



# Amphetamine (am FET a meen)

## Mixed Amphetamine Salts/ Dextroamphetamine/Lisdexamfetamine



*If you or someone you know is in crisis, call/text 988 to speak with a trained crisis counselor 24/7 and/or call 911 for emergency services. A help line and other resources are also available through the National Alliance on Mental Illness at [nami.org](http://nami.org).*

- **Adderall® (mixed amphetamine salts) – immediate release**
  - Tablets: 5 mg, 7.5 mg, 10 mg, 12.5 mg, 15 mg, 20 mg, 30 mg
- **Adderall XR® (mixed amphetamine salts) – extended release**
  - Capsules: 5 mg, 10 mg, 15 mg, 20 mg, 25 mg, 30 mg
- **Mydayis® (mixed amphetamine salts) – triple bead extended release**
  - Capsules: 12.5 mg, 25 mg, 37.5 mg, 50mg
- **Adzenys XR- ODT® (amphetamine sulfate) -- extended release orally disintegrating**
  - Tablets: 3.1 mg, 6.3 mg, 9.4 mg, 12.5 mg, 15.7 mg, 18.8 mg
- **Dyanavel XR®, (amphetamine sulfate) – extended release**
  - Suspension: 2.5 mg/mL
- **Evekeo® (amphetamine sulfate) – immediate release**
  - Tablets: 5 mg, 10 mg
- **Evekeo ODT®(amphetamine sulfate) – orally disintegrating**
  - Tablets: 5 mg, 10 mg, 15 mg, 20 mg
- **Zenzedi® (dextroamphetamine) – immediate release**
  - Tablets: 2.5 mg, 5 mg, 7 mg, 10 mg, 15 mg, 20 mg, 30 mg
- **Dexedrine®(dextroamphetamine) – extended release**
  - Capsules: 5 mg, 10 mg, 15 mg
- **ProCentra® (dextroamphetamine)**
  - Solution: 5 mg/mL
- **Xelstrym® (dextroamphetamine)**
  - Patch: 4.5mg/9 hours, 9mg/9 hours, 13.5mg/9 hours, 18mg/9 hours
- **Vyvanse® (lisdexamfetamine)**
  - Capsules: 10 mg, 20 mg, 30 mg, 40 mg, 50 mg, 60 mg, 70 mg
  - Tablets (chewable): 10 mg, 20 mg, 30 mg, 40 mg, 50 mg, 60 mg

### What are amphetamines, amphetamine salts, mixed amphetamine salts, dextroamphetamine, lisdexamfetamine and what do they treat?

Amphetamine medications are also known as stimulants. They include amphetamine sulfate, mixed amphetamine salts, dextroamphetamine, and lisdexamfetamine.

- Amphetamine sulfate, mixed amphetamine salts, dextroamphetamine and lisdexamfetamine are prescription medications that are used to treat individuals with attention-deficit hyperactivity disorder (ADHD).
- Lisdexamfetamine is also used to treat moderate to severe binge eating disorder.
- Dextroamphetamine, immediate release amphetamine sulfate and amphetamine mixed salts can be used to treat narcolepsy.
- Dextroamphetamine and immediate release amphetamine sulfate can treat certain types of obesity.

Symptoms of ADHD interfere with an individual’s ability to function at school or work or in social settings and include:

- Inattention (e.g., making careless mistakes, losing things necessary for tasks)
- Hyperactivity (e.g., inability to sit still)
- Impulsivity (e.g., interrupting or intruding on others)

Hyperactivity is less common in adults. A person may have severe inattention without hyperactivity or impulsivity.

Amphetamines are used in addition to non-medication treatments to manage ADHD symptoms.

### What is the most important information I should know about amphetamines, amphetamine sulfate, mixed amphetamine salts, dextroamphetamine, lisdexamfetamine?

Although some symptoms may improve within days of starting amphetamine medications, it may take several weeks before you notice the full benefits of the medication.

All FDA warnings are at the end of this fact sheet. Please consult them before taking this medication.

## Are there specific concerns about amphetamines, amphetamine sulfate, mixed amphetamine salts, dextroamphetamine, lisdexamfetamine and pregnancy?

If you are planning on becoming pregnant, notify your health care provider to best manage your medications. People living with ADHD who wish to become pregnant face important decisions. There is very little information available regarding the risks of amphetamine medications in pregnancy when taken as prescribed for ADHD. Abuse of amphetamine medication (i.e., taking without a prescription or taking more than prescribed) has been associated with premature delivery, low birth weight, and neonatal withdrawal symptoms. Untreated ADHD may be associated with increased risk of substance use. It is important to discuss the risks and benefits of treatment with your doctor and caregivers.

Amphetamines are not recommended with breastfeeding according to the American Academy of Pediatrics. Amphetamines may concentrate in breast milk and have negative effects on the infant.

## What should I discuss with my health care provider before taking amphetamines, amphetamine sulfate, mixed amphetamine salts, dextroamphetamine, lisdexamfetamine?

- Symptoms of your condition that bother you the most
- If you have thoughts of suicide or harming yourself
- If you experience side effects from your medications as some side effects pass with time, but others may require changes in the medication.
- Any other psychiatric or medical problems you have, including heart, liver, vascular disease, high blood pressure, thyroid problems, glaucoma, seizures or tics.
- All other medications you are currently taking (including over the counter products, herbal and nutritional supplements) and any medication allergies you have
- Other non-medication treatment you are receiving, such as talk therapy or substance abuse treatment. Your provider can explain how these different treatments work with the medication.
- If you are pregnant, plan to become pregnant, or are breastfeeding
- If you drink alcohol or use drugs

## How should I take amphetamines, amphetamine sulfate, mixed amphetamine salts, dextroamphetamine, lisdexamfetamine?

These medications are usually taken one to two times per day with or without food.

- Tablets (Dexedrine®, Adderall®, Evekeo®): Swallow the tablets whole. Chewing the tablets gives an unpleasant taste and can irritate the mouth and throat.
- Tablets chewable (Vyvanse®): Chew completely before swallowing.
- Tablets orally disintegrating (Evekeo ODT®) and extended-release orally disintegrating tablet (Adzeny XR-ODT®): Do not remove from blister pack until ready to take. With dry hands, peel backing off the blister; do not push tablet through foil. Remove tablet and quickly place on tongue and allow to dissolve/disintegrate. Swallow with your saliva. Do not chew or crush tablet.
- Sprinkle capsules (Adderall XR®, Mydayis®, Dexedrine Spansule®): Swallow whole or sprinkle on a small amount of applesauce and eat immediately without chewing. Do not chew sprinkle capsules or sprinkle beads from inside the capsule.
- Long-acting capsules (Vyvanse®): Swallow whole or open capsule and mix all the powder from the capsule with water, yogurt or orange juice. Stir completely and take all of the mixture immediately; do not store the mixture.
- Liquid (Dexedrine®): Measure with a dosing spoon or oral syringe which you can get from your pharmacy
- Suspension extended-release (Adzenys ER®, Dyanavel XR®): Shake bottle well before taking. Use the oral dosing dispenser provided and clean the dispenser after each use. Do not add to food or mix with liquids.

The dose of amphetamine medication is variable. Only your health care provider can determine the correct dose for you.

Use a calendar, pillbox, alarm clock, or cell phone alert to help you remember to take your medication. You may also ask a family member or friend to remind you or check in with you to be sure you are taking your medication.

## What happens if I miss a dose of amphetamines, amphetamine sulfate, mixed amphetamine salts, dextroamphetamine, lisdexamfetamine?

If you miss a dose of an amphetamine medication, take it as soon as you remember if it is still early in the day. Do not take a missed dose after 5:00 PM, as this may interfere with sleep. Do not take a missed dose of extended-release capsules after 2:00 PM, as this may interfere with sleep. Discuss missed doses with your health care provider. Do not double your next dose or take more than what is prescribed.

## What should I avoid while taking amphetamines, amphetamine sulfate, mixed amphetamine salts, dextroamphetamine, lisdexamfetamine?

Avoid drinking alcohol or using illegal drugs while you are taking this medication. They may decrease the benefits (e.g., worsen your condition) and increase adverse effects (e.g., effects on the heart) of the medication.

## What happens if I overdose with amphetamines, amphetamine sulfate, amphetamine salts, mixed amphetamine salts, dextroamphetamine, lisdexamfetamine?

If an overdose occurs call your doctor or 911. You may need urgent medical care. You may also contact the poison control center at 1-800-222-1222.

A specific treatment to reverse the effects of amphetamines does not exist.

## What are the possible side effects of amphetamines, amphetamine sulfate, mixed amphetamine salts, dextroamphetamine, lisdexamfetamine?

### Common side effects

Upset stomach, loss of appetite, insomnia, and mild anxiety

### Rare side effects

Contact your health care provider if any of the following occur while taking amphetamine medications:

- Significant increases in blood pressure or heart rate, shortness of breath, fatigue
- Severe anxiety, panic attacks, mania, hallucinations, paranoia or delusions
- Severe muscle pain, weakness, signs of dehydration, or dark urine
- Prolonged or painful erection
- Changes of feeling or color in your fingers or toes

### Serious side effects

Misuse of amphetamine medications may cause sudden death and serious cardiovascular adverse events. Amphetamine medications should be avoided in individuals who have a heart defect (structural abnormality), uncontrolled high blood pressure, or other disorder of heart.

## Are there any risks for taking amphetamines, amphetamine sulfate, mixed amphetamine salts, dextroamphetamine, or lisdexamfetamine for long periods of time ?

Amphetamines are Schedule II controlled substances. There is a risk of physical and/or emotional dependence when they are taken for long periods of time.

Although treatment with amphetamine medications can slow growth, many studies have shown that these changes are small. Children may catch up with growth over time; therefore, it should not be a concern for most children. Height, weight, and eating habits should be discussed before treatment starts and regularly during treatment. If you are concerned about your child's growth, discuss other possible treatments with your child's health care providers.

## What other medications interact with amphetamines, amphetamine sulfate, mixed amphetamine salts, dextroamphetamine, lisdexamfetamine?

Medications used to treat depression can interact with amphetamine medications resulting in serious reactions including high body temperature, high blood pressure, and seizures. Tell your health care provider if you are starting or have recently stopped taking any of these medications.

Amphetamines should not be taken with or within 2 weeks of monoamine oxidase inhibitor antidepressants (MAOIs). MAOIs include phenelzine (Nardil®), tranylcypromine (Parnate®), selegiline (Emsam®), and isocarboxazid (Marplan®) or the antibiotic linezolid (Zyvox®). Taking amphetamines with or within 2 weeks of MAOIs can result in seizures, fever or dangerously high blood pressure that can lead to death.

The following medications may **increase** the levels and/or effects of amphetamine medications:

- **Increase levels:** Antacids (e.g., sodium bicarbonate, calcium carbonate [Tums®]), acetazolamide
- **Increase side effects:** Atomoxetine (Strattera®), caffeine, phenylephrine, fluoxetine (Prozac®), bupropion (Wellbutrin®), venlafaxine (Effexor®), duloxetine (Cymbalta®), modafinil (Provigil®), and armodafinil (Nuvigil®)

The following foods/medications may **decrease** the levels and effects of amphetamine medications: ascorbic acid (vitamin C), acidic beverages (e.g., orange juice, grapefruit juice)

Amphetamine medications may decrease the effects of blood pressure medications.

## How long does it take for amphetamines, amphetamine sulfate, mixed amphetamine salts, dextroamphetamine, lisdexamfetamine to work?

Although you may experience beneficial effects from amphetamine medications within a few days of starting the medication, it often takes several weeks to get the full effect of the medication. Your health care provider may also need to gradually adjust the dose to find the dose that works best for you.

## Summary of Black Box Warnings

### Sudden Cardiac Death

Misuse of amphetamines may cause sudden death or serious cardiovascular adverse events.

### Abuse/Dependence

Long-term use of amphetamines may lead to dependence. Physical dependence is when someone experiences withdrawal symptoms (ex: changes in mood, sleep, appetite, agitation) when a medication is suddenly stopped or decreased. Amphetamines also have a high potential for abuse. Abuse is when someone has craving for a drug, limited control over drug use, compulsive use or continued use of that drug despite harm. Particular attention should be paid to the possibility of obtaining amphetamines for non-therapeutic use or distribution to others. People being prescribed amphetamine products should store them in a safe (preferably locked) place to prevent abuse.

**Important Disclosure:** This information is being provided as a community outreach effort of the American Association of Psychiatric Pharmacists. This information is for educational and informational purposes only and is not medical advice. This information contains a summary of important points and is not an exhaustive review of information about the medication. Always seek the advice of a physician or other qualified medical professional with any questions you may have regarding medications or medical conditions. Never delay seeking professional medical advice or disregard medical professional advice as a result of any information provided herein. The American Association of Psychiatric Pharmacists disclaims any and all liability alleged as a result of the information provided herein.