# A.D.D. WareHouse

# Medication Chart to Treat Attention Deficit Hyperactivity Disorder

| DRUG | FORM | DOSING | COMMON SIDE EFFECTS | DURATION OF EFFECTS | PROS | PRECAUTIONS |
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| **METHYLPHENIDATE** | | | | | | |
| RITALIN<br>METHYLIN<br>METADATE<br>Generic MPH | Short Acting Tablet<br>5 mg<br>10 mg<br>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 .3-.6 mg/kg/dose | Insomnia, decreased appetite, weight loss, headache, irritability, stomachache, and rebound agitation or exaggeration of pre-medication symptoms as it is wearing off. | About 3-4 hours. Most helpful when need 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 syndrome, or history of substance abuse. Don't use if glaucoma or on MAOI. |
| FOCALIN<br>(with isolated dextroisomer) | Short Acting Tablet<br>2.5 mg<br>5 mg<br>10 mg | Start with half the dose recommended for normal short acting mehtylphenidate 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 suggestion that Focalin (dextro-isomer) may be less prone to causing sleep or appetite disturbance. | About 3-4 hours. Most helpful when need rapid onset and short duration. Only formulation with isolated dextro-isomer. | Works quickly (within 30-60 minutes). Possibly better for use for evening needs when day's long acting dose is wearing off. | As above. Expensive compared to other short acting preparations. |
| RITALIN SR<br><br>_____<br><br>METHYLIN ER<br><br>_____<br><br>METADATE ER | Mid Acting Tablet<br>20mg<br>_____<br><br>Mid Acting Tablet<br>10 mg<br>20mg | 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, headache, irritability, stomachache. | Onset delayed for 60-90 minutes. Duration supposed to be 6-8 hours, but can be quite individual and unreliable. | Wears off more gradually than short acting so less risk of rebound. Lower abuse risk. | As above. Note: If crushed or cut, full dose may be released at once, giving twice the intended dose in first 4 hours, none in the second 4 hours. |
| RITALIN LA<br>*50% immediate release beads and 50% delayed release beads*<br><br>_____<br><br>METADATE CD<br>*30% immediate release and 70% delayed release beads* | Mid Acting Capsule<br>20 mg<br>30 mg<br>40 mg<br>_____<br>Mid Acting Capsule<br>10 mg<br>20 mg<br>30 mg | Starting dose is 10-20 mg once daily. May be adjusted weekly in 10 mg increments to maximum of 60 mg taken once daily. May add short acting dose in AM or 8 hours later in PM if needed. | Insomnia, decreased appetite, weight loss, headache, irritability, stomachache, and rebound potential. | Onset in 30-60 minutes. Duration about 8 hours. | May swallow whole or sprinkle ALL contents on a spoonful of applesauce. Starts quickly, avoids mid-day gap unless student metabolizes medicine very rapidly. | Same cautions as for immediate release.<br><br>_____<br>If beads are chewed, may release full dose at once, giving entire contents in first 4 hours. |

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| CONCERTA<br><br>*22% immediate release and 78% gradual release* | Long Acting Tablet<br>18 mg<br>27 mg<br>36 mg<br>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, irritability, 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.<br><br>Do not cut or crush. |
| **DEXTROAMPHETAMINE** | **FORM** | **DOSING** | **COMMON SIDE EFFECTS** | **DURATION OF EFFECTS** | **PROS** | **PRECAUTIONS** |
| DEXTROSTAT<br><br>_____<br><br>DEXEDRINE<br>*2004 PDR does not list short acting Dexedrine tablets | Short Acting Tablet<br>5 mg<br>10 mg<br><br>____<br><br>Short Acting Tablet<br>5 mg | For ages 3 -5 years: starting dose is 2.5 mg of tablet. Increase by 2.5 mg at weekly intervals, increasing first dose or adding/ increasing a noon dose, until effective. For 6 years and over, start with 5 mg once or twice daily. May increase total daily dose by 5 mg per week until reach optimal level. Tablet is given on awakening. Over 6 years, one or two additional doses may be given at 4-6 hour intervals. Usually not need more than 40 mg/ day. | Insomnia, decreased appetite, weight loss, headache, irritability, stomachache.<br><br>Rebound agitation or exaggeration of pre-medication symptoms as it is wearing off.<br><br>May also elicit psychotic symptoms. | Onset in 30-60 minutes. Duration about 4-5 hours. | Approved for children under 6. Good safety record.<br><br>Somewhat longer action than short acting methylphenidate. | Use cautiously in patients with marked anxiety, motor tics or with family history of Tourette syndrome, or history of substance abuse. Don't use if glaucoma or on MAOI. High abuse potential particularly in tablet form. |
| DEXEDRINE SPANSULE<br><br>_____<br><br>dextroamphetamine sulfate ER | Long Acting Spansule<br>5 mg<br>10 mg<br>15 mg<br>____<br><br>5mg<br>10 mg<br>15 mg | In chldren 6 and older who can swallow whole capsule, morning dose of capsule equal to sum of morning and noon short acting. Increase total daily dose by 5 mg per week until reach 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. |

| MIXED AMPHETAMINE | FORM | DOSING | COMMON SIDE EFFECTS | DURATION OF EFFECTS | PROS | PRECAUTIONS |
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| ADDERALL | Short Acting Tablet<br>5 mg<br>7.5 mg<br>10 mg<br>12.5 mg<br>15 mg<br>20 mg<br>30 mg | Starting dose is 5 or 10 mg each morning (age 6 and older). May be adjusted in 5-10 mg increments up to 30 mg per day. | Same as above. | Onset in 30-60 minutes. Duration about 4-5 hours. | Wears off more gradually than dextroamphetamine alone, so rebound is less likely and more mild. | Same as for Dexedrine tablets. |
| ADDERALL XR<br>*50% immediate release beads and 50% delayed release beads* | Long Acting Capsule<br>5 mg<br>10 mg<br>15 mg<br>20 mg<br>25 mg<br>30 mg | Starting dose is 5 or 10 mg each morning (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 documented efficacy when sprinkled on applesauce. |
| **ATOMOXETINE** | **FORM** | **DOSING** | **COMMON SIDE EFFECTS** | **DURATION OF EFFECTS** | **PROS** | **PRECAUTIONS** |
| STRATTERA | Long Acting Capsule<br>10 mg<br>18 mg<br>25 mg<br>40 mg<br>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, particularly if need higher doses. | In children: decreased appetite, GI upset (can be reduced if medication taken with food), sedation (can be reduced by dosing in evening), lightheadedness.<br><br>In adults: insomnia, sexual side effects, increased blood pressure. | Starts working within 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.<br><br>Doesn't cause a "high," thus it does not lead to abuse, and so a) it is not a controlled drug and b) may use with history of substance abuse. | Use cautiously in patients with hypertension, tachycardia, or cardiovascular or cerebrovascular disease because it can increase blood pressure and heart rate. Has some drug interactions. While extensively tested, short duration of population use. |
| **BUPROPRION** | **FORM** | **DOSING** | **COMMON SIDE EFFECTS** | **DURATION OF EFFECTS** | **PROS** | **PRECAUTIONS** |
| WELLBUTRIN IR | Short Acting Tablet<br>IR-75 mg<br>100 mg | Starting dose is 37.5 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. May help after school until home. | Not indicated in patients with a seizure disorder or with a current or previous diagnosis of bulimia or anorexia. May worsen tics. May cause mood deterioration at the time it wears off. |

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| WELLBUTRIN SR | Long Acting Tablet<br>SR-100 mg<br>150mg<br>200 mg | Starting dose is 100 mg/day increasing gradually to a maximum of 2 doses, no more than 200 mg/ dose. | Same as Wellbutrin IR | About 10-14 hours. | Same for Wellbutrin IR.<br>Lower seizure risk than immediate release form. Avoids noon dose. | Same as Wellbutrin IR. If a second dose is not given, may get mood deterioration at around 10-14 hours. |
| WELLBUTRIN XL | Long Acting Tablet 150mg<br>300mg | Starting dose is 150 mg /day increasing gradually to a maximum of 2 doses, no moe than 300 mg/ day. | Same as Wellbutrin IR | About 24 + hours. | Same for Wellbutrin IR.<br>Single daily dose. Smooth 24 hour coverage. Lower seizure risk than immediate release form. | Same as Wellbutrin IR. |
| **ALPHA-2 AGONISTS** | **FORM** | **DOSING** | **COMMON SIDE EFFECTS** | **DURATION OF EFFECTS** | **PROS** | **PRECAUTIONS** |
| CATAPRES<br>(clonidine)<br><br>----------<br>CLONIDINE | Tablet<br>0.1 mg<br>0.2 mg<br>0.3 mg<br>--------<br>Tablet<br>0.1 mg<br>0.2 mg<br>0.3 mg | Starting dose is .025 -.05 mg/ day in evening. Increase by similar dose every 7 days, adding to morning, mid-day, possibly afternoon, and again evening doses in sequence. Total dose of 0.1 - .3mg/day divided into 3-4 doses. Do not skip days | Sleepiness, hypotension, headache, dizziness, stomachache, nausea, dry mouth, depression, nightmares. | Onset in 30-60 minutes. Duration about 3 - 6 hours. | Helpful for ADHD patients with comorbid tic disorder or insomnia. Good for severe impulsivity, hyperactivity and/or aggression. Stimulates appetite. Especially helpful in younger children (under 6) with ADHD symptoms asociated with prenatal insult or syndrome such as Fragile X. | 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. |
| CATAPRES Patch | TTS-1<br>TTS-2<br>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 likely need TTS 3). | Same as Catapres tablet but with skin patch there may be localized skin reactions. | Duration 4-5 days, so avoids the vacillations in drug effect seen in tablets. | Same as above. | Same as above. May get rebound hypertension and return of symptoms if it isn't recognized that a patch has come off or becomes loose. An immature student may get excessive dose from chewing on the patch. |
| TENEX<br>(guanfacine)<br><br>----------<br>guanfacine tablets | 1 mg<br>2 mg<br>3 mg<br>--------<br>1 mg<br>2 mg<br>3 mg | Starting dose is 0.5 mg/day in evening and increase by similar dose every 7 days as indicated. Given in divided doses 2-4 times per day. Daily dose range 0.5 - 4mg/ day. DO NOTskip days | Compared to clonidine, lower chances/severity of side effects, especially fatigue and depression. Also less headache, stomache, nausea, dry mouth. Unlike clonidine, minimal problem of rebound hypertension if doses are missed. | Duration about 6 - 12 hours. | Can provide for 24/7 modulation of impulsivity, hyperactivity, aggression and sensory hypersensitivity. This covers most out of school problems, so stiumlant use can be limited to school and homework hours. Improves appetite. Less sedating than clonidine. | Avoid formulations with red dye as above. Hypotension is the primary dose-limiting problem. As with clonidine, important to check blood pressures with dose increases and if symptoms suggest hypotension, such as light-headedness. |

This chart was updated 4/19/04.
Treatment of ADHD usually includes medical management, behavior modification. counseling, and school or work accommodations. The medications charted above include: (1) the stimulants, (2) the non-stimulant Strattera (atomoxetine) with effects similar to stimulants, (3) the antidepressant Wellbutrin (bupropion) and (4) two antihypertensives Catapres (clonidine) and Tenex (guanfacine). Stimulants include all formulations of methyphenidate (Ritalin, Focalin, Metadate and Methylin) and all forms of amphetamines (Dexedrine, Dextrostat and Adderall). Individuals respond in their own unique way to medication depending upon their physical make-up, severity of symptoms. associated conditions, and other factors. Careful monitoring should be done by a physician in collaboration with the teacher, therapist. parents, spouse, and patient. Medications to treat ADHD and related conditions should only be prescribed by a physician. Information presented here is not intended to replace the advice of a physician.


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