

Methylphenidate

This information from Lexicomp® explains what you need to know about this medication, including what it's used for, how to take it, its side effects, and when to call your healthcare provider.

Brand Names: US

Adhansia XR [DSC]; Aptensio XR; Concerta; Cotempla XR-ODT; Daytrana; Jornay PM; Metadate CD; Methylin; QuilliChew ER; Quillivant XR; Relexxii; Ritalin; Ritalin LA

Brand Names: Canada

ACT Methylphenidate ER; APO-Methylphenidate; APO-Methylphenidate ER; APO-Methylphenidate SR; Biphentin; Concerta; Foquest; PMS-Methylphenidate; PMS-Methylphenidate CR; Quillivant ER

Warning

- This drug has a high risk of misuse. This can lead to alcohol or drug use disorder. Misuse or abuse of this drug can lead to overdose or death. The risk is higher with higher doses or when used in ways that are not approved like snorting or injecting it. Do not give this drug to anyone else.
- This drug may be habit-forming if taken for a long time. Do not give for longer than you have been told by the doctor. Give only as you were told. Tell the doctor if your child has ever had alcohol or drug use disorder. Your child will be watched closely while taking this drug.
- Keep all drugs in a safe place. Keep all drugs out of the reach of children and pets. Throw away unused or expired drugs as you have been told.

What is this drug used for?

- It is used to treat attention deficit problems with hyperactivity.
- It is used to treat narcolepsy.
- It may be given to your child for other reasons. Talk with the doctor.

What do I need to tell the doctor **BEFORE** my child takes this drug?

All products:

- If your child is allergic to this drug; any part of this drug; or any other drugs, foods, or substances. Tell the doctor about the allergy and what signs your child had.
- If your child or a family member has any of these health problems: Blood vessel disease, high blood pressure, heart structure problems or other heart problems, or Tourette's syndrome or tics.

- If your child has any of these health problems: Glaucoma, agitation, anxiety, or overactive thyroid.
- If your child has ever had a stroke.
- If your child has taken certain drugs for depression or certain other health problems in the last 14 days. This includes isocarboxazid, phenelzine, or tranylcypromine. Very high blood pressure may happen.
- If your child is taking any of these drugs: Linezolid or methylene blue.

All chewable products:

- If your child has trouble swallowing, talk with the doctor.

Long-acting tablets:

- If your child cannot swallow this product whole.
- If your child has ever had any of these health problems: Cystic fibrosis; narrowing of the GI (gastrointestinal) tract or other GI problems like bowel block, small bowel disease, short gut syndrome, or slow-moving esophagus or bowel tract; peritonitis.

Oral-disintegrating tablet:

- If your child is taking any of these drugs: Cimetidine, dexlansoprazole, esomeprazole, famotidine, lansoprazole, nizatidine, omeprazole, pantoprazole, rabeprazole, ranitidine, or sodium bicarbonate.

Long-acting capsules:

- If your child has a rare hereditary health problem like glucose-galactose malabsorption, fructose intolerance, or sucrase-isomaltase deficiency. Some of these products have sucrose.

This is not a list of all drugs or health problems that interact with this drug.

Tell the doctor and pharmacist about all of your child's drugs (prescription or OTC, natural products, vitamins) and health problems. You must check to

make sure that it is safe to give this drug with all of your child's other drugs and health problems. Do not start, stop, or change the dose of any drug your child takes without checking with the doctor.

What are some things I need to know or do while my child takes this drug?

All products:

- Tell all of your child's health care providers that your child is taking this drug. This includes your child's doctors, nurses, pharmacists, and dentists.
- Have your child avoid tasks or actions that call for alertness until you see how this drug affects your child. These are things like riding a bike, playing sports, or using items such as scissors, lawnmowers, electric scooters, toy cars, or motorized vehicles.
- Have blood work, blood pressure, and heart rate checked as you have been told by the doctor.
- Your child may need to have some heart tests before starting this drug. If you have questions, talk with your child's doctor.
- Alcohol may interact with this drug. Be sure your child does not drink alcohol.
- Limit your child's use of caffeine and chocolate. Use with this drug may cause nervousness, shakiness, and a fast heartbeat.
- If your child is taking this drug and has high blood pressure, talk with the doctor before giving OTC products that may raise blood pressure. These include cough or cold drugs, diet pills, stimulants, non-steroidal anti-inflammatory drugs (NSAIDs) like ibuprofen or naproxen, and some natural products or aids.
- If your child has been taking this drug for a long time or at high doses, it may not work as well and your child may need higher doses to get the same effect. This is known as tolerance. Call the doctor if this drug stops working well. Do not give more than ordered.

- This drug may raise the chance of seizures in some people, including people who have had seizures in the past. Talk to the doctor to see if your child has a greater chance of seizures while taking this drug.
- If your child has phenylketonuria (PKU), talk with your child's doctor. Some products have phenylalanine.
- If your child is allergic to tartrazine (FD&C Yellow No. 5), talk with your child's doctor. Some products have tartrazine.
- This drug may affect growth in children and teens in some cases. They may need regular growth checks. Talk with the doctor.

If your child is pregnant or breast-feeding a baby:

- Talk with the doctor if your child is pregnant, becomes pregnant, or is breast-feeding a baby. You will need to talk about the benefits and risks to your child and the baby.

Long-acting tablets:

- For some brands, you or your child may see the tablet shell in your child's stool. For these brands, this is normal and not a cause for concern. If you have questions, talk with the doctor.
- Tell the doctor that your child takes this drug if your child is getting x-rays near the stomach.

Skin patch:

- Have your child avoid use of heat sources (such as sunlamps, tanning beds, heating pads, electric blankets, heat lamps, saunas, hot tubs, heated waterbeds). Avoid long, hot baths or sunbathing. Your child's temperature may rise and cause too much drug to pass into your child's body.
- This drug may lead to loss of skin color at or around where the patch is put on. Sometimes, this has happened at other areas. This may last even after this drug is stopped. The chance may be higher if you or someone in your family has ever had a skin problem called vitiligo. Talk with the

doctor.

- This drug may cause harm if chewed or swallowed. This includes used patches. If this drug has been put in the mouth, call a doctor or poison control center right away.

What are some side effects that I need to call my child's doctor about right away?

WARNING/CAUTION: Even though it may be rare, some people may have very bad and sometimes deadly side effects when taking a drug. Tell your child's doctor or get medical help right away if your child has any of the following signs or symptoms that may be related to a very bad side effect:

All products:

- Signs of an allergic reaction, like rash; hives; itching; red, swollen, blistered, or peeling skin with or without fever; wheezing; tightness in the chest or throat; trouble breathing, swallowing, or talking; unusual hoarseness; or swelling of the mouth, face, lips, tongue, or throat.
- Signs of high blood pressure like very bad headache or dizziness, passing out, or change in eyesight.
- Signs of liver problems like dark urine, tiredness, decreased appetite, upset stomach or stomach pain, light-colored stools, throwing up, or yellow skin or eyes.
- Joint pain.
- Purple patches on the skin or mouth.
- Change in eyesight or eye pain, swelling, or redness.
- Seizures.
- Shakiness.
- Trouble controlling body movements.
- Trouble controlling sounds, like humming, throat clearing, yelling, or making loud noises.
- Sweating a lot.

- Restlessness.
- Change in color of hands, feet, or other areas. Skin may turn pale, blue, gray, purple, or red.
- Numbness, pain, tingling, or cold feeling of the hands or feet.
- Any sores or wounds on the fingers or toes.
- Muscle pain or weakness, dark urine, or trouble passing urine.
- Weakness on 1 side of the body, trouble speaking or thinking, change in balance, drooping on one side of the face, or blurred eyesight.
- Sudden deaths have happened in people with some heart problems or heart defects. Tell the doctor if your child has any heart problem or defect. Tell the doctor if a family member has an abnormal heartbeat or died suddenly. Get medical help right away if your child has any signs of heart problems like chest pain, abnormal heartbeat, or severe dizziness or passing out.
- Call your child's doctor right away if your child gets a painful erection (hard penis) or gets an erection that lasts for longer than 4 hours. If this is not treated right away, it may lead to lasting sex problems and your child may not be able to have sex in the future.
- New or worse behavior and mood changes like change in thinking, anger, and hallucinations have happened with this drug. Tell the doctor if your child or a family member has any mental or mood problems like depression or bipolar illness, or if a family member has committed suicide. Call the doctor right away if your child has hallucinations; change in the way your child acts; or signs of mood changes like depression, thoughts of suicide, nervousness, emotional ups and downs, thinking that is not normal, anxiety, or lack of interest in life.
- A severe and sometimes deadly problem called serotonin syndrome may happen if your child takes this drug with certain other drugs. Call your child's doctor right away if your child has agitation; change in balance; confusion; hallucinations; fever; fast or abnormal heartbeat; flushing; muscle twitching or stiffness; seizures; shivering or shaking; sweating a lot; severe diarrhea, upset stomach, or throwing up; or severe headache.

If your child is or may be sexually active:

- Change in sex interest.

Skin patch:

- Change in skin color.

What are some other side effects of this drug?

All drugs may cause side effects. However, many people have no side effects or only have minor side effects. Call your child's doctor or get medical help if any of these side effects or any other side effects bother your child or do not go away:

All products:

- Feeling nervous and excitable.
- Decreased appetite.
- Upset stomach or throwing up.
- Weight loss.
- Trouble sleeping.
- Dizziness or headache.
- Feeling sleepy.
- Dry mouth.
- Stomach pain or heartburn.
- Nose or throat irritation.

Skin patch:

- Skin irritation.

These are not all of the side effects that may occur. If you have questions about side effects, call your child's doctor. Call your child's doctor for medical advice about side effects.

You may report side effects to your national health agency.

How is this drug best given?

Give this drug as ordered by your child's doctor. Read all information given to you. Follow all instructions closely.

Tablets:

- Give 30 to 45 minutes before meals.
- If giving this drug to your child more than 1 time a day, give the last dose of the day before 6 p.m.

Fast-release chewable tablet:

- Give 30 to 45 minutes before meals.
- Have your child chew well before swallowing.
- Give this drug with a full glass of water.
- If giving this drug to your child more than 1 time a day, give the last dose of the day before 6 p.m.

Extended-release chewable tablet:

- Give in the morning.
- Have your child chew well before swallowing.
- Give this drug with or without food.
- Give this drug with a full glass of water.
- Some products may be broken in half. If you are not sure if you can break this product in half, talk with the doctor.

Oral-disintegrating tablet:

- Give in the morning.
- Give this drug with or without food but give it the same way each time. Always give with food or always give on an empty stomach.

- Do not push the tablet out of the foil when opening. Use dry hands to take it from the foil. Place on your child's tongue and let it dissolve. Water is not needed. Do not let your child swallow it whole. Do not let your child chew, break, or crush it.
- Do not take this drug out of the blister pack until you are ready to give this drug to your child. Give this drug right away after opening the blister pack. Do not store the removed drug for future use.

Liquid (solution):

- Give 30 to 45 minutes before meals.
- Measure liquid doses carefully. Use the measuring device that comes with this drug. If there is none, ask the pharmacist for a device to measure this drug.
- If giving this drug to your child more than 1 time a day, give the last dose of the day before 6 p.m.

Liquid (suspension):

- Give in the morning with or without food. Shake bottle for 10 seconds or more before giving a dose.
- Check to make sure the drug in the bottle is a liquid. If this drug is still a powder, do not use it. Take it back to the pharmacist.
- Measure liquid doses carefully. Use the measuring device that comes with this drug. If there is none, ask the pharmacist for a device to measure this drug.

Long-acting capsules (Jornay PM):

- Give in the evening.
- Do not give this drug to your child in the morning.
- Give this drug with or without food but give it the same way each time. Always give with food or always give on an empty stomach.
- You may sprinkle contents of capsule on applesauce. Have your child

swallow without chewing.

- Give the mixture right away. Do not store for use at a later time.

All other long-acting capsules and tablets:

- Give in the morning.
- Some drugs may need to be given with food or on an empty stomach. For some drugs, it does not matter. Check with your pharmacist about how to give this drug to your child.
- Have your child swallow whole. Do not let your child chew, break, or crush.

Long-acting capsules:

- You may sprinkle contents of capsule on applesauce. Have your child swallow right away without chewing and follow with water or juice.
- Some products may also be sprinkled on yogurt. Read the package insert or talk with your pharmacist if you are not sure.
- Give the mixture right away. Do not store for use at a later time.

Skin patch:

- Do not cut or divide patches. Do not use patches that are damaged.
- Wash your hands before and after use.
- Put patch on clean, dry, healthy skin on your child's hip. Do not put the patch on your child's waistline.
- Do not put on cuts, scrapes, eczema, or damaged skin.
- Put patch on in the morning and take off 9 hours later or as you have been told by the doctor.
- Put the patch in a new area each time you change the patch.
- Water from bathing, swimming, or showering can make the patch not stick well or fall off. If the patch falls off, do not touch the sticky side with your fingers.

- If the patch falls off, put on a new one on some other part of the same hip. Take the new patch off at the normal time.

What do I do if my child misses a dose?

Liquid (suspension):

- Call your child's doctor to find out what to do.

Long-acting capsules (Jornay PM):

- Give a missed dose as soon as you think about it if you remember on the same evening of your child's missed dose.
- If you do not think about the missed dose until the next morning, skip the missed dose and go back to the normal evening time.
- Do not give 2 doses at the same time or extra doses.

All other long-acting capsules and tablets:

- Skip the missed dose and go back to your child's normal time.
- Do not give 2 doses at the same time or extra doses.

All other oral products:

- Give a missed dose as soon as you think about it. Do not give this drug after 6 p.m.
- If it is close to the time for your child's next dose, skip the missed dose and go back to your child's normal time.
- Do not give 2 doses at the same time or extra doses.

Skin patch:

- You may apply the patch later in the day. Then take off the patch at your child's normal time of day.
- Do not put on 2 doses at the same time or extra doses.

How do I store and/or throw out this drug?

All products:

- Store at room temperature protected from light. Store in a dry place. Do not store in a bathroom.
- Store this drug in a safe place where children cannot see or reach it, and where other people cannot get to it. A locked box or area may help keep this drug safe. Keep all drugs away from pets.
- Throw away unused or expired drugs. Do not flush down a toilet or pour down a drain unless you are told to do so. Check with your pharmacist if you have questions about the best way to throw out drugs. There may be drug take-back programs in your area.

Oral-disintegrating tablet:

- Store blister packs in the plastic case that comes with this drug.

Liquid (suspension):

- Throw away any part not used after 4 months.
- Store upright with the cap on.

Skin patch:

- Keep patches in the pouch. Use within 2 months of opening tray.
- After you take off a skin patch, be sure to fold the sticky sides of the patch to each other. Throw away used patches where children and pets cannot get to them.

General drug facts

- If your child's symptoms or health problems do not get better or if they become worse, call your child's doctor.
- Do not share your child's drug with others and do not give anyone else's drug to your child.

- Some drugs may have another patient information leaflet. If you have any questions about this drug, please talk with your child’s doctor, nurse, pharmacist, or other health care provider.
- If you think there has been an overdose, call your poison control center or get medical care right away. Be ready to tell or show what was taken, how much, and when it happened.

Consumer Information Use and Disclaimer

This generalized information is a limited summary of diagnosis, treatment, and/or medication information. It is not meant to be comprehensive and should be used as a tool to help the user understand and/or assess potential diagnostic and treatment options. It does NOT include all information about conditions, treatments, medications, side effects, or risks that may apply to a specific patient. It is not intended to be medical advice or a substitute for the medical advice, diagnosis, or treatment of a health care provider based on the health care provider’s examination and assessment of a patient’s specific and unique circumstances. Patients must speak with a health care provider for complete information about their health, medical questions, and treatment options, including any risks or benefits regarding use of medications. This information does not endorse any treatments or medications as safe, effective, or approved for treating a specific patient. UpToDate, Inc. and its affiliates disclaim any warranty or liability relating to this information or the use thereof. The use of this information is governed by the Terms of Use, available at

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If you have questions or concerns, contact your healthcare provider. A member of your care team will answer Monday through Friday from 9 a.m. to 5 p.m. Outside those hours, you can leave a message or talk with another MSK provider. There is always a doctor or nurse on call. If you're not sure how to reach your healthcare provider, call 212-639-2000.

For more resources, visit www.mskcc.org/pe to search our virtual library.

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