateness and effectiveness of the drugs hasn't even been determined? Doctors who say they are concerned about the ethics of using children in drug trials apparently have no problem with the ethics of putting those same children on the drugs for extended periods of time without knowing the appropriateness or effectiveness. As we said, appalling.

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## ■ Long-Term Ritalin Use May Change Brain

The December 2003 issue of *Biological Psychiatry* reports on three animal studies that show long-term use of Ritalin may cause negative changes in brain response and behavior.

Ritalin is the drug of choice for the treatment of the dubious condition known as attention-deficit hyperactivity disorder (ADHD).

The first of the three studies found that low doses of Ritalin in rats caused changes in brain cells that made them more sensitive to the effects of cocaine (Ritalin and cocaine are similar in structure and action). The second study found that pre-adolescent rats given Ritalin increased behaviors that could indicate depression once they reached adulthood.

The final study found that adult rats given Ritalin as pre-adolescents were more sensitive to stressful situations and less responsive to natural rewards, such as those derived from sugar and sex. They also showed increased anxiety behaviors and elevated blood levels of stress hormones.

## ■ Early use of Ritalin may alter adult brain function

Research presented in December, 2004 at the annual conference of the *American College of Neuropsychopharmacology* suggests that early use of the ADD-ADHD drug Ritalin can have profound effects on brain function later in life.

Neuropsychopharmacology is the study of how psychoactive drugs used for psychiatric purposes affect the brain and nervous system.

In this study, researchers from the Harvard Medical School in Boston gave Ritalin to rats at ages equal to 4 to 12 years in humans, an early period of high brain development.

Lead researcher, Dr. William Carlezon says, “There has been some evidence that children who had been treated for attention deficit–hyperactivity disorder (ADHD) with Ritalin and other stimulants, when they grew up they were less likely to abuse drugs.”

“This was surprising to us,” he says, “because one of the things that seems to be really reliable in animals is that if you expose them to stimulant drugs like amphetamine or cocaine or opiates [*Ritalin is in the same class of drugs—ed.*] and then at a later time test the animals for how much they like the drug, usually the pre-exposure will make them like the drug more.”

When the Ritalin exposed rats were later exposed to cocaine as adults, they were indeed less sensitive to the drug. More disturbingly however, they showed fewer signs of pleasure and reward, one of the major mechanisms of learning of appropriate behavior.

The loss of this mechanism was demonstrated by forcing the rats to swim. According to Carlezon, “they’ll give up and show us learned helplessness; where instead of trying to escape, they simply float.”

Commentary: One must seriously consider all of the ramifications of trying to control behavior chemically, particularly in children whose brains are still developing. In our opinion, losing the ability to make appropriate decisions later in life is not a fair trade-off for the ease of chemically controlling children’s behavior. In children diagnosed with ADD-ADHD (whose existence is subject to debate), every avenue of possibility should be explored before resorting to life-altering chemical choices.

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## ■ 20 Deaths Not Enough For Recall Of ADD/ADHD Drug

On February 10, 2005, the U.S. Food and Drug Administration (FDA) said that U.S. drug safety reports of 20 deaths linked to the attention deficit drug Adderall XR are not enough to remove the drug from the market.

Health Canada banned sales of the drug the previous day. Their decision was based on a review of adverse event reports released by the producer of the drug, Shire Pharmaceuticals Group of Basingstoke, England.

Robert Temple, director of medical policy for the FDA said “the cases are not convincing evidence the drug is clearly responsible for these deaths.” He went on to say that while the FDA is deciding whether to conduct its own study of Adderall XR, the drug will continue to be available in the U.S., its biggest market.

U.S. House and Senate committees have been studying drug safety since the painkiller Vioxx was removed from the market after it was tied to heart risks and antidepressants were linked to an increased risk of suicide in children.

In a letter to FDA chairman Lester Crawford, Iowa Senator Charles Grassley contends that the FDA may be slow to act on Adderall “because there was concern that FDA could not handle another ‘drug safety crisis.’” Calls to the FDA for comment were not immediately returned.

Adderall already carries a “black box warning”, the strongest the FDA requires. It warns that amphetamines “have a high potential for abuse” and they “should be prescribed or dispensed sparingly.”

Michigan Representative Bart Stupak questioned the FDA’s ability to inform people about drug dangers. “If you’re going to keep this thing on the market,” he said, “have a signed informed-consent for the patient, and make it mandatory.”

# Ritalin Use Linked To Chromosomal Changes

On February 24, 2005, the editors of the journal *Cancer Letters* released an early, online version of their journal. It advises us of a study at the University of Texas Medical Branch at Galveston that found that every one of 12 children treated for ADD/ADHD with methylphenidate, the active ingredient in Ritalin, experienced a threefold increase in levels of chromosome abnormalities of the type typically associated with increased risks of cancer and other damaging health effects.

The researchers were startled to note that all of the children experienced the chromosome damage only three months after taking the drug.

The researchers went on to say that to their knowledge, this is the first study done examining the link between methylphenidate and its potential chromosome-damaging effects.

They decided to do the study because even though methylphenidate has been approved for use in humans for more than 50 years, “there are surprisingly few studies” in either humans or animals “on the potential for serious side effects,” such as chromosome damage and cancer.

In the new study, researchers drew blood from children diagnosed with ADD/ADHD before taking methylphenidate in order to get a baseline level of chromosomal structure. Three months after they began taking normal therapeutic doses of the drug, all 12 children in the study had blood taken again.

“It was pretty surprising that all of the children taking methylphenidate showed an increase in chromosome abnormalities in a relatively short period of time,” said lead researcher Randa El-Zein, M.D., Ph.D. Most of the damage found was chromosome breaks “and a higher frequency of [chromosome] aberrations is reported to be associated with an increased risk of cancer down the line.”

While this does not mean that the children will get cancer, it does expose them to an additional risk factor.

Methylphenidate is the most widely used class of amphetamine-like drugs used to treat ADD/ADHD. Methylphenidate use skyrocketed by more than 500% between 1991 and 1999.