ADDITUDE

ADHD Medication & Treatment

Everything you need to know about medication options, minimizing side effects, alternative therapies, and more



ADDITUDE Expert eBook

A trusted source of advice and information for families touched by attention-deficit disorder—and a voice of inspiration to help people with ADHD find success at home, at school, and on the job.

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Your Essential Guide to ADHD Treatments

ou're relieved to know, finally, that your child's symptoms—impulsivity, distractedness, perhaps hyperactivity—have a name. Or that your inability to focus or pay attention in school as a child—or at work as an adult—is due to attention deficit disorder.

As you sit down with your doctor and discuss treatment options, you will no doubt be overwhelmed with information or uncertain about the alternatives. Yet you want to choose the safest, most effective treatment plan, with a minimum of side effects.

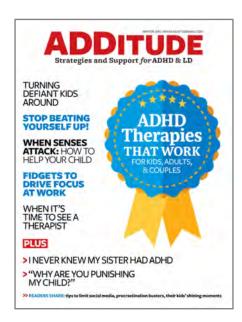
This special report, assembled by *ADDitude* editors and ADHD experts, will help you do that. It is designed to educate parents and adults about finding the right treatment and, working with your doctor, to assemble an effective plan. Inside, you will find detailed information about how ADHD medications work and how to minimize side effects, which alternative therapies can manage ADHD symptoms, and the benefits of behavior therapy and cognitive behavioral therapy for improving behavior and self-esteem.

This report answers questions about the safety of medication, when to increase the dosage, and when to switch to another class of drugs. It also offers tools to address symptoms that medication won't manage: setting up a daily report card that can help you and the teacher correct your child's problem behaviors at school, as well as techniques and therapies to help you overcome habits that have prevented you from achieving goals.

We hope you will use this e-book as a resource when talking with your doctor, your family, or your child's teacher. It will put you on the road to taking control of ADHD and living a happy, productive life.

—the editors of *ADDitude*

ADDitude magazine is an invaluable source of treatment information and ADHD support: **ADDitudeMag.com**



CONTENTS

6–24 CHAPTER 1: How Professionals Diagnose ADHD/ Understanding Your Treatment Options

Getting a proper diagnosis will ensure the right treatment plan for you or your child.

25-39 CHAPTER 2: Types of ADHD Medications

Understanding how stimulants, nonstimulants, tricyclic antidepressants, and other ADHD medications can help you manage symptoms.

40–52 Chapter 3: Medication Strategies

Tips from the experts on how to use stimulants safely and effectively.

53–58 Chapter 4: Managing Side Effects

Advice on dealing with a full range of unwanted symptoms—from poor appetite to sleep problems.

59–72 CHAPTER 5: Alternative Treatments

How diet, supplements, brain training, and nature therapy can manage ADHD symptoms.

73-78 CHAPTER 6: Behavior Therapies

Change ADHD habits and behavior with effective, well-studied approaches.

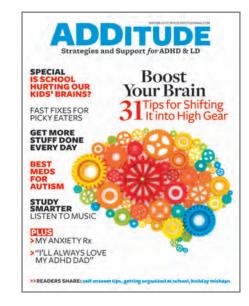
79-85 CHAPTER 7: Working with an ADHD Coach

Hiring a coach to help you achieve your goals and dreams—big and small.

86-88 FOOTNOTES

Tool

Each winter, *ADDitude* produces a **special Alternative Therapies edition** that reports on the latest complementary treatments to help manage ADHD symptoms: **http://additu.de/alttherapies**



CHAPTER 1

How Professionals Diagnose ADHD: Understanding Your Treatment Options

A Step-by-Step Guide to Diagnosing ADHD

Learn about diagnostic tests and evaluations that professionals use to determine whether your symptoms point toward attention deficit disorder.

Testing alone cannot diagnose symptoms of ADHD. Attention deficit disorder is a nuanced condition with three distinct sub-types, symptoms that appear along a spectrum of severity, and overlapping comorbid conditions that often complicate diagnosis and treatment. Add to that lingering misinformation and myths in the medical community, and the barriers to an accurate evaluation and medical care may seem impossibly high.

Here, we break down the essential information on finding an ADHD professional and pursuing an accurate diagnosis.

Warning Signs

You're worried. Your son's teacher sent home a note saying that his <u>lack of focus</u> is holding him back in class.

Your daughter phoned a classmate to set up a play date, and was turned down for the third time. The so-called "friend" told your daughter that she's weird.

You are concerned about your job. You were late to work twice last week, and you frequently miss deadlines and meetings. You won't be getting the promotion you've been after — in fact, you may be fired.

You've wondered for months what's causing you or your child to come up short — stress, learning disabilities, a medical condition, or ADHD? You're tired of wondering. It's time to find out. You want to get an evaluation — to take an **ADHD test**.

Congratulations. You are taking an important step in changing your life. But you are plagued by questions: Where do you start? What kind of doctor diagnoses ADHD? How do you know if you're getting a state-of-the-art evaluation and an accurate diagnosis? And what should you do after you get it? Keep reading for answers to these important first questions.

FYI

The term attention deficit/ hyperactivity disorder (ADHD)

comes from the American Psychiatric Association's *Diagnostic and Statistical Manual for Mental Disorders (DSM-V)*. Check these definitions in *DSM-V*:

Inattentive type: Difficulty staying on task; short attention span; distracted by auditory or visual stimuli.

Hyperactive/impulsive type:

Squirmy, fidgety behavior; some part of the body is always in motion, often purposeless motion. Focusing isn't an issue. **Combined type:** Difficulty focusing

and staying on task; fidgety behavior.

Complete ADHD glossary of terms: http://additu.de/glossary

More about diagnosing ADHD in children: http://additu.de/14p

Where to Go for an ADHD Diagnosis

Your evaluation for ADHD may start with a routine visit to your primary-care physician, but chances are it won't end it there. As a rule, most general practitioners are not trained in the idiosyncrasies of ADHD and its overlapping conditions, or not equipped to perform the in-depth evaluation needed. One reason is time. It can take several hours of talking, test taking, and analysis to diagnose someone with ADHD. Most general practitioners can't give you or your child that much attention in a busy practice.

In addition, general practitioners sometimes overlook co-existing, or comorbid, conditions with overlapping symptoms, such as learning disabilities, mood or anxiety disorders, or autism spectrum disorder. Professionals trained in diagnosing ADHD routinely screen for these problems.

Any good ADHD diagnosis will begin with a clinical interview to gather the patient's medical history. This is often supplemented with neuropsychological testing, which offers greater insight into strengths and weaknesses, and helps identify comorbid conditions.

How can you <u>find an ADHD expert in your area?</u> Follow these five steps to find the right help and diagnosis, and a treatment plan that will best manage symptoms:

- Ask a school psychologist or guidance counselor for a referral for your child. If you'd prefer to see an outside expert before getting the school involved, move to the next step.
- Talk with your internist or your child's pediatrician. Start the conversation this way: "I've noticed these symptoms in myself (or my child), and I'd like an evaluation. Do you know of someone who specializes in diagnosing ADHD?" If the doctor says that he can do it, ask about the tests he uses and how long he typically spends making the diagnosis. If the only basis for a diagnosis is a quick interview with you and/or your child, ask for a referral to a specialist.
- Contact a medical school near your home. "Call the department of psychiatry and ask, 'Is there anyone on your staff experienced at working with adults or children with ADHD?" suggests Edward Hallowell, M.D., a psychiatrist with offices in New York City and Boston, and co-author of Superparenting for ADD. "When you get

Checklist

Conditions that may accompany, resemble, or mask ADHD include:

- Anxiety disorder
- Bipolar disorder
- Excessive coffee or soda drinking
- Conduct disorder (in children)
- Learning disabilities
- Hyperthyroidism or hypothyroidism
- Lead poisoning
- Post-traumatic stress disorder
- Obsessive compulsive disorder
- Pathological gambling

More about conditions related to ADHD:

http://additu.de/related

Find an ADHD Specialist Nearby

Search for doctors, therapists, coaches, and more:

http://additu.de/directory

the name of a professional, ask him how many people he has treated. It should be at least a hundred."

- Check with your insurer. Ask if there are experts trained in diagnosing ADHD covered by your plan. If not, consider going out of network. Remember that your goal, initially, is to get a thorough, accurate evaluation and diagnosis. When you have that information, the diagnosing doctor can work with your plan's physician to prescribe treatment.
- Call your local chapter of the <u>National Alliance on Mental Illness</u> or <u>CHADD</u>, and ask for names of professionals who specialize in ADHD. Another good option: an ADHD support group in your area. Word-of-mouth recommendations are often the best assessment of a professional's ability.

How Experts Make an ADHD Diagnosis

In making an accurate diagnosis, your doctor will first want to determine is whether you or your child has the ADHD symptoms listed in the *Diagnostic and Statistical Manual of Mental Disorders-Fifth Edition (DSM-V)*.

"The DSM-V remains the basis of the diagnosis for children, but most clinicians go beyond that in their assessments," Hallowell says. In addition to reviewing these criteria, doctors will conduct a thorough clinical interview using one standardized ADHD rating scale. A screening test is also often administered to rule out common coexisting conditions like learning disorders, anxiety, autism, and mood disorders.

According to the latest DSM-V guidelines, in order to be diagnosed with ADHD, a patient has to have shown at least six of the nine symptoms of inattention and/or hyperactivity/impulsivity prior to age 12. In addition, these symptoms must impair the person's functioning in more than one setting — home, school, or work.

Inattentive

- 1. Often fails to give close attention to details or makes careless mistakes in schoolwork, at work, or with other activities.
- **2.** Often has trouble holding attention on tasks or play activities.
- 3. Often does not seem to listen when spoken to directly.
- **4.** Often does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace (e.g., loses focus, side-tracked).
- 5. Often has trouble organizing tasks and activities.

ADHD in Real Life

Learn what common symptoms look like in day-to-day interactions with your child:

http://additu.de/kids-signs

- **6.** Often avoids, dislikes, or is reluctant to do tasks that require mental effort over a long period of time (such as schoolwork or homework).
- 7. Often loses things necessary for tasks and activities (e.g. school materials, pencils, books, tools, wallets, keys, paperwork, eyeglasses, mobile telephones).
- 8. Is often easily distracted.
- 9. Is often forgetful in daily activities.

Hyperactive/Impulsive

- 1. Often fidgets with or taps hands or feet, or squirms in seat.
- 2. Often leaves seat in situations when remaining seated is expected.
- 3. Often runs about or climbs in situations where it is not appropriate (adolescents or adults may be limited to feeling restless).
- 4. Often unable to play or take part in leisure activities quietly.
- 5. Is often "on the go" acting as if "driven by a motor."
- **6.** Often talks excessively.
- 7. Often blurts out an answer before a question has been completed.
- 8. Often has trouble waiting his/her turn.
- **9.** Often interrupts or intrudes on others (e.g., butts into conversations or games).

Making Sense of Symptoms

Almost every child will exhibit one or more of these symptoms at some point. A child is diagnosable with ADHD only if he or she exhibits at least six of nine symptoms from one of the lists above, and if the symptoms have been noticeable for at least six months in two or more settings—for example, at home and at school. What's more, the symptoms must significantly impair the child's academic, social, or work functioning, and at least some of the symptoms must have been apparent before the age of 12.

Diagnosing an adult is trickier than diagnosing a child. The DSM-V symptom guide is really invalid for adults; almost all of its criteria is geared toward diagnosing children. An ADHD diagnosis in adulthood emerges only from a careful clinical interview conducted by a specialist in ADHD who takes his or her time with the evaluation.

"The DSM-V criteria are based only on research with children four to 17 years old," says <u>Thomas E. Brown, Ph.D.</u>, Yale-trained clinical psychologist. "As a result, most clinicians bend the criteria when it

Tools

For more information on diagnosis, check out these books:

- <u>Driven to Distraction</u>, by Edward M. Hallowell, M.D., and John J. Ratey, M.D.
- ADHD: The Great Misdiagnosis, by Julian Stuart Haber, M.D.

More ADHD book reviews: http://additu.de/book

"About 80 percent of adults with ADHD have some kind of co-occurring condition that complicates the treatment of their ADHD." — Dr. Michele Novotni

comes to the age of onset — recent research has shown that, in some people, symptoms don't appear until adolescence, when there are greater challenges in self-management. Clinicians also may diagnose adults who have just four or five symptoms, not seven or eight, if they show significant impairment."

Some doctors use computer programs, such as continuous performance tests (CPTs), to check for attention and impulsivity problems. Others use **brain scans**, such as single-photon emission computed tomography (SPECT), to look for abnormalities in the brain. But the most reliable evidence for a positive diagnosis, according to most experts, is found in a patient's history.

ADHD Diagnosis Step 1: The Consultation

Expect the ADHD diagnosis consultation to take an hour or longer. If your child is being evaluated, the doctor will talk to you and your child, and get feedback through checklists and written information from teachers and other adults who spend a lot of time with your child. Sometimes the doctor's office will forward these forms to you before the consultation and review them with you at the initial meeting. Other doctors will meet with you first, do the interview, and give you the forms to be filled out before your next appointment.

If you are being evaluated, your doctor will interview you and someone who knows you well —your spouse, a sibling, or your parents. She may or may not use similar checklists designed to identify symptoms of adult ADHD. The doctor will use the patient interview to determine which, if any, tests might rule out other conditions that may be causing symptoms.

"The clinical interview is the core of any evaluation," Brown says.

"The more input from different sources, the better. Many adults come for a consultation alone, but it's helpful to come with a spouse, sibling, or close friend."

Many doctors ask people in the patient's life — a spouse, parent, or sibling for an adult; or a teacher, coach, or nanny for a child — to write a few sentences describing the patient. Personal insight often uncovers information that can't be culled from questionnaires. Says Hallowell: "A teacher might write, 'Johnny is sweet, adorable, and

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The weekly monitoring report for teachers to document symptom improvement:

http://additu.de/report

cute as a button, but he can't remember to come in out of the rain. He is disorganized. He speaks out of turn. He needs more discipline.' It's what I call the moral diagnosis, but it often reveals a lot about a child who may have ADHD. Those one-paragraph narratives give a wide range of input. Checklists don't."

What are doctors hoping to find by evaluating those checklists and narratives and conducting the clinical interview? These five things:

Social history. "Describe a typical day in [your life or] your child's life" is often the first question a doctor will ask to get a sense of how [you or] your child functions. This reflects what usually goes smoothly and what is challenging in everyday life.

Medical history. Medical problems, ranging from sleep apnea and thyroid conditions to hormone fluctuations and substance abuse, can present symptoms similar to those of ADHD.

Family history. "I ask questions about the immediate family, as well as grandparents, uncles, aunts, and cousins," says Brown. "I'll ask things like, 'Is there anybody who has had trouble paying attention or learning certain subjects, or who was smart but didn't do well in school — and did better later? The answers will give me an idea of what's floating around in the gene pool."

Strengths and weaknesses. "Every person I've seen with ADHD can focus well on some activities," Brown says. "Sometimes it's sports. Sometimes it's artistic or mechanical stuff. Those are telltale symptoms of ADHD. In the process, I identify strengths I want to protect and encourage during treatment."

Education. "Everybody comes in with some information about the condition. Some of it is sophisticated and accurate; the rest is just wrong," Brown says. "I take 15 or 20 minutes to tell them what I think about ADHD, how ideas about the condition have changed, and the latest thinking on managing symptoms."

By the time the clinical interview is over, most doctors with experience treating people with ADHD will have a good idea of whether you or your child has the condition. Even so, most will want to back up their opinion with objective proof from tests.

Is ADHD Hereditary?

Medical research points to genetic and neurological explanations for symptoms exacerbated by some external factors:

http://additu.de/genetic

ADHD Diagnosis Step 2: Testing, Testing

Most clinical interviews include completing one or more of the ADHD rating scales, as well as other tests. A **proper ADHD test** should do two things: determine whether a person has ADHD and rule out or identify other problems — learning disabilities, autism, **auditory processing disorders**, anxiety, or mood disorders. Depending on your doctor's concerns, tests may take from an hour to more than eight hours and may require several appointments.

Common tests used in diagnosing ADHD include:

ADHD rating scales. These questionnaires can identify specific symptoms of ADHD that may not emerge in the clinical interview. Answers to the questions can reveal how well a person functions at school, home, or work. The scales are specifically formatted for children, adolescents, and adults. "ADHD rating scales have their pluses and minuses, and doctors go with the ones they feel most comfortable using," says Patricia Quinn, M.D., cofounder of the National Center for Girls and Women with ADHD. "I recommend using at least two scales that gauge both ADHD and other symptoms."

Research the full library of ADHD assessments and tests: http://additu.de/tests

The most commonly used rating scales include:

Conners' Revised (CRS-R)—for children three to 17 years old

Conners' Adult ADHD Rating Scales (CAARS)—can be completed either by the person who may have ADHD or by someone close to that person

Wender Utah Rating Scale (WURS)—for adults

ADD-H Comprehensive Teacher/Parent Rating Scales (ACTeRS)—for adolescents and adults

Brown ADD Rating Scales—age 3 through adult

Intelligence tests are a standard part of most thorough evaluations because they not only measure IQ but can also detect certain <u>learning</u> <u>disabilities common in people with ADHD</u>.

Broad-spectrum scales screen for social, emotional, and psychiatric problems, and they may be ordered if the doctor suspects that a patient has anxiety, <u>obsessive-compulsive disorder</u>, or another condition in addition to ADHD.

Tests of specific abilities — such as language development, vocabulary, memory recall, motor skills — may also be recommended to screen for learning disabilities or other processing problems. The doctor may decide which tests to do based, in part, on which kinds of tasks you or your child find easy or difficult.

Computer tests are becoming popular because patients enjoy taking them, and because they can screen for attention and impulsivity problems, which are common in people with ADHD. These "continuous performance tests" (CPT) challenge the patient to sustain attention. A series of visual targets appear on the screen, and the user responds to prompts while the computer measures his ability to stay on task. In practice, some experts have found that these tests are better at identifying impulsive symptoms and less successful at flagging symptoms of inattention.

Brain scans. Neuro-imaging procedures, such as positron emission tomography (PET) scans, SPECT scans, and magnetic resonance imaging (MRIs), have long been used in research studies of ADHD. But their use in diagnosing ADHD has not yet been validated with conclusive scientific research. They have revealed, though, that certain parts of the brain appear different in people who have ADHD than in people who don't have the condition.

"You do not need a brain scan to be diagnosed with ADHD, and they are not the standard of care," Hallowell says. "Scans are not a cost-effective way of spending your healthcare money, and they don't contribute much to the diagnosis of ADHD. But it seems that patients love seeing a picture of their brain, and the scans can often help them own the diagnosis."

ADHD Diagnosis Step 3: Learning How to Manage Symptoms

After the clinical interview and the recommended tests are completed, most doctors will call you into the office to go over the results of your ADHD evaluation. This is the best time to ask the doctor questions. When you leave that appointment, the doctor should have formulated an action plan to manage symptoms. It should include:

Could high-tech brain scans help diagnose ADHD symptoms?

Learn why the medical community is cautious:

http://additu.de/lo

- A list of accommodations for work (or school) that will help you (or your child) perform well
- A plan for follow-up therapy with a psychologist, therapist, ADHD coach, or another expert
- Recommendations for ADHD medication, if considered appropriate
- A schedule of follow-up appointments with the diagnosing physician or your primary-care doctor to see how well the treatment plan is working

"After the psychologist finished evaluating my son — a process that included eight hours of testing — she met with me to discuss his strengths and weaknesses, and handed me a list of accommodations that would help him at school," says Joanna Thomas, of Lubbock, Texas, whose son, Ryan was diagnosed with ADHD at age seven. "Every year since the initial evaluation, I discussed the list of accommodations with his new teacher. I have also used it to write an introductory letter to the teachers that focuses on his strengths. Having that diagnosis meant everything to me. It gave me the tools I needed to help him at home and in working with his teachers."

"An accurate diagnosis is good news," Hallowell says, "because things can only get better. When you learn how to manage ADHD, it can become an asset in your life. I tell patients, 'You've got a Ferrari engine for a brain, and you're lucky, because you're going to win a lot of races. The only problem is, you have bicycle brakes.' The point is that someone with ADHD is on the way to being a champion, not a loser. And with the correct diagnosis and treatment, 100 percent of those with ADHD can improve their lives."

Five Common Diagnosis Mistakes

The following are a few common ways in which an evaluation for ADHD may go awry or arrive at a false conclusion.

Not taking enough time. A thorough evaluation for ADHD can't be done in a 15-minute visit. Rushed visits raise the likelihood that you or your child will be misdiagnosed, or that the doctor will miss a secondary diagnosis that may be important to treat.

The 40 best school accommodations for students with ADHD or LD: http://additu.de/40-best

Diagnosing the symptoms, not the underlying problem. "Physicians sometimes misdiagnose secondary symptoms as the person's primary problem, without looking for coexisting ADHD," says Patricia Quinn, M.D., cofounder of the **National Center for Girls and Women with ADHD**. In many cases, when the ADHD is treated, the secondary symptoms also improve.

Thinking that academic failure is intrinsic to ADHD. Many children with ADHD do well at school because they work hard, and teachers and doctors will not suspect they have the condition.

Thinking that a high IQ means your child doesn't have ADHD. Your child may score well on an IQ test, but her grades are mediocre and teachers "diagnose" her as being lazy or undisciplined. An evaluation by an outside psychologist may indicate that she has ADHD and/or a learning disorder.

Sticking with a doctor you don't like. If you don't feel a positive connection with your doctor —if he doesn't seem to respond to you as a person or if he reprimands you for asking too many questions — you won't have confidence in his diagnosis and ADHD treatment won't go well.

ADHD Assessment Checklist

What every thorough, credible ADHD evaluation should comprise.

ADHD is a complex condition with hyperactive and inattentive subtypes that are sometimes difficult to differentiate from anxiety, depression, or learning disabilities. As such, a thorough ADHD evaluation can take anywhere from one to eight hours, and may require several appointments. If your doctor makes a diagnosis without following the steps below, speak up—or find a new doctor.

Clinical Interview

Your doctor should begin her ADHD consultation with an in-depth clinical interview comprising the following for your child or for you:

- What a typical day looks like
- Strengths and weaknesses
- Recent big life events, like a divorce or move
- Parenting style or behavior challenges

Medical History

Next, your doctor should collect a thorough medical history that reflects:

- Genetics:
 - Familial history of ADHD, including parents, siblings, and close relatives
- Prenatal issues:
 - Low birth weight
 - Maternal alcohol or nicotine consumption
- Environmental factors:
 - Possible exposure to pesticides, lead, or other common toxins
- Childhood milestones:
 - Language development
 - Development of social skills
- Previous medical issues:
 - Injuries or accidents
 - Mental health concerns

ADHD Rating Scales

Rating scales are used to assess for the presence and severity of ADHD symptoms at home and at school. Parents and teachers must fill out separate rating scales to evaluate a child in different environments. Adults can fill out their own rating scale.

- Commonly used rating scales for children:
 - Vanderbilt Diagnostic Parent Rating Scale
 - Conners' Rating Scales—Revised (CRS-R)
 - Conners-Wells' Adolescent Self-Report Scale
- Commonly used rating scales for adults:
 - Adult ADHD Self-Report Scale (ASRS)
 - Conners' Adult ADHD Rating Scale (CAARS)
 - Barkley Adult ADHD Rating Scale (BAARS)
 - Brown Attention-Deficit Disorder Symptom Assessment Scale (BADDS) for Adults

Ruling Out Other Diagnoses

Your doctor should rule out these "look-alike" conditions:

- Learning disabilities (http://additu.de/learning-disabilities)
- OCD (http://additu.de/ocd)
- Depression (http://additu.de/depress)
- Bipolar disorder (http://additu.de/bipolar)
- Anxiety (http://additu.de/anxious)
- Sleep apnea (http://additu.de/sleep)
- Seizure disorders (http://additu.de/128)

WHO CAN TREAT ADHD?

Before choosing an ADHD professional, you should understand the strengths and weaknesses of each option. Here is a short list of who does what in diagnosing ADHD.

PSYCHIATRIST

An M.D. who treats the brain and may prescribe medication or other treatment.

Advantages

- Trained in diagnosis.
- Able to diagnose, prescribe medication, and treat.

Disadvantages

 Fees usually start at around \$200 an hour. While psychiatrists can diagnose and treat, they may not be trained in counseling, especially in the day-to-day life skills needed by adults and children with ADHD.

PSYCHOLOGIST

Understands how the mind works, but is not an M.D. and cannot prescribe medications. If the psychologist feels that medications are needed, he or she must refer the patient to either a medical doctor or a psychiatrist.

Advantages

- Trained in diagnosis.
- Trained in counseling.
- Costs less than a psychiatrist.

Disadvantages

- Cannot prescribe medications.
- Patient must be referred for an MRI or any other test that could assist in diagnosis.

FAMILY DOCTOR OR NURSE PRACTITIONER

 $\label{thm:condition} Most\,know\,of\,ADHD, but\,may\,lack\,the\,extensive\,knowledge\,about\,the\,condition\,that\,specialized\,professionals\,have.$

Advantages

- Is familiar with you and your medical history.
- Is usually easier to see for an appointment.
- Can prescribe medications, if needed.
- Less expensive than a psychiatrist.

Disadvantages

- May have limited experience with ADHD, especially in adults.
- Cannot offer counseling.
- Brief office visits often mean a hurried diagnosis.

NEUROLOGIST

A doctor who specializes in treatment of the brain and central nervous system.

Advantages

• Can determine whether other conditions, such as seizure disorder, are present.

Disadvantages

- Expensive.
- EEG testing isn't necessary for diagnosis or treatment of ADHD.
- Patient must be referred for any counseling or therapy.

MASTER LEVEL COUNSELOR

Has a master's degree in psychology or counseling and may be able to perform an initial assessment with the appropriate training.

Advantages

- Is able to provide counseling, problem-solving, and behavior management.
- Less expensive than psychiatric care.

Disadvantages

- May have trouble making a differential diagnosis (identifying other possible problems).
- Must refer patient to a doctor or other professional.
- Cannot prescribe medication.

SOCIAL WORKER

A Master of Social Welfare (MSW) or a Licensed Clinical Social Worker (LCSW) is often employed by an agency (for example, public health-care resources) to provide counseling. Social workers can help with some behavior issues that adults with ADHD experience.

Advantages

• Inexpensive.

Disadvantages

- May have trouble with a differential diagnosis (identifying other potential problems).
- Must refer patient to a doctor or other professional.
- Cannot prescribe medication.

ADHD Treatment: Information and Resources for Adults & Children http://additu.de/treat

Your Full Menu of ADHD Treatment Options

An effective ADHD treatment plan may include medication, behavior therapy, a clean diet, vitamins and supplements, coaching, or all of the above. The first step to selecting the best option(s) is research. Get started here.

The best ADHD treatment strategies are multimodal ones — combinations of several different, complementary approaches that work together to reduce symptoms. For one person, this ideal combination may include medication, diet, exercise, and behavioral therapy. For someone else, it may mean taking supplements, participating in CBT, and joining an ADHD support group.

Finding the right treatments — and managing them — takes research, planning, organization, and persistence. Early on, talk with your doctor about your options. If you use medication, speak with the prescribing professional about his or her expertise with complementary treatment options. If you do not use medication, find a professional who specializes in the types of treatments you want to use — for example, a dietician or psychologist specializing in behavior therapy.

With that in mind, begin by reading this overview of ADHD treatments to understand your options.

Medication

Medication is often the first line of defense against the symptoms of ADHD for one simple reason: studies show it to be most effective. "When adults ask me questions about why they should try medication to manage their ADHD, my answer always comes down to two words: Medication works," says Russell A. Barkley, Ph.D., a clinical professor of psychiatry and pediatrics at the Medical University of South Carolina. "When you find the right medicine, you can experience substantial improvements in your ADHD symptoms." With the right drug and the optimal dosage, the success rate is high: Medication works for at least 80 percent of people with ADHD.

The clinical practice guidelines developed by the American Academy of Child and Adolescent Psychiatry (AACAP) recommend medication as the primary treatment for ADHD in school-age children, citing a forMore about using ADHD medications: http://additu.de/meds

mal review of 78 studies on the treatment of ADHD, which "consistently supported the superiority of stimulant over the non-drug treatment."

Even the widely-cited Multi-Modal MTA Cooperative Group Study, which concluded that medication combined with behavior therapy is the optimal treatment of ADHD in children, conceded that "a pharmacological intervention for ADHD is more effective than a behavioral treatment alone."

Though broadly effective, medication is not an easy answer. Before pursuing treatment with medication, patients should consider the following:

- Finding the right medication, amount, and dosage schedule often takes months.
- Every medication has side effects for some people. Balancing those with the positive effects of medication is a trial-and-error process. It will take time for you or your child to find the optimal medication and dosage with minimal or zero side effects.
- To get the most out of medication, you must communicate with the prescribing doctor and follow his or her advice, especially during the initial phase of taking medication. This communication is needed to adjust dosage and control side effects in a timely manner.
- Medication isn't a magic bullet. It helps manage some ADHD symptoms, but it does not cure the disorder.
- Supplementing medication with behavioral therapy and/or coaching is often a more effective strategy than managing ADHD with one or the other alone, as studies have shown!

Behavior Therapies

Medicine alone is not sufficient treatment for most people with ADHD. This is especially true for children and adolescents who face ADHD-related challenges in school, with peers, and/or at home with their families, and for adults struggling with work and day-to-day responsibilities. While medication works on a neurological level to regulate the brain, behavior therapy addresses specific problem behaviors by teaching the individual how to structure their time, establish predictability and routines, and increase positive outcomes. Behavior therapy can help change behavior through conditioning, which involves the following:

- Creating an environment conducive to suitable behavior
- Providing positive feedback and reinforcement for acceptable behavior and improvement

More about behavior therapy for children with ADHD: http://additu.de/behavioral

- Establishing clear consequences for unwanted behavior, which may entail withholding reward/praise, or enforcing negative consequences
- Being consistent about expectations and consequences, both positive and negative

Behavior therapy helps many children improve their attitudes and school performance, and changes negative habits and behaviors in many adults. This type of therapy often involves training parents — and sometimes teachers — as well.

Cognitive Behavioral Therapy (CBT)

This approach, often used in combination with medication, is implemented by a therapist who works with you and/or your child to pinpoint problem behaviors and to develop strategies for changing them. CBT is a short-term, goal-oriented form of psychotherapy that aims to change negative patterns of thinking and change the way a patient feels about herself, her abilities, and her future. Here's how it works:

 Choose one problem behavior — procrastination, say — to work on at a time.

- Understand the motivation for the behavior, and change the thoughts and perceptions that cause it.
- Develop practical ways to change the behavior.
- Implement the strategies, and try new ones if they don't work.

This approach is effective for most people with ADHD. Exceptions to this rule are very young children — who are unable to articulate their thoughts and feelings — and people who need a more structured approach, such as those with oppositional defiant disorder who are unwilling to cooperate in managing their behaviors. Changing distorted thoughts, and the resulting change in behavior patterns, is effective in treating mood disorders, anxiety, and other emotional problems, as well.

Alternative or Complementary Treatments

Some people choose to manage their symptoms — in whole or in combination with medication and behavior therapies — through diet, physical activity, and alternative therapies like meditation or brain training.

Diet and supplements. Changing your diet to increase the consumption of certain ADHD-friendly nutrients — fish oil, the minerals

More about how diet and exercise impact ADHD: http://additu.de/nutrition

More about the impact of nature therapy on ADHD: http://additu.de/tl

zinc, iron, and magnesium — as well as protein and complex carbohydrates, can help the brain function at optimal levels and control swings in mood and behavior. Limiting sugar, artificial preservatives, and artificial food coloring reduces hyperactivity in some children.

Exercise. "Think of exercise as medication," says John Ratey, M.D., an associate clinical professor of psychiatry at Harvard Medical School and author of Spark: The Revolutionary New Science of Exercise and the Brain. "Exercise turns on the attention system, the so-called executive functions — sequencing, working memory, prioritizing, inhibiting, and sustaining attention. On a practical level, it causes kids to be less impulsive, which makes them more primed to learn."

Share your questions and insights about ADHD treatment: http://additu.de/forum

A 2015 study published in the Journal of Abnormal Psychology found that 30 minutes of exercise before school can help kids with ADHD focus and manage moods. It can even decrease the need for stimulant medications used to treat symptoms.²

Walking for 30 minutes, four times a week, is enough exercise to yield benefits.

Nature therapy. A daily dose of nature — a walk in the woods or spending time in a greenhouse — may reduce ADHD symptoms in both adults and children. This was solidified in a 2004 study where researchers found that "green outdoor activities reduced symptoms significantly more than did activities conducted in other settings." Several experts suggest that patients use nature therapy in conjunction with prescription medications and behavioral therapy.

Mindful meditation and yoga. Mindful awareness, or mindfulness, involves paying close attention to your thoughts, feelings, and bodily sensations; in other words, developing a greater awareness of what's going on with you from moment to moment. It can be used as a tool to foster wellness, especially psychological well-being. Similar techniques have been used to lower blood pressure and to manage chronic pain, anxiety, and mood disorders.

A 2005 study at Arizona State University found that children who participated in mindfulness exercises had lower test anxiety and fewer

ADHD symptoms, plus greater attention than kids who did not participate in the exercises. 4

Yoga, a physical and spiritual practice originating in India, provides similar benefits to mindfulness practice and meditation, reducing anxiety while increasing energy.

Brain Training. Brain-training therapies like neurofeedback and Cogmed are making a serious promise: increased attention and working memory without medication. The scientific community, however, is not yet convinced. 5

"Working memory is the ability to hold information in your mind for several seconds, manipulate it, and use it in your thinking," says Ari Tuckman, Psy.D., a clinical psychologist in West Chester, Pennsylvania. "It is central to concentration, problem solving, and impulse control."

Individuals with ADHD can't always hold on to information because their attention gets hijacked. Improving working memory capacity with brain training enables an individual to pay attention, resist distractions, manage emotions better, and learn.

Neurofeedback is a form of brain training that uses brain exercises to reduce impulsivity and increase attentiveness. The brain emits different types of waves, depending on whether we are in a focused state or day-dreaming. The goal of neurofeedback is to teach individuals to produce brain-wave patterns that reflect focus. The result: Some ADHD symptoms — namely, impulsivity and distractibility — diminish.

COACHING

An ADHD coach knows about the specific, unique challenges facing people with the condition and can help them acquire the skills to overcome those problems. Part cheerleader, part taskmaster, part personal assistant, part teacher, a coach may help you do the following:

- Develop structures for organizing your life
- Make plans and set goals
- Get and stay motivated
- Develop time and money-management skills

Everything you need to know about brain training strategies and systems for ADHD: http://additu.de/brain-train

Search our directory of leading ADHD coaches, many of whom offer live-video sessions: http://additu.de/adhd-coaches

Some coaches meet with their clients weekly; others stay in regular contact by phone. Still others meet with clients in their homes to help with specific tasks, such as organizing papers or working on social skills.

How to Approach ADHD Treatments

Most people with ADHD try a variety of treatment programs to maximize symptom control. If you plan to do this, keep a log, so you can follow the progress of your efforts and understand the outcomes of each strategy you try. Don't drop a treatment from your plan if changes aren't happening as fast as you'd like. Change takes time. Before you stop — unless side effects are getting in the way of your life — consult a professional. Look for ways to adjust the treatment before you give up on it.

CHAPTER 2 Types of ADHD Medications

Medication Options for ADHD

Professionals prescribe many medications to manage ADHD symptoms. This guide will explain how medications work, the benefits they deliver, and how to manage them safely.

The medications used to treat ADHD can dramatically improve the quality of an individual's life. Just as a pair of glasses helps the near-sighted person focus, so can medication help the person with ADHD see the world more clearly.

When medication is effective, the results can be life-changing. However, medication is no panacea. It does not work for everybody, and for those it does help, it does not cure the condition.

Medication should be used only under medical supervision, and only as part of a comprehensive treatment program that includes a careful diagnostic evaluation; education about ADHD and associated learning problems; practical suggestions about restructuring one's life and managing one's moods; counseling, or coaching, as well as family or couples therapy, if needed.

How Meds Work

Medications for people with ADHD affect brain chemicals called neurotransmitters. ADHD meds work by increasing the norepinephrine and dopamine levels in the synapses—the areas between the brain's neurons. Higher levels of neurotransmitters enable the brain to rebalance activities of these two systems and, consequently, the activities of other neurotransmitter systems.

Dopamine is responsible for the strength of signals coming into the brain and for filtering external stimuli, so you can pay attention. Norepinephrine plays a role in arousal level (how awake or drowsy you are), and the clarity of the brain's processes. Both play a role in the level of motivation.

Neuroscientists are beginning to understand which chemicals are associated with specific ADHD symptoms. Distractibility is often a result of too much norepinephrine in relation to dopamine. Impulsivity may be related to too much norepinephrine or too little dopamine. In many people who exhibit ADHD symptoms, the levels of neurotransmitters in the nerve cells are normal; the problem lies in the way the chemicals are released or the way the receptors bind to them.

Misconceptions about stimulants

- Given in the right dosage, they do not cause you to feel foggy or "out of it."
- They are not addictive in the doses prescribed for ADHD.
- They do not take away the creativity or that "special something" people with ADHD possess.

Finding the right medication can take time and patience. It is difficult to predict whether a child or an adult will respond better to one medication or another. Some people respond poorly to one and have a good response to another. Some have side effects with one and not with another. Your doctor should use his or her judgment as to which one to try first.

Stimulant Medications for ADHD

Here's what you need to know about the most commonly prescribed drugs.

Stimulants are the most popular class of drugs used for treating ADHD. In the decades since stimulant medications were introduced (1937), several thousand scientific studies have assessed the effectiveness of these medications. The conclusion? Stimulants significantly improve symptoms of ADHD in most people. Stimulants do not work for 20-30 percent of people diagnosed with ADHD. When they don't, a doctor will consider using a nonstimulant medication to improve symptoms.

Stimulants work by increasing levels of the neurotransmitters dopamine or norepinephrine (or both) in the brain's synapses, or by causing more of these neurotransmitter(s) to be retained in the synapses for a longer time. Stimulants decrease hyperactivity, distractibility, and/or impulsivity.

Here are the most common stimulants (each drug has a generic name and a brand name).

Methylphenidate (Ritalin, Concerta, Metadate, Focalin, Daytrana, Aptensio XR, QuilliChew ER, and Quillivant XR):

This is the most widely used medication for ADHD, although dextroamphetamine works as well for many individuals. The big difference among the brand names is in the delivery system—how the drug is released in the intestinal tract, and how long it lasts in the body. Methylphenidate comes in short- and long-acting forms.

Dextroamphetamine (Dexedrine, Dexedrine Spansule):

The oldest medication used for ADHD, dextroamphetamine also comes in short- and long-acting forms. A doctor will try this medication when methylphenidate doesn't work on symptoms or causes unwanted side effects.

FYI

When is it safe to start a child on stimulants? Dexedrine is approved for use in children three years of age. Other stimulants are approved for use in children six or older.

More about treating children with ADHD: http://additu.de/kids-treat

Tip

As you take medication, look for signs that the dose is too high. These signs include:

- Feeling anxious, jittery, or overly drowsy
- Developing symptoms you didn't have before
- Experiencing mood changes that get worse

Mixed Amphetamine (Adderall, Evekeo, and Dyanavel XR):

Similar to dextroamphetamine, it contains a mixture of several amphetamine salts. It supposedly works better on norepinephrine-containing neurons than does dextroamphetamine. Short- and long-acting forms are available.

Lisdexamfetamine Dimesylate (Vyvanse): This newer medication, which came on the market in 2007, is known as a "prodrug," meaning that it is chemically inert until it interacts with an amino acid in the gastrointestinal tract. It is designed for once-daily dosing, with efficacy and side effects comparable to those of Adderall XR.

What You Should Know

- For children who have trouble swallowing pills, methylphenidate and amphetamines are both available in liquid and chewable forms. They are also available in capsules, which can be opened to sprinkle the contents on food. Another option is Daytrana, a methylphenidate skin patch.
- Some children don't respond to stimulants. Others respond but are unable to tolerate the side effects. Stimulants may be inappropriate for children who take oral steroids for asthma, or for anyone who has unstable bipolar disorder, a history of drug addiction, or an eye condition known as narrow-angle glaucoma. For such children, doctors sometimes prescribe nonstimulant medication, tricyclic antidepressants, or the antidepressant **bupropion** (Wellbutrin). See below.
- Clinical practice guidelines recommend that a doctor fine-tune medication dosage once a year. For some people, when they reach age 16, the dosage is locked in and remains the same for the rest of that individual's life. However, this isn't true for everyone, so it's important to work with your doctor periodically to make sure your dose is still effective.
- Although cardiovascular complications are rare, the FDA has required a label warning that stimulants may cause heart problems. If you or your child has an irregular heartbeat or heart palpitations, or if there is a family history of heart disease, you should have your child tested before starting stimulants.
- Some researchers conclude that, on average, kids taking stimulants lagged behind peers on their growth curves by 3/4 of an inch in height and by six pounds in weight. Other researchers have good longitudinal data to show that the lag in height is unrelated to the taking of medication. Still, it's probably a good idea for your child's doctor to monitor his height and weight.

Tool

Keep a daily log—writing down small, positive (or negative) changes in your behavior and symptoms. This journal can help you see how well your medication program is working.

More about side effects and medication changes: http://additu.de/sideeffects

Non-stimulants, Antidepressants, and Antihypertensives

When stimulants do not manage ADHD symptoms, doctors turn to other medication options.

NON-STIMULANT

Atomoxetine (**Strattera**): This is the only medication that is not a stimulant specifically approved by the FDA for ADHD treatment. Atomoxetine works like an antidepressant—it is a reuptake inhibitor that increases the levels of epinephrine, but not other neurotransmitters, in the brain.

What You Should Know

- Atomoxetine is a once-a-day medication, and it takes four to six weeks to reach its full effect.
- Tell your doctor and pharmacist about all other medicines that you are taking, including non-prescription medicines, nutritional supplements, or herbal products, all of which can affect the effectiveness of atomoxetine.

TRICYCLIC ANTIDEPRESSANTS

Tricyclic antidepressants (TCAs) work by decreasing the breakdown or absorption of neurotransmitters at the nerve endings, resulting in an increase in these key brain chemicals. Each tricyclic antidepressant affects norepinephrine, dopamine, and serotonin in varying degrees.

These medications are used if stimulants do not work, or if they produce side effects that cannot be clinically managed. A tricyclic antidepressant might also be added to a stimulant to get more even coverage—filling in the valleys when a stimulant is not working.

The most commonly prescribed tricyclic antidepressants are:

Imipramine (**Tofranil**): This was the first tricyclic antidepressant, and is the most frequently used medication in this class of drugs.

Desipramine (Norpramin): This can be given in single daily dosage, avoiding the need to take a pill several times a day. Combining a low dose of desipramine with methylphenidate has been shown to work well in managing ADHD symptoms.

More on using antidepressants to treat symptoms of ADHD and depression: http://additu.de/mood

Nortriptyline (Pamelor): This TCA is not as sedating as other tricyclic antidepressants and may cause fewer side effects than other medications in its class.

What You Should Know

- Tricyclic antidepressants are long-acting—they can be taken in the morning and the evening—avoiding the need to take medication at school. If two doses a day cause fatigue, or a child seems to do worse in the late afternoon, the total dose can be divided into three doses a day, given in the morning, after school, and in the evening.
- It may take a week or two for TCAs to begin to work. The dose is usually increased every week to two weeks until the desired effects are reached.
- If a TCA is stopped, it must be tapered off slowly. If it is stopped abruptly, the child or adolescent might develop flu-like symptoms.
- If depression coexists with ADHD, as it frequently does, one should not usually start the antidepressant at the same time as the stimulant. Depression often diminishes alongside ADHD symptoms.
- Because TCAs are in the bloodstream all the time, it is necessary to get a blood test every six months to monitor liver function. On rare occasions, TCAs might decrease white blood cell count, so a complete blood count (CBC) is appropriate.

ANTIDEPRESSANTS

Bupropion (Wellbutrin): Typically used to treat depression, bupropion can also be helpful in treating ADHD. The exact mechanism of its action is not known.

What You Should Know

- It is recommended for patients 18 years or older.
- It usually has few, if any, side effects.

ANTIHYPERTENSIVES

While stimulants manage hyperactivity, distractibility, and/or impulsivity, TCAs seem to help with only hyperactivity and distractibility. As a result, a second medication—often clonidine or guanfacine, called antihypertensives—might be added to address impulsivity.

These medications, often used by adults with high blood pressure, decrease norepinephrine levels at low doses.

For women only

Buspirone (Buspar), fluoxetine (Prozac), or sertraline (Zoloft) may alleviate severe PMS symptoms that frequently occur in women with ADHD. Ask your doctor whether they will work for you.

Warning

Some children taking tricyclic antidepressants may stop metabolizing the medication, causing a fatal cardiac arrhythmia. Talk with your doctor about this before starting your child on a TCA. The two most commonly prescribed antihypertensives are:

Clonidine (**Catapres**): This medication is somewhat sedating and short-acting, unless delivered continuously by a skin patch. Sometimes used to induce sleep in children and adults, clonidine is helpful for decreasing impulsivity. Clonidine also comes in a slow-absorption patch, called a TTS (transdermal therapeutic system).

Guanfacine (**Tenex**): This medication is similar to clonidine, but is longer-acting and less sedating. A time-release version of guanfacine, called Intuniv, came on the market in 2009.

What You Should Know

- Because this class of drugs can cause sleepiness, minimal doses are typically prescribed.
- Both drugs are usually taken in the morning, and again around 3 P.M. Each dose lasts about six hours.
- If either clonidine or guanfacine is stopped, it should be tapered off slowly. When it is stopped abruptly, headaches or dizziness could occur.
- Clonidine may help children taking stimulants get to sleep when taken one hour before the planned bedtime. Talk with your doctor before trying this on your own.

Medications for Related Conditions

How to treat conditions that frequently occur with ADHD: anxiety and anger disorders, depression, and OCD.

Anxiety Disorder. Anxiety is the emotional uneasiness associated with the anticipation of something bad happening or of danger. A doctor should determine whether the anxiety is *primary* or *secondary*.

If a child has had difficulty regulating stress and anxiety since early childhood, and his anxiety is pervasive, it is primary. With this type of anxiety, there is usually a family history of the disorder. On the other hand, an anxiety disorder may be secondary to difficulties experienced by a child who has ADHD or a learning disability. Secondary anxiety occurs in certain circumstances—only at school, say.

Anger. Children and adults who have trouble controlling anger often go into a tantrum. Usually, children with anger regulation problems explode only at home, with parents or other significant adults.

Depression. There are two types of depressive disorder: 1) *Dysthymia* is characterized by a depressed or irritable mood that lasts a year or longer in an individual who is never symptom-free for more than two months. 2) *Major depressive episode* is characterized by loss of pleasure, feelings of worthlessness or guilt, changes in appetite or weight, or suicidal thoughts that last at least two weeks.

Obsessive-compulsive disorder. *Obsessions* are unwanted thoughts, images, or impulses that an individual knows are senseless or unnecessary that intrude into his or her consciousness involuntarily, causing functional impairment and distress. *Compulsions* are repetitive behaviors that a person feels driven to perform to prevent or reduce anxiety related to obsessions.

The clinical treatment for these disorders is to use selective serotonin reuptake inhibitors (SSRIs), which increase the level of serotonin in the brain. This class of medication includes **fluvoxamine** (**Luvox**), **paroxetine** (**Paxil**), **fluoxetine** (**Prozac**), and **sertraline** (**Zoloft**).

In addition to these medications, behavior therapy, talk therapy, or family therapy is often recommended as well.

FYI

Anxiety disorder, inability to control anger, and mood disorders, like depression, appear to be due to a deficiency of serotonin in the brain.

FYI

The current availability of information on using SSRIs with children does not indicate clear guidelines for choosing one over the other. A doctor might prefer to start with one and, if needed, move on to another.

Is It ADHD or Another Condition?

Evidence suggests that more than half of all individuals who have ADHD also suffer from depression, anxiety, obsessive-compulsive disorder (OCD), a learning disorder, or some other emotional or neurological problem. In some cases, these problems are "secondary" to ADHD—that is, they are *triggered* by the frustration of coping with ADHD symptoms and are resolved when ADHD symptoms are under control. In other cases, the conditions may be "comorbid," caused by some of the same factors that trigger ADHD. Below are three common comorbid conditions and their symptoms:

 Feelings of unhappiness, hopelessness, pessimism Feeling of low self-esteem, worthlessness, guilt Loss of interest or pleasure in hobbies, work, and activities you usually enjoy, including sex Excessive worry; a feeling or sense of anxiety that has bothered you every day for the last three to six months Feelings of irritability and agitation Hyperactivity Racing thoughts Aggressive behavior 	Depression	Anxiety	Bipolar Disorder
 Decreased energy, fatigue, feeling "slowed down" Insomnia, early-morning awakening, or oversleeping Difficulty concentrating, remembering, making decisions Appetite changes—eating significantly less or more Irritability, restlessness, hostility Feeling anxious; low tolerance for stress Recurring thoughts of death or suicide; suicide attempts Unexplained physical symptoms or pains—such as headache, chronic indigestion, or pain—that do not respond to treatment Not being able to relax; persistent feelings of restlessness or of being hyperalert Not being able to relax; persistent feelings of restlessness or of being hyperalert Poor attention Decreased need for sleep Inappropriate social behavior Easily distracted Poor ability to concentrate In the depressive phase: Same symptoms as in depression 	hopelessness, pessimism Feeling of low self-esteem, worthlessness, guilt Loss of interest or pleasure in hobbies, work, and activities you usually enjoy, including sex Decreased energy, fatigue, feeling "slowed down" Insomnia, early-morning awakening, or oversleeping Difficulty concentrating, remembering, making decisions Appetite changes—eating significantly less or more Irritability, restlessness, hostility Feeling anxious; low tolerance for stress Recurring thoughts of death or suicide; suicide attempts Unexplained physical symptoms or pains—such as headache, chronic indigestion, or pain—that do not respond	sense of anxiety that has bothered you every day for the last three to six months Feelings of irritability and agitation Occasional feelings of panic, fear, or dread Not being able to relax; persistent feelings of restlessness or of being hyperalert Poor attention Tire easily; sleep poorly Low tolerance of stress	 Excessive elation, exuberance, and euphoria Hyperactivity Racing thoughts Aggressive behavior Increased talking High energy Grandiose notions Decreased need for sleep Inappropriate social behavior Easily distracted Poor ability to concentrate In the depressive phase: Same symptoms as in

ADHD Medication Chart

DRUG	FORM	DOSING	COMMON SIDE EFFECTS	DURATION OF EFFECTS	PROS	PRECAUTIONS
METHYLPHENIDATE						
RITALIN METHYLIN METADATE Generic MPH	Short-Acting Tablet 5 mg 10 mg 20 mg	Starting dose for children is 5 mg twice daily, 3-4 hours apart. Add third dose about 4 hours after second. Adjust timing based on duration of action. Increase by 5-10 mg increments. Daily dosage above 60 mg not recommended. Estimated dose range 0.3-0.6 mg/kg/dose	Insomnia, decreased appetite, weight loss, headache, irritabili- ty, stomachache, and rebound agita- tion or exaggeration of pre-medication symptoms as it is wearing off.	About 3-4 hours. Most helpful for rapid onset and short duration.	Works quickly (within 30-60 minutes). Effective in over 70% of patients.	Use cautiously in patients with marked anxiety, motor tics, or with family history of Tourette's syndrome, or history of substance abuse. Don't use if you have glaucoma or are taking an MAO inhibitor.
FOCALIN (with isolated dextroisomer)	Short-Acting Tablet 2.5 mg 5 mg 10 mg	Start with half the dose recommended for normal short-acting methylphenidate above. Dose may be adjusted in 2.5 to 5 mg increments to a maximum of 20 mg per day (10 mg twice daily).	As above. There is evidence that Focalin (dextroisomer) may be less prone to causing sleep or appetite disturbance.	About 3-4 hours. Most helpful for rapid onset and short duration. Only formulation with isolated dextro-isomer.	Works quickly (within 30-60 min- utes). Possibly bet- ter for use for evening needs when day's long acting dose is wearing off.	As above. Expensive compared to other short-acting preparations.
FOCALIN XR	Long-Acting Capsule 5 mg 10 mg 15 mg 20 mg 30 mg 40 mg	Starting dose of 5 mg for all ages. Dose can be increased weekly by 5 mg, based on patient response	As above. Same as for all stimulants	9 to 12 hours	Removal of left isomer lowers intensity of side effects.	As above. Same as for all stimulants.
RITALIN SR	20mg daily. M	Start with 20 mg daily. May combine with short- acting for quicker onset and/or coverage after this wears off.	Insomnia, decreased appetite, weight loss,	Onset delayed for 60-90 minutes.	Wears off more gradually than short-acting, so less	As above. Note: If crushed or cut, full dose may
METHYLIN ER METADATE ER	Mid-Acting Tablet 10 mg 20 mg 40 mg 50 mg 60mg		weight loss, headache, irritabili- ty, stomachache.	Duration supposed to be 6-8 hours, but can be unreliable.	risk of rebound. Lower abuse risk.	be released at once, giving twice the intended dose in first 4 hours, none in the second 4 hours.
RITALIN LA 50% immediate- release beads/50% delayed-release beads	Long-Acting Capsule 10 mg 20 mg 30 mg 40 mg 60 mg	Starting dose is 10- 20 mg once daily. May be adjusted weekly in 10 mg increments to maxi- mum of 60 mg taken once daily. May add short-act- ing dose in AM or 8 hours later in PM if needed.	Insomnia, decreased appetite, weight loss, headache, irritability, stom- achache, and	Onset in 30-60 minutes. Duration about 8 hours.	May swallow whole or sprinkle ALL con- tents on a spoonful of applesauce. Starts quickly, avoids mid-day gap	Same cautions as for immediate-release.
METADATE CD 30% immediate- release and 70% delayed-release beads	Mid-Acting Capsule 10 mg 20 mg 30 mg		May add short-act- ing dose in AM or 8 hours later in PM if	rebound potential.		unless person metabolizes medi- cine very rapidly.

ADHD Medication Chart

DRUG	FORM	DOSING	COMMON SIDE EFFECTS	DURATION OF EFFECTS	PROS	PRECAUTIONS
		METHY	LPHENIDATE (con	tinued)		
CONCERTA 22% immediate- release and 78% gradual-release	Long-Acting Tablet 18 mg 27 mg 36 mg 54 mg	Starting dose is 18 mg or 36 mg once daily. Option to increase to 72 mg daily.	Insomnia, decreased appetite, weight loss, headache, irritabili- ty, stomachache.	Onset in 30-60 minutes. Duration about 10-14 hours.	Works quickly (within 30-60 minutes). Given only once a day. Longest duration of MPH forms. Doesn't risk mid-day gap or rebound, since medication is released gradually throughout the day. Wears off more gradually than short-acting, so less rebound. Lower abuse risk.	Same cautions as for immediate release. Do not cut or crush.
<u>DAYTRANA</u> <u>PATCH</u>	10 mg 15 mg 20 mg 30 mg	There is no correlation between oral methylphenidate and the patch. Daytrana must be fine-tuned from the beginning. Although not FDA-approved, patches may be cut with scissors to fine-tune the dose. Talk with your doctor first.	Non-allergic skin irritation at the site of application; itching and discomfort. FDA warns that a permanent loss of skin color may occur. For more information, visit FDA.gov	Slow onset of benefits over 5 hours to steady blood level. Although FDA-approved for only 9 hours of wear time, it is almost always worn until 2-3 hours prior to desired end of medication benefits.	A good alternative if the child has trouble swallowing pills.	The patch should be worn on the hip. Before applying it, be sure the area of the hip is clean and dry. When applying it, firmly press it with your hand for 30 seconds, being sure the edges fully adhere. When disposing of the patch, fold it in half, so that it sticks to itself, and throw it away in a safe place.
QUILLIVANT	Extend release oral suspension	25 mg per 5 ml dispensed by syringe	As for all stimulant medications	10–12 hrs	Good for children who cannot swal- low pills; allows for very fine dosing increments; savcoupons online.	Must be shaken vig- orously prior to each use. Mildly messy. Hard to travel with. If switching from another MPH formu- lation, stop first med and re-fine tune dose
QUILLICHEW ER	Chewable extended release tablets	20 mg; 30 mg; 40 mg	As for all stimulant medications	8–10 hrs	One dose covers whole school or workday. Tablet can be divided to fine- tune dose	New product. Poor insurance coverage initially.
APTENSIO XR	Extended-release capsule; 40% imme- diate acting, 60% long-acting.	10, 15, 20, 30, 40, 50 and 60 mg	As for all stimulant medications	10–12 hrs	One dose covers whole school or workday.	New product; poor insurance coverage initially.

ADHD Medication Chart

DRUG	FORM	DOSING	COMMON SIDE EFFECTS	DURATION OF EFFECTS	PROS	PRECAUTIONS
		DE	XTROAMPHETAMI	NE		
DEXEDRINE	Short-Acting Tablet 5 mg	For ages 3 -5 years: starting dose is 2.5 mg tablet. Increase by 2.5 mg at weekly intervals, increasing first dose or adding/ increasing a noon dose, until effective. For a child 6 years or older, start with 5 mg once or twice daily. May increase total daily dose by 5 mg per week to find optimal level. Tablet is given on awakening. For a child over 6 years, one or two additional doses may be given at 4-6 hour intervals. Usually no more than 40 mg/day.	Insomnia, decreased appetite, weight loss, headache, irritabili- ty, stomachache. Rebound agitation or exaggeration of pre-medication symptoms as it is wearing off. May also elicit psy- chotic symptoms.	Onset in 30-60 minutes. Duration about 4-5 hours.	Approved for children under 6. Good safety record. Somewhat longer action than short-acting methylphenidate.	Use cautiously in patients with marked anxiety, motor tics, or family history of Tourette's syndrome, or history of substance abuse. Don't use if patient has glaucoma or is on MAOI. High abuse potential, particularly in tablet form.
DEXEDRINE SPANSULE DEXTROAMPHETA- MINE SULFATE ER	Long-Acting Spansule 5 mg 10 mg 15 mg 5mg 10 mg 15 mg	Children 6 and older who can swallow whole capsule should take morning dose of capsule equal to sum of morning and noon short-acting. Increase total daily dose by 5 mg per week to find optimal dose, to maximum of 40 mg/day.	Same as above.	Onset in 30-60 minutes. Duration about 5-10 hours.	May avoid need for noon dose. Rapid onset. Good safety record.	As above. Less likely to be abused intranasal or IV than short-acting. Must use whole capsule.
DESOXYN (methampheta- mine)	Immediate-Release Tablet 5 mg	Starting dose of 5 mg for all ages, which can be increased by 5 mg increments, based on patient response. Typical dose: 10-15 mg twice a day.	As above. Same as for all stimulants.	4-6 hours	Often effective when there is no benefit from amphetamine or methylphenidate	Expensive, stigma attached to taking it, potential for abuse
PROCENTRA	Oral Solution 5 mg/5 mL	Dose typically starts at 2.5 mg per day, and can be raised in increments of 2.5 mg per week until optimal response is achieved, up to a maximum dose of 40 mg per day.	As above.	3–6 hours	Low abuse and addiction potential. One dose a day.	May be messier than traditional pills. Harder to adminis- ter a school-day dose.
ZENZEDI	Immediate release, short-acting, 100% dextro-ampheta- mine tablet	2.5, 5, 7.5, 10, 15, 20, 30 mg tablets	As for all stimulant medications	3–4 hours.	Very consistent from dose to dose; can be cut to fine- tune dose; FDA- approved down to three years of age.	High cost; poor insurance coverage; short duration of action.

ADHD Medication Chart

DRUG FORM		DOSING	COMMON SIDE EFFECTS	DURATION OF EFFECTS	PROS	PRECAUTIONS			
MIXED AMPHETAMINE									
ADDERALL	Short-Acting Tablet 5 mg 7.5 mg 10 mg 12.5 mg 15 mg 20 mg 30 mg	5 mg 10 mg each morn- ing (age 6 and older). May be adjusted in 5-10 mg increments up to 30 mg per day. 10 mg 210 mg about 4-5 hours. utes. Duration about 4-5 hours.			Wears off more gradually than dex- troamphetamine alone, so rebound is less likely and more mild.	Same as for Dexedrine tablets.			
ADDERALL XR 50% immediate- release beads/ 50% delayed- release beads	Long-Acting Capsule 5 mg 10 mg 15 mg 20 mg 25 mg 30 mg	Starting dose is 5 or 10 mg each morning (at age 6 and older). May be adjusted in 5-10 mg increments up to 30 mg per day.	Same as above.	Onset in 60-90 minutes (possibly sooner). Duration 10–12 hours.	May swallow whole or sprinkle ALL contents on a spoonful of applesauce. May last longer than most other sustained-release stimulants. Less likely rebound than with long-acting dextroamphetamine.	Same as for Dexedrine Spansules, except that it has docu- mented efficacy when sprinkled on applesauce.			
ADZENYS XR-ODT	Extended-release orally disintegrating tablet 3.1 mg 6.3 mg 9.4 mg 12.5 mg 15.7 mg 18.8 mg	Recommended starting dose is 6.3 mg; can be increased weekly to a maximum of 18.8 mg	Similar to those listed above.	10–12 hours	Tablet dissolves in saliva for children who can't swallow pills.	Tablets may be crushed easily. Keep them in the blister packaging and hard plastic travel case or carton until you are ready to take a dose or administer one to your child. Do not chew the tablet.			
DYANAVEL XR	Extended-release oral suspension 2.5 mg per ml	Oral dosing syringe; FDA approved for only 2.5 mg – 20 mg/day	As for all stimulant medications	10–12 hours	Designed for children who cannot swallow pills; allows for very fine-tuned dosing.	If switching from another formulation, fine-tune dose; shake vigorously prior to each use; hard to travel with; relatively low doses approved by FDA will limit insurance coverage.			
EVEKEO	short-acting tablet; 50% dextro and 50% levo-ampheta- mine	5 and 10 mg tablets	As for all stimulant medications	3–4 hours.	Consistent; scored and can be cut to fine-tune dose; fine-tuned FDA- approved down to 3 years of age	High cost; poor insurance coverage; short duration of action.			

ADHD Medication Chart

DRUG	FORM	DOSING	COMMON SIDE DURATION OF EFFECTS AMPHETAMINE (continued)		PROS	Stop taking the medication and call your doctor if you experience mild difficulty urinating, persistent diarrhea, suspiciousness, over-talkativeness, moderate to severe tenseness of your jaw, significant loss of sleep, a significant increase in blood pressure, unusual heart rhythms, very fast heart rate, or panicky feelings.	
		MIXED					
VYVANSE Long-Acting Capsule 10 mg 20 mg 30 mg 40 mg 50 mg 60 mg 70 mg		Children and adults respond to the same range of dosing. Approximately 8% of patients optimize at doses lower than lowest dose manufactured; 40% optimize at doses higher than 70 mg.	Loss of appetite, dry mouth, jitteriness, and irritability if the dose is too high.	Onset of benefits at 45 minutes, with duration usually from 10 to 12 hours in children. Commonly shorter in adults.	Low abuse and addiction potential. One dose a day.		
DRUG	FORM	DOSING	COMMON SIDE EFFECTS	DURATION OF EFFECTS	PROS	PRECAUTIONS	
			ATOMOXETINE				
STRATTERA	Long-Acting Capsule 10 mg 18 mg 25 mg 40 mg 60 mg	Starting dose is 0.5 mg/kg. The targeted clinical dose is approximately 1.2 mg/kg. Increase at weekly intervals. Medication must be used each day. Usually started in the morning, but may be changed to evening. It may be divided into a morning and an evening dose, if patient needs higher doses.	In children: decreased appetite, Gl upset (can be reduced if medica- tion taken with food), sedation (can be reduced by dos- ing in evening), lightheadedness. In adults: insomnia, sexual side effects, increased blood pressure.	Starts working with- in a few days to one week, but full effect may not be evident for a month or more. Duration all day (24/7), so long as taken daily as directed.	Avoids problems of rebound and gaps in coverage. Doesn't cause a "high," thus does not lead to abuse. It is not a controlled drug and may be used by those with history of substance abuse.	Use cautiously in patients with hypertension, tachycardia, or cardiovascular or cerebrovascular disease. It can increase blood pressure and heart rate. Has some drug interactions.	
DRUG	FORM	DOSING	COMMON SIDE EFFECTS	DURATION OF EFFECTS	PROS	PRECAUTIONS	
			BUPROPION				
WELLBUTRIN IR	Short-Acting Tablet IR 75 mg 100 mg	Starting dose is 75 mg, increasing gradually (wait at least 3 days) to maximum of 2-3 doses, no more than 150 mg/dose.	Irritability, decreased appetite, and insomnia.	About 4-6 hours.	Helpful for ADHD patients with comorbid depression or anxiety.	Not advised in patients with a seizure disorder or with a current or previous diagnosis of bulimia or anorexia. May worsen tics. May cause mood deterioration when it wears off.	
WELLBUTRIN SR	Long-Acting Tablet 100 mg 150mg 200 mg	Starting dose is 100-150 mg/day; increase as tolerat- ed to 400 mg.	Few side effects	About 10-14 hours; benefits apparent after 4-6 weeks.	Well tolerated, no potential for abuse.	May increase seizure risk.	
WELLBUTRIN XL	Long-Acting Tablet 150mg 300mg	Starting dose is 100-150 mg/ day; increase as tolerat- ed to 400 mg/day.	Few side effects	About 10-14 hours; benefits apparent after 4 -6 weeks.	Well tolerated, no potential for abuse.	May increase seizure risk.	

ADHD Medication Chart

DRUG	FORM	DOSING	COMMON SIDE DURATION OF EFFECTS EFFECTS		PROS	PRECAUTIONS	
		A	NTIHYPERTENSIVE	S			
KAPVAY (clonidine)	Tablet 0.1 mg 0.2 mg 0.3 mg	Starting dose is 0.025 -0.05 mg/day in evening. Increase by similar dose every 7 days,	Sleepiness, hypotension, headache, dizzi- ness, stom- achache, nausea,	Onset in 30-60 minutes. Duration about 3 – 6 hours.	Helpful for ADHD patients with comorbid tic disor- der or insomnia. Good for severe	Sudden discontinuation could result in rebound hypertension. Minimize daytime tiredness by starting with evening dose and increasing slowly. Avoid brand and generic formulations with red dye, which may cause hyperarousal in sensitive children.	
CLONIDINE	Tablet 0.1 mg 0.2 mg 0.3 mg	adding to morning, mid-day, possibly afternoon, and evening doses in sequence. Total dose of 0.1–0.3 mg/day divided into 3-4 doses. Do not skip days.	dry mouth, depression, nightmares.		impulsivity, hyper- activity, and/or aggression. Stimulates appetite. Especially helpful in younger children (under 6) with ADHD symptoms associated with pre- natal insult or syn- drome, such as Fragile X.		
CATAPRES Patch	TTS-1 TTS-2 TTS-3	Corresponds to doses of 0.1 mg, 0.2 mg, and 0.3 mg per patch. (If using .1 mg tid tablets, try TTS 2, but will likely need TTS 3).	Same as Catapres tablet, but with skin patch there may be localized skin reactions.	4-5 days, so avoids the vacillations in drug effect when taking tablets.	Same as above.	Same as above. May get rebound hypertension and return of symptoms if it isn't recognized when a patch has come off or becomes loose. An immature student may get excessive dose from chewing on the patch.	
TENEX (guanfacine)	1 mg 2 mg 3 mg	Starting dose is 0.5 mg/day in evening. Increase by similar	mg/day in evening. d Increase by similar	Compared to cloni- dine, lower chance of severity of side effects, especially	About 6 – 12 hours.	Can provide for 24/7 modulation of impulsivity, hyper- activity, aggres-	Avoid formulations with red dye as above. Hypotension is the primary dose-
GUANFACINE TABLETS (generic)	1 mg 2 mg 3 mg	as indicated. Given in divided doses 2 – 4 times per day. Daily dose range 0.5 – 4mg/day. Do not skip days.	fatigue and depression. Also less headache, stomacheache, nausea, dry mouth. Unlike clonidine, minimal problem of rebound hypertension if doses are missed.		sion, and sensory hypersensitivity. This covers most out-of-school prob- lems, so stimulant use can be limited to school and homework hours. Less sedating than clonidine.	limiting problem. As with clonidine, important to check blood pressures with dose increases and if symptoms suggest hypotension, such as lightheadedness.	
<u>INTUNIV</u>	Time-Release (guanfacine) tablet	1 mg 2 mg 3 mg 4 mg	Starting dose of 1 mg each morning, increasing by 1 mg each week up to a maximum dose of 4 mg per day. Benefits build over 3 to 4 weeks.	24 hours	Non-stimulant with particular benefit for the hyperactive- impulsive impair- ments of ADHD.	Maintain water intake; do not skip doses.	

CHAPTER 3 MEDICATION STRATEGIES

Getting the Most from ADHD Medications

Expert advice that will help you or your child derive the most benefit from stimulant medication—at home and in school.

Successfully treating ADHD with medication isn't as simple as filling a prescription and living happily ever after. There is no standard medication or dosage for everyone with ADHD. Prescribing involves trial and error. "Getting ADHD meds to work to their optimal benefit requires patience," says <u>William W. Dodson</u>, a Denver-based psychiatrist specializing in ADHD.

Here are five rules for using ADHD medications effectively:

1. Find a doctor who will closely monitor medication.

Studies have shown that children who are closely monitored show the greatest improvement in their symptoms.

The American Academy of Pediatrics (AAP) suggests that parents start out with a general pediatrician to treat ADHD. But if your child has a comorbid condition, such as depression or a learning disability, or if she doesn't respond to initial drug therapy, a parent should consider seeking specialized care, says Andrew Adesman, M.D., director of developmental and behavioral pediatrics at Schneider's Children's Hospital in New Hyde Park, New York.

A developmental pediatrician, child neurologist, or child psychiatrist can offer a working knowledge of the newest medications and experience with drug therapy.

While the frequency of visits may vary during the startup phase of a new medication, your child's doctor should be willing to see him every two to four weeks for the first several months. These meetings will enable you to discuss how the meds are working, whether there are noticeable or troubling side effects, or whether the medication is affecting your child's height or weight.

A doctor should measure height and weight during the initial office visit and then at evenly spaced intervals like once a month, perhaps, afterward.

Need help finding an ADHD specialist? Go to directory.additudemag.com

2. Start at the lowest dose possible and adjust dosage upward.

Because everyone has a unique response to medication, a physician may need to increase the dosage—adjustment is typically done every three to seven days—to arrive at an optimal dose. Such adjustment is called titration. Doctors start at the lowest dose to provide a baseline for how much more (if any) of the drug a child needs, explains Ray Boorady, M.D., a child and adolescent psychiatrist and clinical coordinator of psychopharmacology at New York University Child Study Center.

At some point, the lower of two doses will become the optimal dose. "Don't think of high dose or low dose, think of the right dose," advises Dr. Dodson.

Gender, height, and age aren't reliable gauges as to how a child will respond to medication—nor is weight. That's because each child metabolizes medication at a different rate. While one 83-pound child might see a benefit from 5 mg. of methylphenidate, another might need a higher dosage to achieve the same effect.

Physicians do use weight as a starting point. "Even though dosage is not directly related to weight, we have to start somewhere," says Stephen C. Copps, M.D., director of central Georgia's Institute for Developmental Medicine, in Macon. "So I choose to start with the lowest dose possible."

3. Try medication 7 days a week, 16 hours a day.

Although some studies suggest that skipping medication on weekends—called drug holidays—may reduce side effects without increasing symptoms, many experts don't recommend this strategy.

"ADHD is a life problem, not just an academic or workplace problem," says Dr. Copps. "The appropriate treatment is as important to relationships and social competency as it is to academic endeavors."

Taking medication that extends beyond the school day has many advantages, including increased focus for homework and after-school activities, such as sports.

More about ADHD drug holidays: http://additu.de/79

Says Dodson: "No ADHD medication's delivery system lasts long enough to cover a 16- to 18-hour day, especially for a person over 13 years of age. Second doses are often necessary for homework and behavior problems. However, a doctor may hesitate to prescribe a second dose for fear of causing insomnia. If a second dose is needed, the family should first see whether a child can take a nap after lunch while on medication. If he can, they know that a second dose of the same long-acting formulation probably won't cause insomnia at night."

4. Keep tabs on how the medication is working.

Parents can help the doctor arrive at the correct dosage for their child by tracking the child's response to his medication. A doctor should offer parents a structured way to monitor their child's symptoms. Behavior rating scales are very effective.

The SNAP-IV Scale can help parents assess a child's behavior throughout the day to detect problems with medication. (You can download the form free from http://www.myadhd.com/snap-iv-6160-18sampl.html.) This scale gauges the frequency of 90 physical symptoms and emotional behaviors at home and in the classroom. A doctor can evaluate any troubling patterns and adjust the dosage or switch to another medication to correct them.

The Conners' Rating Scales-Revised (CRS-R) is another worthwhile tool. Each of the three versions—parent, teacher, and adolescent—is available in a short and long form. Dr. Boorady recommends that parents use the long form and reserve the short form for their child's teacher(s), who probably have less time to fill out the evaluation. The CRS-R is available from Multi-health Systems, Inc., P.O. Box 950, North Tonawanda, New York 14120.

5. Consider a child's diet.

Drinks rich in ascorbic acid/vitamin C or citric acid (orange, grape-fruit, and other drinks supplemented with vitamin C) may interfere with the absorption of **Ritalin**.

Some doctors insist that children on stimulants also avoid cold/sinus/hayfever medications that contain decongestants (antihistamines without decongestants are OK); over-the-counter or prescription weight-control medications; steroids, taken orally or injected; and asthma medication containing albuterol or theophylline. Any of these may give a child a mildly unpleasant "buzz."

ADHD Treatment: Information and Resources for Adults & Children

http://additu.de/treat

How Do We Know the Medication is Working?

For reasons we don't fully understand, some stimulants and non-stimulants just don't work for certain individuals. What is the best way to figure out what prescription(s) will work for you? Experimentation. Learn how to recognize good and bad signs—and how to solve common medication problems—by using the information below.

By Laurie Dupar, PMHNP

We know from years of research that ADHD medications work—in fact, studies show they work up to 80 percent of the time. Unfortunately, many children and adults taking ADHD medications for the first time find their prescriptions don't work the way they expected at first. Sometimes, the medication is the problem; other times, the expectations are the problem. Either way, it's good to know the signs of success and the signs of a bad fit.

A. Good Signs

I'm always surprised how often my clients come in and say, "My doctor keeps asking me how the medications are working, but I'm not sure what to tell him!" We will discuss some common medication pitfalls later in this chapter; but first we need to explain how to know when your medication is working, plain and simple.

Learn more about ADHDpowered hyperfocus: http://additu.de/hyperfocus

Here a few positive signs that your medication is doing its job:

Sustained focus: If your medication is starting to work, you'll be able to focus for longer periods of time than you used to. This doesn't mean hyperfocus or "zombie focus"—just a nice, sustained focus that you can direct where you want it to go. Maybe you can sit and finish paperwork that you couldn't before. As a result of this sustained focus, you'll be more productive.

Less impulsivity: If your medication is working, you'll notice less impulsivity—both physical and verbal. You will interrupt people or jump out of your seat less often. You'll notice that your thoughts are less impulsive, too. Instead of jumping from one thought to the next, you'll follow a train of thought more effectively—without getting distracted by "brain chatter."

Improved mood: Once ADHD medication is optimized, people typically report an improved overall mood. They're less stressed, with less anxiety—usually resulting from higher productivity and fewer social challenges. When you're able to plan out your day, act on those plans, and better control your words and actions, you're bound to feel better!

Greater attention to detail: You'll notice that details stick out more—instead of skipping a row in your spreadsheet or skipping a step in a math problem, you or your child will find that you catch small mistakes before they happen. Once your attention to detail is improved, however, you might not always like what you see: The mess in the garage or the piles on your desk may suddenly bother you much more.

Better memory: Some patients report improved memory once they start taking ADHD medication. I had a client once who was writing a book. Before taking medication, she struggled to remember what she'd written from one day to the next; so before she could start writing, she'd have to reread the preceding text. She felt like she was wasting time. Once she started taking medication, she better remembered what she'd written the previous day and could dive right in to the next chapter without reviewing. For her, this was a big improvement—and convinced her that ADHD medication was the right choice.

Better sleep: Some people report sleeping better once their ADHD medication begins working. This may be surprising, since many people know that sleep problems are a common side effect of ADHD medication. This is true—and sleeplessness is one red flag to watch out for—but, in some cases, the right medication actually helps children and adults with ADHD fall asleep by slowing down their brains enough to quiet the racing thoughts that used to keep them awake. If you struggled to sleep before you started medication, and now find that you drift off more comfortably and quickly, this may be a sign that the medication is working for you.

These are just some of the most common signs that a medication is doing what it should; you may experience others unique to your specific challenges. If you're not sure what to look for in yourself or your child, stick to these general guidelines. If you see them (even if some side effects remain), you're well on your way to optimizing your medication's effectiveness.

Learn more about ADHD's impact on working memory: http://additu.de/mem

B. Bad Signs and Common Side Effects

What's the most obvious sign a medication isn't working? You aren't feeling any of the positive signs mentioned above. But even if you're feeling some or many of them, the medication might not be perfect. You might not feel the benefits as consistently or as strongly as you would like, or you might now be dealing with some uncomfortable side effects.

Many people know intuitively when they're experiencing unpleasant side effects, but some problems—particularly mood changes—may slip by unnoticed unless you're prepared. Ask your doctor to go over the most common side effects—like nausea, appetite loss, irritability, sleeplessness, or headaches—so you know what to look for. You should also ask your doctor to explain the rare side effects that can be extremely dangerous, like shortness of breath, allergic reactions, and heart problems. If you're a parent, ask the doctor what signs you should look out for in your child—especially if she isn't old enough to properly articulate what she's feeling.

Learn more about the four most common sleep disturbances among adults with ADHD: http://additu.de/fall-asleep

C. What Could Be Causing the Problem(s)?

When ADHD medication doesn't perform as we'd like, it usually comes down to one of these five explanations:

a. Wrong Medication

If you've tried just one prescription, you haven't really "tried ADHD medication"—you've just tried that one. And the first medication you try is rarely the very best one for you; experimentation is key.

ADHD medications come in three varieties: methylphenidates (Ritalin, Concerta, Daytrana, and others), amphetamines (Adderall, Vyvanse, Dexedrine, and others), and non-stimulant medications (Strattera, Wellbutrin, Effexor, Tenex, Clonidine, and a few others).

If you're taking the wrong medication, you may feel some of the benefits discussed earlier in the chapter—but they'll be faint, and any negative side effects will outweigh them by a considerable degree. To find out if you're taking the wrong medication, ask yourself how you feel physically. Are you more irritable than normal? Do you have a headache that won't go away? Are you sleeping worse than before? If you answer yes to any of these questions, it might be that you're using the wrong medication.

If you think you're taking the wrong medication, ask your doctor about switching. Make sure you try both types of stimulants (amphetamines and methylphenidates)—as well as a non-stimulant—before you give up on ADHD medication entirely. If you haven't tried a medication from every category, you still haven't explored the whole gamut of options.

b. Generic Vs. Brand Name

Generics can differ from brand name medications by about 25 percent—in fact, it's perfectly legal for them to do so. But when you switch from a brand name to a generic medication, from generic to brand, or from generic to generic, you may find that the medication affects you in a vastly different way than it did before. A 25 percent change can be a lot!

If you switch medications due to insurance requirements but find that your previous medication was much more effective, talk to your doctor. In most cases, she should be able to work with your insurance company to get you back on your previously used medication.

c. Wrong Dose

Some patients report that their medication feels like it's working—productivity, focus, and mood are all improved with minimal side effects—but it doesn't feel like *enough*. Maybe you feel great all day at work, but once you get home, you start to feel anxious and want to retreat to your room. Or maybe you can focus for 20 minutes now instead of 5, but you still can't manage to get your paperwork completed.

If this sounds like you, you might be taking the wrong dose. It could be either too much or too little. In most cases, it's too little, since prescribers typically start at the lowest recommended dose and move up from there. But everyone responds to medication differently, and even a "low dose" might be too much for your particular brain and body. If you feel like your medication is helping, but could be doing more, talk to your doctor about adjusting your dose.

Staying on the same dose for too long can also be a de facto "wrong dose"—our brains change throughout our lives, and what worked for us when we started ADHD medication won't necessarily work forever. This is particularly true for women, who cycle through dramatic hormonal changes as they age, which can greatly affect the effectiveness of their ADHD medication. If you've been on the same dose for a long time, periodically check in with yourself to assess how well it's working for you. If it feels like it used to work better, you may need to change your dose.

More fixes to common ADHD medication problems: http://additu.de/3x

ADHD Treatment: Information and Resources for Adults & Children

http://additu.de/treat

d. Wrong Time

You could also be taking your medication at the wrong time—either too early, too late, or at an incorrect frequency. Taking it too early means it wears off before you want it to, while taking it too late means it doesn't kick in by the time you need it. If you take your medication right as you're heading out the door, and then spend the first hour of your workday stressed and unproductive, you're probably taking the medication too late. If this sounds like you, try taking your medication first thing every morning.

If you're taking it at the wrong frequency—taking it only once a day, for instance, instead of in multiple doses—you may not be covered consistently. If different times of day have different focus needs, don't be afraid to ask your doctor about medication combinations: you could take a long-acting pill in the morning and a short-acting pill in the evening to keep your focus level throughout the entire day.

People with ADHD often struggle to remember to take their medication on time, or to refill their prescription at the end of the month. This can lead to gaps in coverage—gaps that can make your medication less effective.

To avoid these pitfalls, implement a *medication reminder system*. This might mean setting an alarm in your phone or on your computer, or setting up a visual reminder like a note taped to your front door reminding you to take the medication or refill it as needed. If you'd like, try out the Medication Log included later in this chapter.

People often ask about "drug holidays"—particularly for children on break from school. In most cases, this is a personal decision. Taking a medication holiday may help a child catch up on height or weight, or help an adult judge whether they can succeed without medication. However, be aware: most research shows that the best results are achieved when medication is taken consistently. If you're considering a drug holiday, make sure you try it at an appropriate time (not when you have a big project coming up at work!)

e. Interactions

Even if you're doing everything "right"—right medication, right dose, and right timing—something might still feel off. In these cases, it's important to look at additional factors that could alter a medication's efficacy, like other prescriptions or caffeine.

Encourage your teen to take the reins on treatment: http://additu.de/remind

ADHD Treatment: Information and Resources for Adults & Children

http://additu.de/treat

While most medications interact well with those used to treat ADHD, there are a few exceptions. Wellbutrin, for example, amplifies the effect of tricyclic antidepressants. So if you use a tricyclic to treat depression, your doctor shouldn't prescribe Wellbutrin for your ADHD (and vice versa). Other antidepressants called Monoamine oxidase inhibitors (MAOIs) are dangerous when combined with ADHD medication. Make sure your doctor knows what kind of antidepressant you're taking before you start taking a medication to treat ADHD.

Caffeine is another common culprit. It's also a stimulant, and many people with ADHD unknowingly "self-medicate" with caffeine everyday. Once you start taking an ADHD medication, you may find that the levels of caffeine you used to tolerate easily now make you jittery and anxious. This is most likely because they're supplementing your dose of ADHD medication, causing you to be overstimulated. You may need to lower your caffeine intake—or perhaps cut it out entirely.

ADHD Medication Log

Fill out this simple log daily to track the effectiveness of your or your child's ADHD medication.

	MON	TUE	WED	THUR	FRI	SAT	SUN
Medication name							
Dose/amount							
Time(s) taken							
Time medication wore off							
Hours of sleep? Nap?							
Rate the following on a scale of 1 (poor) to 10 (excellent)							
Mood							
Irritability/agitation							
Concentration/focus							
Memory							
Energy							
Ability to complete tasks							
Motivation							
Appetite							
What else?							
Nausea? Headache? Etc.?							
Other notes							

ADHD Meds at School

Everything you need to know about setting up a school-day dose and trouble-shooting for potential problems.

Your child should be on medication if hyperactivity, distractibility, and/or impulsivity interfere with his success in life at school, at home, and in peer/social interactions. If he is on medication during school hours but cannot focus on homework, or has a behavioral problem at home, coverage should expand to include after-school hours. Think about weekends the same way. Follow this step-by-step guide for help.

STEP ONE: Assess the Need for Midday Meds

Many children with ADHD do best with a short-acting tablet in the morning and another in the afternoon, ensuring an appetite for lunch. For them, a midday trip to the nurse's office at school is imperative.

Other children can take a morning dose that covers the entire school day. Most stimulants are available in a long-acting form that lasts for 8 to 12 hours. However, keep in mind that, for some children, 8-hour tablets or capsules may work for 10 hours or for 6 hours. The 12-hour form of **Concerta** may work for 14 hours or 10 hours.

You and your child's teacher should observe when the medication wears off and base the timing of each dose on your observations. For example, your child might take an eight-hour capsule at 7:30 A.M., expecting it to last at least until 3:30 P.M. But if the teacher notes that by 2 P.M. he is restless, another dose may be needed at that point.

STEP TWO: Set Up a School-Day Dose

Go to the school's front office or health room and ask for a medication authorization form. Schools cannot give this form out without a request from a parent or guardian, because they aren't permitted to recommend medication.

Most of these forms have three parts. Part one, to be filled out and signed by the parent, authorizes the school nurse or aide to give your child medication. Part two is completed and signed by the physician. It asks him to provide information on the diagnosis, medication, time and dosage to be dispensed, and possible side effects. Part three is the school's approval of the form and is completed by an administrator.

Many schools require a separate bottle from the pharmacy, so the prescription might look like this: **Methylphenidate**, **10 mg tablets**, **#90**

Label: School Use

- Place 20 tablets in bottle
- One tablet at noon

Label: Home Use

- Place 70 tablets in bottle
- One tablet three times a day

Take the forms you and your physician have completed, plus the bottle labeled for school use, to the health room. The school nurse or assistant should let you know when meds are running low, but you should also monitor this yourself.

STEP THREE: Prepare to Tweak

The teacher should know which med your child takes and the symptoms it targets. Ask her to notify you if she notices the emergence of side effects, such as headaches, stomachaches, tics, or "spaciness." Some children have negative rebound experiences, or feel overfocused. If there's a problem, your child's medication may need to be adjusted.

STEP FOUR: Watch for Problems

The person responsible for giving out the medication should alert you if your child does not show up to get it. Did the teacher forget to remind him? Did he not want to leave class? Are the logistics in middle or high school such that there is no time to make the trip? If there is a problem, it must be addressed.

Teachers sometimes embarrass a child by stopping class and and saying, "John, it's time to get your medicine." Even worse, some school nurses call over the loudspeaker, "John, please come to the health room to get your medicine." If this happens, complain to the school to stop it.

If leaving class to visit the school nurse makes your child feel "different," ask her doctor about medication that lasts through the day.

Medication Authorization Forms

Private schools may have their own form or may accept a form from a public school. After-school programs usually will accept the public school form. When in doubt, ask.

Just in Case

Even if your child doesn't take a dose at school, inform the nurse which ADHD med your child takes; in an emergency, she'll know to avoid administering any drugs that might interact dangerously with it.

How a daily report card can track effectiveness at school: http://additu.de/hm

CHAPTER 4 Managing Side Effects

When Medication Causes Problems

No one should put up with side effects when taking ADHD medication. Here's a game plan for dealing with them.

The right medication can make life much easier for children and adults who have attention deficit disorder. But ADHD medications can cause severe side effects, including headaches, sleep problems, and blunted appetite.

Some people (including more than a few doctors) assume that side effects are merely the price to pay for being on medication. Wrong. Often, a simple adjustment in the way a medication is used is all it takes to remedy the problem.

Methylphenidate (Ritalin), dextroamphetamine (Dexedrine), dextroamphetamine/levoamphetamine, and lisdexamfetamine dimesylate (Vyvanse) have similar side-effect profiles, and the strategies that curb side effects for one medication work for the others, as well. The strategies below are applicable for adults and children.

STIMULANT MEDICATIONSLoss of Appetite

A blunted appetite is the most common side effect of stimulants. This problem often clears up on its own within weeks, so a wait-and-see approach is prudent. If the problem persists, take action—especially if the appetite loss is severe enough to trigger unwanted weight loss, or, in a growing child, failure to gain weight appropriately.

First, observe your child's eating patterns. Breakfast often goes well because the first dose of the day hasn't yet kicked in. Lunch is likely to be a lost cause, nutrition-wise. Ditto for dinner. A child often becomes very hungry around 8 P.M., when the evening dose wears off.

Adjust mealtime. There may be little you can do to boost your child's appetite in the middle of the day, when medication is at maximum effectiveness. So instead of worrying about what gets eaten at lunch, create nutritional "windows of opportunity" at other times of the day. For example, get a healthful breakfast into your child before the first dose of the day kicks in. Hold off on the 4:00 P.M. dose until 5:00 or 6:00 P.M. Your child's appetite may return in time for dinner. Give the third dose after dinner.

General Approaches to Address Side Effects

- Wait two weeks; sleep and appetite problems often go away.
- Lower, raise, or change the time of the dose, depending on the side effect.
- Take medication with food, not on an empty stomach.
- Consider a change to long-acting medications to ease the side effects of short-acting medications, or vice versa.
- Add medication to counteract side effects (e.g., clonidine or guanfacine for sleep problems).
- Change medications if side effects are too bothersome or problematic.

—PETER S. JENSEN, M.D.

Tip

Longer-acting stimulant drugs don't seem to suppress appetite as much as shorter-acting versions do.

Another way to make sure that your child is getting adequate nutrition is to offer a food supplement drink instead of nutritionally empty snacks—or in place of a meal that is likely to go uneaten. These tasty beverages, such as Pediasure and Ensure, come in several flavors. They can be made into milk shakes or frozen to make pops.

Switching medication. If these approaches don't work, ask your doctor about trying a different stimulant. For reasons that remain unclear, some children who experience appetite loss while taking one stimulant medication don't experience such loss on another.

Some children and adults will have to try several medications before finding the one that provides benefits without adverse reactions. If switching stimulants doesn't help, ask your doctor about moving to a non-stimulant.

Difficulties with Sleep

For some kids, difficulty falling asleep is a troubling side effect of stimulant medication. But other kids are kept awake at night by a lack of medication. That is, once the last dose of the day wears off, these children return to "being ADHD." They feel restless, are sensitive to sound, and find it impossible to "turn off" their brain.

Get to the root of the problem. There's no easy way to tell which of these scenarios explains your child's sleep problem. To find out, pick an evening when sleeplessness is unlikely to prove disastrous (when your child can sleep late the following morning). Have your child take an additional dose of her usual stimulant around 8:00 P.M.

If your child goes right to sleep, it's a good bet that her sleeplessness has been caused by a lack of medication. You should be able to remedy this problem by continuing with the extra evening dose.

Sleep solutions. If the extra dose triggers the opposite reaction—and your child becomes more "wired"—then sleeplessness is a side effect. The problem can often be remedied by giving your child a weight-adjusted dose of the antihistamine Benadryl just before bedtime. If your child lies in a dark room after taking a dose, sleep should come in an hour. (Benadryl is for occasional use only.)

Tool

If your doctor seems less concerned than you are about your child's appetite problems, download CHADD's "Fact Sheet No. 3, Medical Management of ADHD" (http://help4adhd.org/Portals/o/Content/CHADD/NRC/Factsheets/medication.pdf) and share it with him.

More ADHD sleep solutions: http://additu.de/28

What if the sleep problem persists? See what happens if you reduce the 4:00 P.M. dose or give it up entirely. Of course, this might cause your child's ADHD to flare up in the evening. If so, ask the doctor about trying a non-stimulant medication.

For some children, the only medication that is effective against ADHD symptoms is a stimulant that causes severe sleep problems. In such a case, ask your doctor about giving your child a dose of clonidine (Catapres) about one hour before bedtime. This non-stimulant medication often has a sedating effect.

Stomachaches and Headaches

No one knows why stimulants cause these problems in some kids. But often it's helpful if the child eats something before taking his medication. Occasionally, one stimulant will cause symptoms while another will not. For very sensitive children, especially allergic children, many medications must be tried to determine the most effective and least problematic one.

If stomachaches or headaches persist, it may be necessary to try a non-stimulant medication.

Tics

These sudden, involuntary muscular contractions typically involve the eyes, face, mouth, neck, or shoulders. If the muscles in the throat are involved, the tic might cause sniffing, snorting, or coughing. In some cases, children experience tics shortly after starting on a particular medication, though recent studies have concluded that stimulant medications do not directly cause tics. §

If tics occur, stop the medication and try another one. In most cases, the tics will go away within several weeks. If there is a family history of tic disorder, however, the tics may not go away. Talk to your doctor about your family's history of tics when starting your child on ADHD medication.

Emotional Problems

When the dosage is too high, stimulants can cause children to seem "spacey" or "zombie-like," or to be uncharacteristically tearful or irritable (a condition known as emotional lability). In general, the best way to rein in these side effects is to lower the dosage.

Tip

In the case of persistent tics, ask your doctor about clonidine (Catapres), risperidone (Risperdal), or guanfacine (Tenex), each of which has been shown to ease the condition.

If reducing the dosage causes your child's ADHD symptoms to re-emerge, ask your doctor about trying another stimulant. If all stimulants cause problems, you'll have to move on to a non-stimulant.

Rebound

Some children experience 30 to 60 minutes of increased hyperactivity, impulsivity, and nonstop talking a half-hour or so after the last dose of the day wears off. It is as though they have stored up energy all day and, once the medicine wears off, this pent-up energy explodes. This effect is called rebound. You may be able to avoid this problem by reducing the last dose.

Another helpful strategy is to add another short-acting dose to the regimen at 4:00 or 8:00 P.M. If this additional evening dose fails to help—or if it causes sleep problems—it's probably best to switch your child to a non-stimulant medication.

Other Side Effects

If your child has a problem with anger or suffers from anxiety, depression, or obsessive-compulsive disorder, taking a stimulant can make symptoms worse. (Sometimes, you may be unaware that your child has such a disorder until he starts taking a stimulant.) In any of these situations, stopping the stimulant should solve the problem.

If your child is taking medications to address an emotional disorder, it may be possible to re-start stimulants. Another option is to try a non-stimulant medication.

NON-STIMULANT MEDICATIONS

If stimulants cannot be used because their side effects prove uncontrollable, consider using one of the non-stimulant medications. Some children experience side effects on both stimulants and non-stimulants. In this case, combining much smaller doses of a stimulant and a non-stimulant might be the solution.

TRICYCLIC ANTIDEPRESSANTS

Along with **bupropion** (Wellbutrin), three tricyclics are used to treat ADHD: **imipramine** (Tofranil), desipramine (Norpramine), and nortriptyline (Pamelor).

Learn more about treating ADHD alongside related conditions in ADDitude's on-demand webinars:

http://additu.de/webinars-treat

Fatigue is the most frequent side effect of these four drugs. This problem often diminishes over the first several weeks. If it does not, ask your doctor about reducing your child's daily dosage, or about dividing one large dose into three smaller doses—one to be taken in the morning, another at about 4:00 P.M., and the third at bedtime.

Bupropion and the tricyclics can also cause constipation, dry mouth, and blurred vision. These "cholinergic" effects often respond to symptomatic treatment. That is, a high-fiber diet or a fiber supplement might eliminate constipation, throat lozenges might moisten a dry mouth, and so on.

If these approaches fail, try another medication. Unlike stimulant medications, tricyclic medications must be tapered off slowly. Very rarely, these medications cause a child to wake up at 4:00 to 5:00 A.M. and be unable to go back to sleep. If reducing the evening dose or giving it a bit earlier doesn't ease your child's "early morning insomnia," try another non-stimulant medication.

Brain and heart problems. In some children, tricyclics affect brain-wave activity. If your child has a seizure disorder, a tricyclic might exacerbate the problem. Discuss the matter with your doctor.

Tricyclics have also been known to affect the electrical conduction pattern within the heart, triggering a rapid pulse. This is a rare side effect, and it generally stops once the medication is stopped. If you are concerned, discuss this with your doctor.

ANTIHYPERTENSIVES

Clonidine (Catapres), guanfacine (Tenex), and time-release guanfacine (Intuniv) control impulsivity in certain people with ADHD. However, these meds may cause daytime sedation. If this occurs, reducing the dose or spreading it out over the day may solve it. If not, ask your doctor about trying another non-stimulant medication.

ATOMOXETINE

This medication (**Strattera**) can cause stomachaches, decreased appetite, nausea, vomiting, dizziness, fatigue, and mood swings. These problems often go away over time. It they do not, try lowering the dosage or replacing a once-a-day dosing regimen with several smaller doses during the day. If these steps fail, ask your doctor about trying a different non-stimulant medication.

More on combatting dry mouth and other common side effects:

http://additu.de/cse

ADHD Treatment: Information and Resources for Adults & Children

http://additu.de/treat

CHAPTER 5 Alternative Treatments

5 Natural Therapies to Supplement ADHD Medications

Non-drug treatments—everything from training the brain to taking the right supplements—can help manage ADHD symptoms without side effects.

In this age of herbal supplements, cult diets, and as-seen-on-TV miracle cures, it's more important than ever for parents of children with ADHD, and for adults with ADHD, to separate legitimate alternative therapies from the sometimes-dangerous scams.

Read about the full menu of alternative treatments: http://additu.de/alt-treat

Here we explore several promising alternative therapies—neurofeed-back, nutrition and supplements, exercise, and nature therapy—to help you make informed decisions about what ADHD treatment is right for you or your child.

The best ADHD treatment often involves a combination of therapies, including medication and non-drug alternatives. Fish oil and exercise are adjuncts to medication, not substitutes for it.

"Asking if you should use medication or a complementary therapy to treat attention deficit disorder is like asking whether you should eat fruit or vegetables," says Barbara Ingersoll, Ph.D., a clinical psychologist and author of <u>Daredevils and Daydreamers: New Perspectives on Attention Deficit/Hyperactivity Disorder</u> (Main Street Books). "You often need both."

Since the effectiveness of any treatment for attention deficit disorder varies with individuals and rarely acts in a vacuum, don't begin any new course of treatment before discussing it with your doctor.

1) Neurofeedback: Better Brain Waves

The goal of this high-tech therapy is to teach patients to produce brain waves that help one to focus. **by David Rabiner, Ph.D., Edward Hamlin, Ph.D., and the ADDitude Editors**

Each year, countless parents of children with ADHD begin researching high-tech brain exercises because traditional medication has stopped working (or has never worked), produces unwelcome side effects, or, most commonly, doesn't manage all the symptoms of ADHD.

Today, more than 10,000 children in the U.S. are receiving neurofeed-back treatments to reduce impulsivity and increase attentiveness, according to Cynthia Kerson, director of education at Brain Science International and former executive director of the International Society for Neurofeedback and Research. Seventy-five to 80 percent of them have some type of attention deficit condition.

Neurofeedback sessions are brief (approximately 30 minutes) and painless, but they are also expensive. The average course of treatment can range from \$2,000 to \$5,000. One promising aspect of neurofeedback is that its benefits are retained after treatment is ended—benefits like sustained focus, diminished impulsivity, and reduced distractibility.

Vincent Monastra, Ph.D., founder of the FPI Attention Disorders Clinic, in Endicott, New York, author of <u>Parenting Children with ADHD: 10 Lessons That Medicine Cannot Teach</u> (American Psychological Association), and a practitioner of neurofeedback, conducted a year-long, uncontrolled study with 100 children who were taking medication, half of whom also received neurofeedback. Monastra's results suggest that "patients who did not receive the therapy lost most of the positive effects of treatment one week after they were taken off medication." Those who combined medication with neurofeedback maintained their ability to control attention.

Numerous other studies, although none blind, showed that neurofeed-back therapy can result in improved attention, diminished hyperactivity, and enhanced executive functions, including working memory. In 2012, researchers studied 14 randomized trials and calculated the following effect sizes: a 0.8 reduction in inattention and 0.7 reduction in hyperactivity for participants with ADHD¹⁰. In the scientific community, these are considered fairly robust results, though not as high as the

More studies on neurofeedback: http://additu.de/neurostudy

approximate effect size of 1.0 that is typical of stimulant medications.

How Does It Work?

Neurofeedback is based on a simple principle. "The brain emits different types of waves, depending on whether we are in a focused state or daydreaming," explains Siegfried Othmer, Ph.D., chief scientist at the EEG Institute, in Woodland Hills, California. Many ADHD brains generate an abundance of low-frequency delta or theta brain waves, and a shortage of high-frequency beta brain waves. Over 20 to 40 sessions, neurofeedback works to reverse that ratio.

The goal is to teach the patient to produce the brain-wave patterns associated with focus. More specifically, neurofeedback therapy works to increase the brain's capacity and predisposition for beta waves, which are associated with efficient information processing and problem solving. At the other end of the spectrum are delta and theta waves, which occur in the brain when it's relaxing or daydreaming. When a high proportion of theta waves are present, patients complain of incomplete work, disorganization, and distractibility. Neurofeedback aims to diminish the frequency of delta and theta waves. The result: Some symptoms of ADHD—impulsivity, distractibility, and acting out—diminish.

Treatment Specifics

After a practitioner takes a detailed history of the patient, he "maps" the patient's brain. The patient wears a cap lined with electrodes and sits with his eyes closed for several minutes. He is then asked to perform a complex cognitive task, such as reading aloud. The results are shown as a color-coded map on a computer screen, indicating areas of the brain where there is too much or too little brain-wave activity—the sources, theoretically, of the patient's ADHD symptoms.

This digital map enables a person's brain activity to be compared with other brain-wave patterns stored in databases—and can help fine-tune a treatment plan by delineating sites for the electrodes.

During treatment, a child wears the headgear while sitting in front of a video screen. His goal: to move the characters in a computer or video game (goals vary, depending on the protocol the practitioner Learn more about neurofeedback from Naomi Steiner, M.D., in this ADDitude on-demand webinar:

http://additu.de/neuro

uses) by producing short bursts of sustained brain-wave activity in those areas of the brain thought to be under-aroused. The software generating the game monitors and records brain activity. Loss of focus will cause the game to stop. It plays only when the child exercises that portion of the brain that is deficient in focus. Each traditional neurofeedback therapy session lasts no more than 30 minutes, ideally.

Neurofeedback Critics

Neurofeedback has its critics, many of whom have valid objections. Unlike medication, the therapy hasn't been rigorously tested in large, double-blind studies. Some experts also claim that it isn't clear from studies whether improvements in children are due to the therapy itself or to the one-on-one time spent with a therapist.

Another criticism is that, while neurofeedback may sharpen attention in some children, it doesn't necessarily improve the other problems associated with ADHD.

Many experts believe that neurofeedback is a promising treatment for ADHD, but the current research suggests it's best considered as a complement to medication and/or behavior therapy rather than as a standalone treatment. Research support for both stimulant medication therapy and behavior therapy is stronger than for neurofeedback at the moment. "If I had a child with ADHD, I might use neurofeedback as one part of the treatment regimen," says David Rabiner, Ph.D., senior research scientist at Duke University's Center for Child and Family Policy.

The ABCs of Neurofeedback

Before Therapy: Read up before jumping in. Then discuss the therapy with your spouse or partner. Parents should agree on therapy. A parent's negativity may affect results.

During Therapy: Have a trainer collaborate with your primary-care physician or psychiatrist. Depending on the results of therapy, you may need to change the dosage or the type of medication.

Who Should Avoid Therapy: Children younger than six and those who don't understand what's asked of them in neurofeedback sessions.

Who Neurofeedback Helps the Most: The brain remains plastic

More on the pros and cons of neurofeedback: http://additu.de/5c

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http://additu.de/treat

throughout life, but younger brains can more quickly change and adapt than can older brains. In other words, adults *can* use neurofeedback to treat ADHD. But children often require fewer sessions, are less skeptical of the treatment, and make improvements more quickly.

Side Effects: Typical complaints from children include sleepiness, headaches, and/or crankiness right after a session. These are usually relieved by a short nap or a protein-rich snack. Some children experience a temporary increase in mood swings around the eighth week of treatment. Reducing medication dosage often alleviates side effects.

How Much, How Long?

The initial brain mapping costs \$250; each session, from \$125 to \$200. An average course of treatment lasts from nine to 12 months, for once- or twice-weekly sessions. The cost can range from \$2,000 (with insurance, although few companies cover neurofeedback prescribed for a diagnosis of ADHD) to \$5,000 (without insurance). Ask your practitioner whether he is willing to offer a sliding-scale rate based on your income. Many do.

How Do You Know It's Working?

Frequent benchmarking is key to meaningful neurofeedback treatment. What this means: A therapist should regularly compare each patient's new EEG readings to his or her baseline assessment. This comparison helps assess the type and scale of changes taking place in brain wave patterns, and helps the practitioner adjust treatment going forward.

Also important is gathering parent or patient feedback about behavior changes reflected at home. Patients should initially commit to no more than 6 to 10 neurofeedback sessions and insist on frequent evaluation. If brain-wave and behavior improvements take place in this time, most experts recommend completing 20 to 40 sessions total in order to achieve lasting changes. Sometimes, patients will attend several sessions before seeing positive results. But if treatment is not working after 10 sessions, it's time to stop.

Where to Find a Trainer

Contact the Biofeedback Certification Institute of America (BCIA; **bcia.org**) for a list of practitioners. Look for those with advanced degrees in psychology, neuroscience, or one of the biomedical or social sciences. Interview all candidates. Note: BCIA is not regulated by the government.

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2) Nutrition and Supplements

Studies suggest that balancing your diet and taking the right supplements can sharpen focus and improve attention.

OMEGA-3 FATTY ACIDS

Found mainly in cold-water, fatty fish, such as sardines, tuna, and salmon, omega-3 fatty acids are believed to be important in brain and nerve cell function. The body cannot make omega-3 fatty acids by itself, and most people don't consume enough of them to derive benefits, which is why fish-oil supplements are popular today.

For a thorough study of ADHD, diet and nutrition, download this *ADDitude* eBook

http://additu.de/nutrition

The Benefits of Fish Oil

Omega-3 fatty acids seem to improve anyone's mental focus, but these compounds may be especially helpful to those with ADHD. One study 11, published in 2005 in *Reproduction Nutrition Development*, showed that omega-3s tended to break down more readily in the bodies of patients with ADHD.

Another study¹², published in 2004 in *The Journal of Nutritional Biochemistry*, suggested that children with ADHD were more likely to have low blood levels of omega-3 fatty acids than children who showed no symptoms of the condition. Although both studies were small, the results led scientists to surmise that increasing omega-3s can help control symptoms.

Edward Hallowell, M.D., founder of the Hallowell Center for ADHD, in Massachusetts, recommends that all of his patients take omega-3 supplements, and notes that "it seems to help most with mental focus, not hyperactivity or impulsivity."

Picking the Right Supplement

If you decide to add omega-3s to your diet, how do you determine which brand is best? There are two main types of omega-3 fatty acids in fish oil: eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA). Both seem to help brain function, but, because they are slightly different compounds, they work in different ways.

Early studies that tested the impact of either EPA or DHA in children with attention problems produced mixed results. Only recently have researchers begun to look at supplements that combine the two. In a

Warning

High doses of omega-3s may cause nausea, diarrhea, and other gastrointestinal discomfort. Consult your doctor before adding this supplement to your routine.

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small study¹³, published in *Nutrition Journal*, for example, nine children with ADHD were given supplements containing both EPA and DHA every day. After eight weeks, the children showed significant improvements in ADHD symptoms.

The most popular omega-3 supplements differ in the amounts of EPA and DHA they contain. Based on the most recent research, Dr. John Ratey, associate clinical professor of psychiatry at Harvard Medical School, recommends that you choose a supplement that has at least three times the amount of EPA to DHA. "The data seem to show that those using supplements containing higher ratios of EPA get a better response in ADHD symptoms," says Ratey.

According to Sandy Newmark, M.D., director of the Osher Center for Integrative Medicine, in San Francisco, children four to six years of age should start with a daily supplement of 500 mg. of omega-3s; children seven years and older, 1000 mg.

BALANCED MEALS

Choosing the right foods—or cutting back on the wrong ones—may prevent ADHD symptoms from swinging out of control. Poor nutrition can cause a child to become distracted and restless.

Dr. Edward Hallowell, author of **Delivered from Distraction** and **Superparenting for ADD**, advises all of his patients to visualize their plates when preparing a meal. Half of the plate, he recommends, should be filled with fruits and vegetables, one-fourth with a protein, and one-fourth with carbohydrates. This combination is a balanced diet, and it may control swings in behavior caused by hunger, surges in blood sugar, or a shortfall of a particular nutrient.

The Power of Protein

Protein is important, in part because it prevents surges in blood sugar that may increase hyperactivity. The brain makes a variety of chemical messengers, or neurotransmitters, to regulate wakefulness and sleep. Certain neurotransmitters, including dopamine and norepinephrine, boost alertness. Others, including serotonin, cause drowsiness.

Studies by <u>Massachusetts Institute of Technology</u> neuroscientist Richard Wurtman, Ph.D. <u>14</u>, and others have shown that dietary protein triggers synthesis of alertness-inducing neurotransmitters, while

Tip

Good sources of protein include lean meats and poultry, eggs, unprocessed nuts and seeds, low-fat milk or milk products, whole-grain cereals and bread, and fresh fruits.

dietary carbohydrates trigger the synthesis of neurotransmitters that cause drowsiness.

These findings lend credence to the belief that people with ADHD fare better on a protein-rich breakfast and lunch. A study in the *Journal of Psychiatric Research* suggests that hyperactive children did better on tests, including a test for attention, on a high-protein breakfast than they did after eating a meal high in carbohydrates.

Hallowell also advocates eating several servings of whole grains each day to prevent blood sugar levels from spiking and plummeting, and cutting back on foods that contain dyes and excess sugar.

Food Additives and Sugar

Several studies 16 suggest that some children with ADHD are adversely affected by food additives—causing them to be inattentive and fidgety. Dyes and preservatives are also found in personal care products, such as toothpaste and mouthwashes—some of which may be swallowed by young children. Many pediatric medicines also contain additives. Ask your doctor whether there is an additive-free substitute that would work just as well.

More about the impact of diet and exercise on ADHD symptoms:

http://additu.de/adhd-nutrition

Mind Your Minerals

Eating the right foods can improve ADHD symptoms; not eating enough of the right foods can worsen them. Deficiencies of several minerals—zinc, iron, and magnesium—have been shown to increase inattention, impulsivity, and hyperactivity in children.

Zinc. A 2004 study¹⁷, published in *BMC Psychiatry*, followed 44 children with ADHD, half of whom were given 55 mg. of zinc sulfate, as well as methylphenidate, the active ingredient found in both Ritalin and Concerta. After six weeks, ADHD symptoms in all of the children improved; however, those who took zinc showed even greater improvement in their symptoms of hyperactivity and impulsivity.

Zinc is involved in the regulation of dopamine, a neurotransmitter that helps control mood. John Ratey, M.D., believes that zinc sulfate may make a drug like Ritalin more effective by improving the brain's response to dopamine. Zinc is found in beef, turkey, chicken, pork, lamb, oysters, and beans. Zinc can cause side effects in high dosages,

so always talk with your doctor before adding a zinc supplement to your child's diet.

Iron. Research suggests that low levels of iron can increase ADHD symptoms in children with the condition. One study 18 found that 84 percent of children with ADHD had significantly lower levels of iron, compared with 18 percent of kids without the condition. Iron plays an important role in the brain, affecting production of the key neurotransmitter, dopamine. If you suspect your child has low levels of iron, talk with your doctor about having his iron levels tested. Diet, not supplements, is the safest way to increase your child's iron levels.

Magnesium. This mineral is involved in many metabolic processes in the body. Among the substances that are developed from magnesium are the myelin sheath that surrounds our brain cells (making neural transmission possible) and the neurotransmitters that produce attention and concentration. Like other minerals, magnesium is found in meats, nuts, soybeans, and spinach.

More on minerals to fight ADHD: http://additu.de/20

3) Exercise: A Med Without Side Effects

Physical activity may be good for focus. And it's inexpensive, self-prescribed, and accessible to everyone.

When you walk, run, or do a set of jumping jacks or pushups, your brain releases several important chemicals, including endorphins—hormone-like compounds that regulate mood, pleasure, and pain. That burst of activity also elevates the brain's dopamine, norepinephrine, and serotonin levels. These brain chemicals affect focus and attention.

"Exercise turns on the attention system, the so-called executive functions—sequencing, working memory, prioritizing, inhibiting, and sustaining attention," says John Ratey, M.D., author of <u>Spark: The</u> <u>Revolutionary New Science of Exercise and the Brain</u> (Little, Brown). "On a practical level, it causes kids to be less impulsive, so they are ready to learn."

More on how physical activity changes your brain for the better: http://additu.de/110

Walking for 30 minutes, four times a week, will do the trick. But evidence has shown that any of the martial arts, ballet, ice skating, gymnastics, rock climbing, mountain biking, whitewater paddling, and—sorry to tell you, Mom—skateboarding are especially good for adults and children with ADHD. Why? The technical movement inherent in these types of sports activates a vast array of brain areas that control balance, timing, sequencing, evaluating consequences, error correction, fine motor adjustments, inhibition, and, of course, intense focus and concentration.

Firming Up the Brain

Most of us think of exercise as a way to trim our waistlines, but the better news is that routine physical activity also firms up the brain. The latest news about exercise is that it helps kids push through past failures and attack things they didn't succeed at before. "The refrain of many kids with ADHD is, 'No matter what I do, I'm going to fail,'" says Ratey. "Rat studies show that exercise reduces learned helplessness. If you're aerobically fit, the less likely you are to learn helplessness."

How Physical Activity Helps

So how, exactly, does exercise deliver these benefits to the ADHD brain? When you walk, run, or do a set of jumping jacks or pushups,

your brain releases several important chemicals, such as endorphins, the hormone-like compounds that regulate mood, pleasure, and pain. A burst of activity also elevates the brain's dopamine, norepinephrine, and serotonin levels. These brain chemicals affect focus and attention. When you increase dopamine levels, you increase the attention system's ability to be regular and consistent, which has many good effects, like reducing the craving for new stimuli and increasing alertness.

Which Activity Is Best?

You don't have to be a marathoner, or even a runner, to derive benefits from exercise. Get your child involved in something that he finds fun, so he will stick with it. Team activities or exercise with a social component are especially beneficial. Studies 19 have also found that tae kwon do, ballet, and gymnastics, in which you have to pay close attention to body movements, tax the attention system.

Many schools include exercise in their curricula to help kids do better in the classroom. A school in Colorado starts off the day by having students do 20 minutes of aerobic exercise to increase alertness. If they act up in class, they aren't given time-outs but time-ins—10 minutes of activity on a stationary bike or an elliptical trainer. "The result is that kids realize they can regulate their mood and attention through exercise," says Ratey. "That's empowering."

10 great sports for kids with ADHD: http://additu.de/f6

4) Nature Therapy: The Benefits of Green Time

Getting out into nature every day has a calming effect on ADHD symptoms, and may improve attitude and behavior.

A 2009 study²⁰ in the *Journal of Attention Disorders* confirmed that as little as 20 minutes of daily "green time" can reduce the symptoms of ADHD in children. The research examined the impact of several different outdoor environments — including a nature-filled park and an urban setting — on children's attention, finding that children who walked through the green space were able to concentrate better and recover from their "attention fatigue." (Attention fatigue occurs after long periods spent concentrating, inhibiting impulses, or being patient.)

Researchers hypothesize that engagement with nature buffers life stresses, which aggravate ADHD symptoms.

"When you concentrate on a task like writing, neurotransmitters in the brain's prefrontal cortex are depleted," says study author Frances Kuo, Ph.D., of the <u>University of Illinois</u>. "Being in a natural environment seems to let the system replenish itself."

The Need for Nature

In his book *Last Child in the Woods*, Richard Louv traces several emerging trends—from higher levels of childhood obesity and depression to a dearth of creativity and lower academic performance—back to what he calls a "nature deficit" in today's plugged-in kids. He argues that the human brain is hard-wired to thrive on the sensory input provided by swaying trees and gurgling brooks, and their absence may change us in fundamental ways.

The University of Illinois researchers, while not questioning the effectiveness of current ADHD treatment methods, have suggested that nature therapy could be a third option, in conjunction with prescription medications and behavior therapy.

How Much Green Time Is Needed?

Experts recommend that a child or adult get 30 minutes of green time each day—indoors and/or outdoors. A <u>Cornell University</u> study²¹ reported that the more nature a child encountered at

A "Green" Tip

Gardening offers a bounty of visual, tactile, and olfactory delights. Plus, watering plants each day teaches responsibility, and awaiting blooms helps kids understand delayed gratification.

Quote

"The greater the exposure to nature, the greater the attentiveness." —Frances Kuo, Ph.D.

More about the impact of nature therapy on ADHD: http://additu.de/outside

home—including exposure to indoor plants and window views of natural settings—the less he or she was affected by negative stresses.

Three Ways to Get Out There

Research also shows that aerobic activity, as discussed in "Exercise: A Med Without Side Effects" (above), can relieve ADHD symptoms. Here are some ideas for combining physical activity with a dose of nature to improve physical and mental health:

Commute smarter. Walk or bike to school via the greenest route available—waking up a few minutes early will pay off in sustained attention all day.

Walk the dog. A dog is an enthusiastic fitness partner who will encourage you to walk or run outside daily.

Ride a bike. Whether it's a leisurely ride around the neighborhood, a mountain bike trek on rough-and-tumble trails in the woods, or a hard and fast workout that satisfies your need for speed, biking is a great way to get out in nature.

CHAPTER 6 Behavior Therapies

How to Improve Behavior and Focus

Studies show that behavior therapy, when used in combination with medication, can improve attitude and behavior, and increase focus and organization.

"Drugs can do only so much," says <u>Patricia Quinn, M.D.</u>, a Washington, D.C., pediatrician who's been been treating children with ADHD for more than 25 years. "Drugs don't improve selfesteem, time management, or organizational skills." And that is where behavior therapy comes in.

According to a landmark study²² by the <u>National Institute of Mental Health</u>, behavior therapy and medication together promise the best results for children with ADHD—delivering higher parental satisfaction and better academic performance on some metrics than taking medication alone.

Combining Therapies

When Dr. Quinn diagnoses a child with ADHD, she first prescribes behavior therapy and then tackles the topic of medication with the parents. According to the American Psychological Association, behavior therapy should be the first line of treatment for children with ADHD under the age of five. William Pelham, Ph.D., director of the Center for Children and Families at Florida International University, recommends only behavior therapy to begin with, partly because recent evidence suggests that kids who go on medication straight away never try the behavioral approach to treating ADHD.

"The benefit of using behavior therapy first is that, if a child also needs medication, he can often get by with a smaller dose," says Pelham. "Also, parents who see that medication is working are less motivated to follow through with behavior therapy. That would be fine if the data showed that medication alone helped the long-term trajectory of kids with ADHD. It doesn't."

Countering Genetics

An intriguing study²³ from the <u>University of Oregon</u> suggests that behavior therapy may actually prevent ADHD or minimize its severity in children with a gene called the "7 repeat allele." Roughly 25% of children with ADHD have this gene.

FYI

Not all behavior-therapy programs are created equal. "The COPE [Community Parent Education] programs use larger groups of parents than some other programs," says Charles Cunningham, Ph.D., a professor in the department of psychiatry and behavioral sciences at McMaster University, in Hamilton, Ontario. "This dynamic creates a supportive atmosphere and encourages collaboration."

To find a COPE program in your area, talk with your child's therapist, an ADHD support group, a community mental health hospital, or your own insurance provider. If there isn't a COPE program in your area, look for similar programs, like The Incredible Years (incredibleyears.com) and Triple P (Positive Parenting Program; triplep.net).

Learn more about behavior therapy and children with ADHD:

http://additu.de/1r

ADHD Treatment: Information and Resources for Adults & Children http://additu.de/treat "It appears that, in children who have a genetic susceptibility to ADHD, things can be done to prevent it," says Michael I. Posner, Ph.D., who headed the study. "Good parenting may be part of that."

How It Works

Behavior therapy is a structured discipline strategy based on rewards and consequences—such as increased or decreased TV privileges—that aims to incrementally teach children new, preferred ways of behaving. The desired behavior—waking up on time, reducing interruptions, and so on—varies widely from child to child, but the method for achieving that behavior is the same:

- Focus narrowly on a clear, realistic expectation for your child
- Establish benchmarks and document daily achievements
- Note and reward improvement when it occurs
- Expand your program by working with the school

Though not all health-care professionals concur with the Oregon study cited above, they do agree that implementing behavior therapy at home is worth the effort.

Step One

Name a single goal for which you can easily measure progress. If your goals are too diverse (going to bed at a certain time, being dressed by 8 A.M., doing homework immediately after school, and remembering to take out the trash), you probably won't be able to observe and keep track of your child's accomplishments. You may also overwhelm your child and set him up for disappointment if he fails at one or more goals.

Step Two

Create a chart or other visual reminder that outlines exactly what is expected of your child, when it is expected, and how his behavior will be assessed. Post the chart or checklist where your child will see it—this serves as a reminder and cuts down on parental nagging.

Step Three

Reward your child quickly and effusively each time she achieves the desired behavior. Place stars on the child's reminder chart, extend a special privilege, like playing a video game, or award 15 minutes of additional playtime after dinner. The rewards need not be expensive, but they should be meaningful to your child—and worth working for.

Tip

Evidence suggests that behavior therapy works best when it is initiated at a young age.

Sample rewards when using behavior therapy

Daily rewards

- Dessert after dinner
- Computer games for 15 minutes
- Staying up 30 minutes later

Weekly rewards

- Watching a movie
- Special activity with mom or dad
- Day off from chores

School-based rewards

- Care for class animals
- Bring message to office
- Take a positive note home

Experts often advise parents to discourage negative behavior by ignoring it, because a child often acts up to get attention and may stop acting up if he doesn't receive it. If the negative behavior is too serious to ignore, parents should take away a privilege—for example, 15 minutes of television time lost. At the same time, parents should keep an eye out for the negative triggers that encourage bad behavior and try to alleviate them.

Step Four

Speak to your child's teacher about the behavior therapy tactics you're using at home, and work with her to devise a way to keep track of and reward desired behavior at school. You might employ a daily report card or regular journal entries to keep track.

At the beginning of each school year, meet with the teacher to create a report card that will allow her to record how well the student has performed on several specific target behaviors in the classroom each day. The child brings home the report card (this can be done via e-mail, if you're afraid it won't get home), so parents can recognize and reward their child for specific good behaviors at school.

Be specific when discussing with the teacher the skills and behavioral goals you'd like to reinforce: "Completed assignments within the designated time" or "kept hands to himself" are more revealing than "Johnny had a good day." You can download a daily report card from the <u>Center for Children and Families at the University of Buffalo</u>. Weekly report cards can be equally effective and less burdensome for a busy teacher.

Need help working with your child's teacher or school administrators? Go to http://additu.de/collaborate

Tip

Work to avoid these common mistakes when using behavior therapy:

- Murky rules: State your expectations clearly and post them around the house.
- Unclear commands: Spell out your desires in detail, not generalities.
- Unreal expectations: Praise your child for doing something well at least five times as much as you criticize him for bad behavior.
- **Little patience**: Keep in mind that children with ADHD often struggle to transfer what they've learned from setting to setting, so be prepared to maintain a role as your child's advocate for a long time.

How Cognitive Behavioral Therapy Works

You can overcome negative thoughts and actions caused by ADHD by learning to think and act positively.

Most adults with ADHD need medication, but medication is not always enough to manage symptoms. Many experts recommend meds and psychotherapy, specifically cognitive-behavioral therapy (CBT). CBT was developed 40 years ago, and it has proven highly effective in treating anxiety and depression. Only in the last decade has it been used for ADHD.

There's no evidence that CBT can replace drug therapy for ADHD, or even allow a child or adult to take lower dosages. In fact, no head to head studies have directly compared CBT to medication. But research suggests that it works better for ADHD than other forms of talk therapy. One study²⁴, from Boston's Massachusetts General Hospital, found that a combination of drug therapy and CBT was more effective at controlling ADHD symptoms than was drug therapy alone.

"CBT picks up where medication leaves off," says Steven A. Safren, Ph.D., professor of psychology in the department of psychiatry at <u>Harvard Medical School</u>. "Even after taking medication, most adults have residual symptoms. This treatment may make them better."

How CBT Works

Traditional therapy focuses on emotions, and mines the past to find causes of current problems. CBT is based on the recognition that cognitions, or automatic thoughts, lead to emotional difficulties. Automatic thoughts are spontaneous interpretations of events. These impressions are susceptible to distortion, such as unfounded assumptions about yourself (or others), a situation, or the future. An unhealthy internal dialog could prevent an individual from working toward an aggressive goal, working to develop productive new habits, or generally taking calculated risks.

CBT is a tool for getting organized, staying focused, and improving one's ability to control anger and get along with others. This might sound like what's offered by ADHD coaches (see Chapter 7) and self-help books. But knowing what to do is seldom enough—irrational thoughts and expectations stop you from doing it. CBT eliminates these roadblocks.

Tool

To find therapists who use CBT, contact the Association for the Advancement of Behavior Therapy (http://behavenet.com/association-advancement-behavior-therapy) or the Academy for Cognitive Therapy (http://www.academyofct.org).

Tip

Work to avoid negative thinking during the course of the day. For example:

- Don't use "should" statements.
- Don't predict that things will turn out badly.
- Don't view a single negative event as part of a pattern.
- Don't exaggerate the significance of minor problems while trivializing your accomplishments.

Dealing with Distorted Thinking

Demoralizing thoughts and beliefs keep many adults with ADHD from achieving goals and realizing dreams. Distorted thinking can include all-or-nothing thinking and mind reading (you know what people think about you, or something you've done—and it's bad) or comparative thinking, in which you measure yourself against others and feel inferior, even though the comparisons may be unrealistic. Once a therapist works with you to recognize such distorted thoughts, you'll be able to replace them with realistic, constructive ones.

"Understanding how you think is an effective start to making changes in your life," says J. Russell Ramsay, Ph.D., co-director of the Adult ADHD Treatment and Research Program at the <u>University of Pennsylvania</u>. "Changing thoughts and changing behavior work hand in hand. Widening your view of a situation makes it possible to expand the ways you can deal with it."

Most individuals find that they need CBT to target ongoing struggles with disorganization and procrastination, despite being on ADHD stimulants. As has been said many times, "pills don't teach skills." The combination of medication and CBT is often the treatment of choice for dealing with the wide-ranging effects of ADHD.

CHAPTER 7 Working with an ADHD Coach

ADHD Coaching: What You Need to Know

An ADHD coach can help you solve problems at home and at work—and to achieve your dreams.

Medication and alternative treatments have helped you manage some of your ADHD symptoms. You are more focused and less impulsive. But your life, at times, still seems out of control. You want to stop chronic disorganization and lateness, which have been hurting your marriage. And you may have dreams you want to realize—starting your own business, perhaps—but you don't know how to get started. An ADHD coach can help you with both.

What are the characteristics of a good coach?

A coach knows how to encourage people, can solve problems, and provides support to allow the client to accomplish his goals.

Is an ADHD coach like a therapist?

Coaching and therapy are two different things. "Psychotherapy deals with healing psychological issues and is generally long-term and intensive. The focus is often on past history and how it relates to that individual's development," says ADHD coach Sandy Maynard.

Why couldn't I just ask a friend to do this for me?

Is your friend going to understand how and why ADHD makes you do certain things? How are you going to feel about this friend when he demands to know why you didn't reach a goal? It is better to work with someone who is removed from your situation.

Is coaching cheaper than therapy?

Prices vary, from a low of \$50 per hour to over \$250 per hour, depending on the expertise of the coach and the level of involvement.

Does coaching involve a long-term commitment?

It depends on your goals. If you're using a coach for a specific project, that will determine how long you commit to the process. If you are using a coach for general self-help, it could become a long-term relationship. Most coaches ask for a three- to six-month commitment.

What happens if I find that coaching doesn't work for me?

Very few coaches use written contracts. Most will usually let you stop immediately if coaching is not working for you.

How to find a coach

Contact your local chapter of CHADD, your doctor, or your psychologist. Another option is to log on to the websites of organizations that certify, list, or refer coaches. They are:

International Coach Federation (ICF; coachfederation.org)

ADHD Coaches Organization (ACO; **adhdcoaches.org**)

Also check the *ADDitude*Directory of ADHD
Professionals:
http://additu.de/adhd-coaches

Five Principles of Successful ADHD Coaching

A coach can help you accomplish goals and deal with pressing needs, but you must do the hard work to achieve success.

1. Work together to devise a plan.

ADHD coaching encourages you to assess your most pressing needs. It requires you and the coach to develop strategies to address them, fine-tuning the game plan until you get results. An ADHD coach works to create a climate of support and encouragement, so that you can discover for yourself how to replace negative, defeating behaviors with positive patterns of success.

Perhaps you have trouble paying bills on time. You plan to write the checks one Saturday a month, rather than once a week. But then you find yourself facing a pile of checks to write, and you go shopping or take a bike ride, rather than paying bills. Working with a coach, you will lay out a plan to address your bills weekly, and devise a way for the coach to hold you accountable.

2. Make your brain work for you.

Coaching focuses on the biological differences in your ADHD brain that have caused you to lose control of your life or prevented you from meeting a goal. An ADHD coach understands the neurobiological symptoms at the root of your negative behavior patterns, and, through this recognition, helps you learn to navigate the daily challenges caused by your symptoms.

You and your coach will develop ADHD-friendly strategies to cope with the things that have overwhelmed you, using the strengths of your ADHD to succeed. A coach serves as a cheerleader, helping you maintain hope as you do the difficult work of making changes in your life.

3. Become responsible without guilt.

You may still recall the disapproval you heard as a child: "What's wrong with you? Why didn't you finish your homework? How could you have lost your assignment?"

You have to believe that you can succeed. Many people with ADHD have been labeled "stupid." Refusing to accept this label can make all

FYI

You can interview coaches on the phone or in person. In most cases, the initial interview is free.

Tip

If you aren't sure a coach is right for you after the initial interview, pay for a trial coaching session before making a long-term commitment.

the difference in your life. An ADHD coach will work with you to reject the negative scripts that hold you back.

4. Be ready to change.

Your success with a coach will depend on whether you are ready to do the hard work of transforming your life, or even a little slice of it. When you can admit that you have a problem, when you want to change, and when you agree to work hard at whatever is necessary, you are ready for coaching.

5. Create a recipe for success.

Every coaching relationship should have these components:

- Partnership. Your job is to tell the coach about the areas in which you need help. As you work with the coach, the balance in the partnership should shift from the coach to you. In other words, you, not the coach, will eventually initiate changes in your life.
- **Structure.** You and the coach should establish routines that work with your strengths. It is easier to face tasks you enjoy or that you know you are capable of completing.
- **Process.** The coach should use language that lets you concentrate on specific actions and solutions, not on past failures.

More organization help for adults with ADHD:

http://additu.de/clutter

How to Find the Right Coach for You

What to look for, what to expect, and how to work together.

Clients sometimes hire a coach who doesn't specialize in ADHD. "They don't realize that strategies that work for clients without ADHD often don't work for people with ADHD, whose brains are wired differently," says ADHD coach <u>Michele Novotni, Ph.D., S.C.A.C.</u>, coauthor of *Adult AD/HD* (Pinon Press).

Look for a coach who is qualified and has worked extensively on the problems you want to address. Most important, find someone with whom you click. When you have a short list of two or three candidates, set up interviews and ask each of them the following questions:

1. Do you work with clients who have problems like mine?

You may choose to work with a coach on a short-term, goal-oriented basis (completing a stalled project or switching jobs), to help you achieve long-term goals (improving finances or a relationship), or to address pervasive issues (chronic disorganization).

2. Do you specialize in working with people like me?

If you need a coach for your child, ask about experience with children. If you're an entrepreneur who wants to launch a business, look for a coach who has worked with clients who have done so.

3. Do you coach in person or over the telephone?

Coaching by phone or Skype can be done anywhere and at almost any time. If there isn't a coach in your hometown, you can find a capable coach hundreds of miles away.

4. How long are the sessions?

Some coaches meet or talk on the phone with a client for an hour once a week. Many coaches and clients find that half-hour sessions, followed by one or two quick "check-in" phone calls, are ideal. If you need daily reinforcement, some coaches will work with you via e-mail.

5. Do you have personal experience with ADHD?

Often ADHD coaches have been diagnosed with attention deficit or have a close family member who has it. This gives them a deeper understanding of the issues. However, it is absolutely essential that

Other questions to ask a prospective coach:

- How long have you been an ADHD coach?
- Approximately how many people have you coached?
- What is your basic approach to coaching?
- What will you expect from me (doing homework, e-mailing between sessions)?
- How will you monitor my progress?
- How much will this cost?
- What is your policy if I have to cancel an appointment?

you find a coach you are comfortable with, regardless of their personal connection to ADHD.

Sign on the Dotted Line

Once you've chosen a coach, you will probably have to sign an agreement or contract. Many coaches use three-month agreements, and some ask for full payment up front. There is good reason for this. Around the fourth or fifth week, most clients lose interest in the process. If they commit to three months, they tend to stick with it, and they usually make progress during that time.

Getting Started

Expect the first meeting to take longer (between one and two hours) than the meetings that will follow because the coach wants to get to know you.

During the first session, tell her specifically what issue you want to address, and, along with the coach, plot the steps to achieve this. The coach will assign you homework, and subsequent sessions will begin with a review of your assignment.

Doing homework is critical to making progress. "Coaching is a partnership, but the client is in charge," says Novotni. "Coaches are not there to nag. We're there for support, to ask questions that get people thinking about whether certain strategies work." If they don't work, it's the coach's job to suggest others.

A coach should cheer your successes and tweak those strategies that didn't work. The coach monitors your progress and fine-tunes strategies until you get results. If you feel that the strategies she's suggesting aren't working, ask her to come up with new ones.

Making Progress—Or Not

You should see improvements during the first month, but interest and resolve often lag around the fifth week. Expect that this will happen, and remember that it doesn't mean you're not succeeding.

But what if you don't make progress—or you stop clicking with the coach? A good coach will probably notice the problem before you do, and will gladly discuss how to proceed. The coaching relationship is most effective when you honestly feel that a coach has your best inter-

Paying for coaching

Because insurance plans don't typically cover coaching, here are ways to defray the expense:

- If you are having trouble in the workplace, ask your human resources department about possibly picking up the cost.
- Pay through your flexible spending account.
- Ask your physician to write a prescription for coaching, the cost of which may be written off on your taxes.

FYI

Sessions are usually held weekly for the first three to six months. When you and the coach finally identify the strategies for achieving your goals, sessions may be cut back to biweekly or even monthly.

est at heart. If, however, your coach has exhausted her strategies and you are no closer to achieving your goal, find another professional. A good sign of progress is when you start solving problems that used to overwhelm you. The real goal of coaching is to change the way you perceive yourself and, ultimately, to teach you how to coach yourself.

What's in a Degree?

Here are some credentials and affiliations you will come across when searching for an ADHD coach, what they stand for, and what it took to earn them.

C.A.C. (Certified ADHD Coach)

Two years of ADHD coaching experience; 65 hours minimum of ADHD coach training. In addition, the applicant must pass exams demonstrating the use and knowledge of IAAC Core Competencies. These include ethics and conduct, knowledge of ADHD and ADD, and the ability to ask questions that move the client toward his goals.

S.C.A.C. (Senior Certified ADHD Coach)

Five years of ADHD coaching experience; 65 hours minimum of ADHD coach training. As with the C.A.C. credential, the applicant must take exams demonstrating the use and knowledge of IAAC Core Competencies (see Certified ADHD Coach).

A.C.C. (Associate Certified Coach)

Certification by the International Coach Federation (ICF) for life coaches; doesn't indicate a specialty or training in ADHD. Ask whether a coach has training in ADHD and has experience working with clients who have the condition.

P.C.C. (Professional Certified Coach)

Certification by the ICF, have coached a minimum of 750 hours. Ask whether they have training in ADHD and have experience working with clients who have the condition.

M.C.C. (Master Certified Coach)

Certification by the ICF, have coached a minimum of 2,500 hours. Ask about their training in ADHD and their experience working with clients who have the condition.

Checking credentials

These two top-rated institutions offer training for ADHD coaches:

- ADD Coach Academy (ADDCA; http://addca.com/)
- American Coaching Association (ACA; <u>americoach.org</u>).

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ADDitude Magazine

108 West 39th St, Suite 805 New York, NY 10018 646-366-0830

ADDitudeMag.com

American Academy of Child and Adolescent Psychiatry (AACAP)

3615 Wisconsin Avenue, NW Washington, DC 20016-3007

aacap.org

American Academy of Family Physicians (AAFP)

11400 Tomahawk Creek Parkway Leawood, KS 66211-2672 1-800-274-2237

aafp.org

American Academy of Pediatrics (AAP)

141 Northwest Point Boulevard Elk Grove Village, IL 60007-1098 1-800-433-9016

aap.org

American Psychiatric Association (APA)

1000 Wilson Boulevard, Suite 1825 Arlington, VA 22209 1-888-357-7924

psychiatry.org/

Centers for Disease Control and Prevention (CDC)

1600 Clifton Road Atlanta, GA 30329 1-800-CDC-INFO

cdc.gov

Center for Parent Information & Resources (CPIR)

c/o SPAN 35 Halsey Street, Fourth Floor Newark, NJ 07102 1-973-642-8100

parentcenterhub.org

Children and Adults with Attention Deficit Hyperactivity Disorder (CHADD)

4601 Presidents Drive, Suite 300 Lanham, MD 20706 1-301-306-7070

chadd.org

LD OnLine

WETA Public Television 2775 South Quincy Street Arlington, VA 22206 Idonline.org

National Association of State Directors of Special Education, Inc. (NASDSE)

IDEA Partnership 225 Reinekers Lane, Suite 420 Alexandria, VA 22314 1-877-IDEA-INFO ideapartnership.org

National Federation of Families for Children's Mental Health

12320 Parklawn Drive Rockville, MD 20850 1-240-403-1901

ffcmh.org

National Institute of Mental Health (NIMH)

6001 Executive Boulevard Bethesda, MD 20892 1-866-615-6464 nimh.nih.gov

National Resource Center on AD/HD

4601 Presidents Drive, Suite 300 Lanham, MD 20706 1-800-233-4050 **chadd.org/NRC.aspx**

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