

ATTENTION DEFICIT/HYPERACTIVITY DISORDER



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ADD/ADHD

Millions of American children are affected by problems related to hyperactivity and inattention. Attention deficit disorder (ADD) has been diagnosed in epidemic proportions. *Does ADD really exist? Is this another term for a new fad or a politically correct term for misbehavior?* There is considerable controversy over whether the symptoms these children experience are actually attributable to biological or to behavioral disorders. According to psychiatric studies, ADHD (Attention-Deficit/Hyperactivity Disorder) shows behavioral characteristics of motor hyperactivity or impulsivity, and cognitive characteristics of inattention, or both. Although ADHD is now understood to afflict people of all ages, most of available research concentrates on children and adolescents.

Currently, over two million children in the United States take stimulant medications and it is estimated that 5-10% of all children are affected with ADHD. Boys are diagnosed in a 10:1 ratio over girls. ADHD was first identified and described in the



early 20th century when children with encephalitis developed symptoms of hyperactivity, impulsivity and inattention. Impulsive children have been labeled "minimal brain damage," "minimal brain dysfunction or hyperkinetic syndrome."

The prevalence of childhood ADHD is reported to be higher in the United States than in other countries. This difference is hypothesized as most likely due to diagnostic practices. For example, in England, about 2% child psychiatric outpatients have a diagnosis of ADHD versus 40% in the United States. The diagnostic label is usually restricted in England. This difference reflects the traditional American emphasis on biological

causes and pharmacological treatment of ADHD. The British emphasis is on social causes and the psychological treatment of a conduct disorder.

How do you make a diagnosis of ADHD? Learning disabilities, hyperactivity, emotional instability, easy distractibility, short attention span, general coordination deficit and "acting before thinking" characterize ADHD (See table 1: DSM-IV diagnostic criteria for ADHD)

Imagine the following scenario: Michael is a very active seven-year-old who starts first grade in public school. His teacher quickly notices that he is always fidgety, restless, disrupt-

ive in the class, and asking questions frequently and inappropriately. He has a difficult time following the teacher's instructions and does not finish assignments. Mrs. Goodman, an older more experienced teacher, allots a great deal of time and attention to Michael, and as a result he is promoted to the second grade.

Ms. Ciba, a young second grade schoolteacher who has been warned about "hyper Michael," decides to play tough with her student. Within a matter of weeks, his parents receive notes from the teacher that report his disruptive behavior. Within the semester, Ms. Ciba asks for conferences with Michael's parents to address Michael's behavior. At the end of a meeting, an exasperated Ms. Ciba asks them:

"Have you heard of ADD? I

think Michael has ADD. Have you ever thought of putting your child on Ritalin? We do have a licensed psychologist in our school, Mr. Geigy. He can help your child get on Ritalin right away..."

Similar scenarios occur with the over two million children in the United States who are taking stimulant drugs.

Often, parents who initially refuse to give drugs to their children later change their minds due to fear that they will ruin their children's normal development. A national support group, Children with Attention Deficit Disorders (CHADD), based in Plantation, Florida (305-587-3700), supports the hypothesis that ADD is a "neurologically based disorder." They believe that medication is not the only answer, but that it can equip the child with a better capacity to learn. CHADD acknowledges that the decision to medicate a child is the most difficult choice a parent has to make regarding ADD treatment.

Do we really need Ritalin or other drugs for ADHD?

Have you thought about the side effects of the drug? Who promotes Ritalin? Who profits from encouraging drug therapies? Are there alternative therapies? These questions surround the parents of ADD children. Ciba-Geigy, the company that manufactures Ritalin attributes the surge in ADD to "heightened public awareness." Much of that awareness however, appears to have emerged from Ciba-Geigy, a large contributor to ADD support groups throughout the United States that often recommend medication to parents. (See side effects associated with Ritalin).



Over 2 million American children take stimulant drugs

Ritalin: (Methylphenidate):

- Structurally related to amphetamine
- A mild central nervous system stimulant (psycho stimulant) with more prominent effects on mental than on motor activities
- Shares abuse potential of the amphetamines
- Its half-life in plasma is 1-2 hours

Adverse side effects associated with Ritalin:

- Addiction
- Difficulty Sleeping
- Decreased Appetite
- Headaches
- Stomach Aches
- Increased Chance of Tics/Tourette's Syndrome
- Carcinogenesis: Increase in Hepatocellular Adenomas
- Cardiac Arrhythmia
- Toxic Psychosis
- Weight Loss During Prolonged Therapy
- Rash
- Rebound Phenomenon

Diagnosis/Evaluation for ADD/ADHD

Before we make a diagnosis of ADD/ADHD on any child, we need to separate neurological, psychological, medical or social conditions that may mimic attention deficit hyperactive disorder. (See table 2: Differential diagnosis of ADHD) The physical examination is usually recommended and a neuropsychological evaluation by the neurologist or psychiatrist might also be helpful. Advisable laboratory screening includes: food allergy tests, thyroid function test, heavy metal toxicity



diagnosis through a hair mineral analysis and blood test. Differential diagnosis is challenging. ADHD is often difficult to distinguish from other childhood psychiatric disorders because it may present concurrently with many other psychiatric diagnoses. Examples: Based upon behavior in school, a child is prescribed Ritalin. This same child also suffers from "separation anxiety disorder" in the wake of recently divorced parents with a complex child custody arrangement. Another child starts Ritalin for learning disabilities and suspected autism. This child is also diagnosed heavy metal toxic from copper, lead, cadmium and aluminum.

Differential diagnosis of attention-deficit/hyperactivity disorder (ADHD)

Psychiatric

Conduct disorder
Oppositional defiant disorder
Major depression
Anxiety (situational, developmental)
Separation anxiety disorder
Posttraumatic stress disorder
Panic disorder
Phobic disorder
Dissociative disorders
Psychotic, prepsychotic, or intermittent psychotic disorders (bipolar, schizophrenic, borderline)
Attention-seeking or manipulative behavior

Psychosocial

Physical or sexual abuse
Neglect
Boredom
Overstimulation
Sociocultural deprivation

Neurological

Neurological damage (post-trauma, postinfection)
Lead poisoning

Medical

Thyroid disorders
Drug-induced agitation
Recreational stimulants
Medical stimulants:
 pseudoephedrine
Barbiturates, benzodiazepines
Carbamazepine
Theophylline

Dietary

Excessive caffeine
Hunger
Constipation
Minor persistent pain
Normal behavior

Note There are a variety of etiological factors that give rise to ADHD or to the “ADHD look-alike” conditions. Certain ADHD look-alikes may appear as comorbid conditions along with ADHD. Because of the common co-occurrences of ADHD and ADHD look-alike conditions, the differential diagnosis includes certain conditions that might be considered etiological factors.

Treatment Plan:

Back to the Basics

- 1. Unconditional Love**—A child who is subjected to “conditional love” experiences great stress. Conditional love comes with rules. For example, when a child displays “bad” behavior, parents withdraw love or dispense punishment that often makes no sense to the child. Unconditional affection begins with loving children for who they are, not for what they do. Love your child unconditionally.
- 2. Diet**—A diet rich in fresh organically grown food is best. Home-cooked meals eaten in a loving, relaxed environment assure optimal absorption of nutrients.
 - Avoid fast foods, which contain surplus food additives, chemicals and processed fats and proteins.
 - Avoid most cereals marketed for children. They are not only refined, but also filled with excess chemicals and sugars.
 - Hydrate with a lot of water and a minimal amount of fruit juice. Avoid all soda, caffeine beverages and artificial sweeteners.
 - Avoid junk food.
 - Use a metabolic body-type based diet. Many children are fast oxidizers and require a high fat/low carbohydrate diet to deflect unwanted hypoglycemia. A diet high in carbohydrates and sugar will aggravate cravings for sweets and adversely affect energy and attention levels. Example: Children’s behavior at school often gets worse following Halloween night due to sugar binges.
- 3. Nutritional Influences And Nutrition Support For ADD—**
Overview:
 - a. A high protein, low carbohydrate, sugar-free diet may be beneficial.
 - b. Supplementation with the B vitamins, niacin (B-3), pyridoxine (B-6), or possibly thiamin (B-1) may benefit selected children.
 - c. A calcium deficiency may cause hyperkinetic behavior.
 - d. Normalizing elevated serum copper levels may be beneficial.
 - e. Iron deficiency may cause irritability and attention deficit.
 - f. Magnesium deficiency is characterized by fidgeting, anxious restlessness, psychomotor instability and learning difficulties.
 - g. Reduced zinc levels may be associated with hyperactivity.
 - h. The neurotransmitter precursor, tryptophan, has shown some efficacy in improving behavior.
 - i. Various foods and food additives have been shown to affect hyperkinetic behavior in selected children.
 - j. Aluminum, lead, mercury, and cadmium may be associated with hyperactivity.

Specific Nutritional Support For ADD:

- B-complex vitamins: If you skip a few meals or feast on candy bars and soda, you’ll swiftly feel flat, grouchy, irritable and tired. B vitamins are supplemental spark plugs to ignite the body’s fuel reserves.
- Thiamin (B-1): A thiamin deficiency is characterized by fatigue, depression and memory deficit.
- Pyridoxine (B-6): B-6 has been linked to mood swings and depression. Vitamin B-6 is necessary for the formation of the important transmitters: Dopamine, Histamine, Serotonin and Epinephrine.
- Amino Acids: Considered the building blocks of physical and emotional being, amino acids are more than building blocks for muscles. These essential nutrients may help regulate emotions, function as neurotransmitters, lower cholesterol, and reduce pain related to serious injury.
- L-Glutamine: This major energy booster for brain function crosses blood brains barrier and detoxifies brain (Ammonia)—composing over 50% of brain amino acid content.

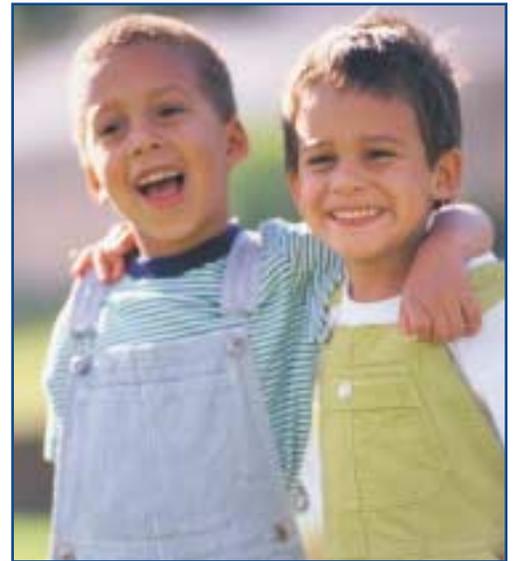
Symptoms of Hypoglycemia

High birth weight
Headaches
Sleeplessness
Moody
Temper Tantrums
Can't sit still
Crying for no apparent reason
Craves sweets
Hyperactive/overactive
Shaky/irritable before meals
Angry/Hostile
Behavior improved after meals
Distractible
Agitated
Defiant
Jekyll/Hyde behavior

Symptoms of Allergies and Sensitivities

Vomiting/spitting up
Constipation/diarrhea
Colic
Hyperactive/overactive
Formula changes
Angry/hostile
Ear infections
Distractible
Dark circles under eyes
Fatigue
Congestion/runny nose
Learning problems
Coughing/wheezing
Had multiple antibiotics
Bed-wetting
Craves certain foods
Picky eater
Agitated/irritable after eating
Seasonal allergies
Seasonal behavioral changes
Hives/skin rashes/eczema
Stomachaches
Red earlobes/pink cheeks
Uncontrollable
Chronic infections
Sensitive
Headaches

- **Fatty Acids:** The body requires specific fatty acids to create gastrointestinal integrity, lipid membranes, hormones, neurotransmitters, prostaglandins and immune modulators. The use of trans fats (from margarine, french fries, cookies, crisco oil, etc.) literally shuts down fatty acid metabolism on immune, endocrine and central nervous systems. Essential fatty acids (EFA's), also known as omega-3s or omega-6s, aid transmission of nerve impulses and are necessary for normal brain function, a factor directly associated with the treatment of ADD. There is evidence that mothers who receive sufficient essential fatty acids during pregnancy have infants who are brighter and learn more quickly. Good sources for essential fatty acids include flaxseed oil, borage oil, fish oil and evening primrose oil. Butter and olive oil are also excellent sources for the "good fats."



There is now a test available to determine an overall impression of fatty acid metabolism. This test assays red blood cell membrane fatty acids and can provide extremely valuable information for fatty acid nutritional support.

- **Ginkgo Biloba:** Ginkgo Biloba improves blood supply to the brain and also increases the rate at which information is transmitted at nerve cells.
 - **Herbal bowel cleansers** eliminate mucous, parasites and speed up the detoxification process by increasing bowel movements.
 - **Spirulina/Chlorella:** An excellent source of amino acids and minerals, Spirulina/Chlorella are also useful for detoxification, especially heavy metals.
 - **Calcium/Magnesium:** This nutritional supplement has a calming effect upon the central nervous system. Hyperactivity has been associated with fast oxidation (low calcium and magnesium levels). However, hyperactivity is also seen in slow oxidizer's who have elevated calcium and magnesium levels because calcium and magnesium are not bioavailable.
 - **Zinc/Copper:** Another common cause of hyperactivity symptoms is an imbalance involving zinc and copper. Zinc has a relaxing effect and some qualify it as a calming neurotransmitter in its own right. Zinc stimulates the new brain or cortex, which modifies and reduces emotional responses. Copper tends to trigger activity of the diencephalon or emotional brain. This can lead to exaggerated emotional responses. Copper also affects thyroid and adrenal activity.
 - **Chromium/Manganese:** These minerals can help eliminate hypoglycemic tendencies, which can produce symptoms of hyperactivity.
4. **Toxic Metals**—High levels of toxic metals are commonly found in infants and children. Elevated lead, cadmium, mercury and aluminum are among the observed metals. Heavy metals are known to be passed from mother to child through the placenta. Indeed, one neurotoxicology book describes babies as "sinks" for heavy metals. To screen for Heavy Metal Toxicity, a hair mineral analysis is advised.
 5. **Mineral Deficiency/Nutritional Deficiency**—Despite a mother's best nutritional intentions, these deficiencies frequently occur as the result of poor biochemical conditions in mothers. A Hair Mineral Analysis and customized nutritional program are recommended to meet individual nutritional and mineral-level needs.

Homeopathy treats the individual rather than the disorder

Salicylates are used in aspirin and found in the following foods, beverages and spices:

Almonds
Nectarines
Apples and Apple Cider
Oranges
Apricots
Peaches
Berries
Bell Peppers
Cherries
Chili Peppers
Chili Powder
Pickles
Cider Vinegar
Plums
Cloves
Prunes
Coffee
Raisins
Cucumbers
Tangerines
Currants
Tea
Grapes
Tomatoes
Mint
Wine



6. **Allergies**—Typical allergy symptoms include sneezing, runny nose and itchy, watery eyes. Many people also experience itching and swelling of the mouth, throat and inner ears and stomach discomfort. Some allergy sufferers grow restless, irritable and inattentive. Studies reveal that many children with allergies display hyperactive behavior. It is worthwhile to test for allergies—especially food allergies—and if present, to follow an elimination diet.
 - Dr. Joseph Egger, a pediatric neurologist in Germany, has demonstrated an effective elimination-diet treatment for hyperactivity in children who have symptoms triggered by food sensitivity.
 - Marshall Mandell, M.D. of Norfolk, Connecticut has documented on videotape the often serious effects allergies wreak on the nervous systems of many children with emotional, behavioral and learning disorders, as well as autism and seizures.
 - A few years ago, the New York City public school system decided to change the school diet. They decreased the amount of sugar, food colorings, synthetic flavorings and two commonly used preservatives. Over the next four years, city school students displayed a dramatic (15.7%) increase in academic performance.
7. **Feingold Program**—In 1975, Dr. Benjamin Feingold published a book titled *Why Your Child Is Hyperactive* in which he cited synthetic dyes, chemical preservatives, and food containing salicylates and artificially manufactured flavorings as the cause of hyperactivity in numerous children. Salicylates are natural compounds believed to cause behavioral problems in some children by disturbing the brain's ability to produce neurotransmitters.
8. **Homeopathy**—Established by Dr. Samuel Hahnemann in Germany Homeopathy is a unique form of medicine based upon two principal discoveries: 1.) The law of similars; and 2.) The idea of using microdoses, or extremely tiny doses of medication to stimulate the body's ability to heal itself. Homeopathy—which treats the individual rather than the disorder—can effectively manage ADD by bringing the individual into balance. Homeopathy is safe, non-toxic and may be used in conjunction with other therapies.
9. **Behavior Modification**—Under the guidance of a holistic-oriented psychologist or social worker, you can work toward:
 - *Building Self-Esteem*
 - *Instilling Confidence*
 - *Improving Attitude*
 - *Providing Motivation and Encouragement*
 - *Downplaying Small Mistakes*
 - *Respecting Feelings and Emotions*
 - *Bonding The Family As A Team*
 - *Taking Care Of Yourself And Your Spouse*
10. **Modification Of Modern Day Lifestyle**—
 - a. Exercise: Perform some type of physical activity everyday.
 - b. Sleep: Ensure adequate sleep for children, with no TV in the bedroom.
 - c. Slow Down: Don't enroll children in extra-curricular activities unless they are designed to create a calming, relaxing and confidence-building environment.
 - d. Family Value and Tradition
 - e. Prayer/Spirituality
 - f. Organize One Day At A Time

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11. Other Therapies To Consider—

- Spinal Adjustment/Cranial Adjustment
- Electro Magnetic Disturbance
- Candida/Fungus/Parasites
- Dental Toxicology
- Antibiotic Over-Use and Gastrointestinal Dysbiosis
- Environmental Pollution
- Hormonal Disturbance
- Chemical Sensitivity
- Thought Field Therapy by Roger Callahan, Ph.D.
- Air Filtration System
- Water Filtration System
- Light Therapy
- Color Therapy

Summary:

ADD/ADHD has evolved as the new buzzword in today's fast-paced society. Any child with signs of hyperactivity and inattention is in danger of being labeled ADD/ADHD. That child is at risk for a "blanket prescription" of drugs and psychostimulants, regardless of his or her underlying causes. Parents and teachers view 50% of "normal" children as "hyperactive." There are far too many "ADHD look alike" diagnoses. Moreover, it is unethical to test an empirical stimulant drug on a hyperactive child to confirm a diagnosis. Unfortunately, this is a common practice today.

Management of ADHD is a challenge that requires time, commitment and great sensitivity on the part of parents, teachers, physicians and other support groups. Though stimulant medication may improve symptoms, it has become a knee-jerk response. Medical science has yet to determine the long-term consequences associated with the liberal use of psychostimulants in our society.

I believe a psychostimulant-free, multi-model, holistic approach is the safest and most effective treatment for the majority of true ADD/ADHD children. Positive results for ADHD children will continue to grow as parents and educators access information on alternative, non-pharmacological approaches such as: nutritional therapy, food allergy/elimination diets, environmental management, behavior modification, and individualized learning plans.

Table 1 DSM-IV diagnostic criteria for attention-deficit/hyperactivity disorder

<p>A. Either (1) or (2):</p> <p>1. Six (or more) of the following symptoms of <i>inattention</i> have persisted for at least 6 months to a degree that is maladaptive and inconsistent with developmental level:</p> <p><i>Inattention</i></p> <p>a. Often fails to give close attention to details or makes careless mistakes in schoolwork, work, or other activities.</p> <p>b. Often has difficulty sustaining attention in tasks or play activities.</p> <p>c. Often does not seem to listen when spoken to directly.</p> <p>d. Often does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace (not due to oppositional behavior or failure to understand instructions).</p> <p>e. Often has difficulties organizing tasks and activities</p> <p>f. Often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort (such as schoolwork or homework).</p> <p>g. Often loses things necessary for tasks or activities (e.g., toys, school assignments, pencils, books, or tools.)</p> <p>h. Is often easily distracted by extraneous stimuli.</p> <p>i. Is often forgetful in daily activities.</p> <p>2. Six (or more) of the following symptoms of <i>hyperactivity-impulsivity</i> have persisted for at least 6 months to a degree that is maladaptive and inconsistent with developmental level:</p> <p><i>Hyperactivity</i></p> <p>a. Often fidgets with hands or feet or squirms in seat.</p> <p>b. Often leaves seat in classroom or in other situations in which remaining seated is expected.</p> <p>c. Often runs about or climbs excessively in situations in which it is inappropriate (in adolescents or adults, may be limited to subjective feelings of restlessness).</p> <p>d. Often has difficulty playing or engaging in leisure activities quietly.</p>	<p>e. Is often “on the go” or often acts as if “driven by a motor.”</p> <p>f. Often talks excessively.</p> <p><i>Impulsivity</i></p> <p>g. Often blurts out answers before questions have been completed</p> <p>h. Often has difficulty awaiting turn.</p> <p>i. Often interrupts or intrudes on others. (e.g., butts into conversations or games).</p> <p>B. Some hyperactive-impulsive or inattentive symptoms that caused impairment were present before age 7 years.</p> <p>C. Some impairment from the symptoms is present in two or more settings (e.g., at school [or work] at home).</p> <p>D. There must be clear evidence of clinically significant impairment in social, academic, or occupational functioning.</p> <p>E. The symptoms do not occur exclusively during the course of a pervasive developmental disorder, schizophrenia, or other psychotic disorder and are not better accounted for by another mental disorder (e.g., mood disorder, anxiety disorder, dissociative disorder, or a personality disorder).</p> <p><i>Code based on type:</i></p> <p>314.01 Attention-deficit/hyperactivity disorder combined type: if both criteria A1 and A2 for the past 6 months.</p> <p>314.00 Attention-deficit/hyperactivity disorder, predominately inattentive type: if criterion A1 is met but criterion A2 is not met for the past 6 months.</p> <p>314.01 Attention-deficit/hyperactivity disorder, predominately hyperactive-impulsive type: if criterion A2 is met but criterion A1 is not met for the past 6 months.</p> <p>Coding note: For individuals (especially adolescents and adults) who currently have symptoms that no longer meet full criteria, “in partial remission” should be specified.</p>
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