

## Patient education: Steroid medicines (The Basics)

[Written by the doctors and editors at UpToDate](#)

**What are steroid medicines?** — Steroid medicines are a group of medicines that can treat a wide range of medical conditions. Steroid medicines are a man-made form of a hormone the body makes naturally in the adrenal glands ([figure 1](#)). This hormone is called "cortisol."

The medical terms for steroid medicines are "glucocorticoids" and "corticosteroids." These are **not** the same as the steroids some athletes take illegally.

**What do steroid medicines do?** — All steroid medicines work by reducing inflammation.

Many different medical conditions and some injuries cause swelling or inflammation. Depending on which body part is affected, the inflammation can cause pain or other symptoms, such as joint pain and stiffness or trouble breathing. Steroid medicines reduce or prevent that inflammation. That's why steroid medicines can help with conditions that cause inflammation, such as eczema, arthritis, allergic reactions, and asthma.

Steroids come in many different forms, depending what they are used for. "Oral" steroids are pills, capsules, or liquid that you swallow. If you cannot take oral steroids, you might get the medicine through a thin tube that goes into a vein (called an "IV") instead. Other steroid medicines come as shots, inhalers, sprays, and creams or ointments that go on the skin.

Because they affect the whole body, not just one area, oral and IV steroids can do other things, too. In addition to reducing inflammation, they can:

- **Prevent nausea and vomiting** – Steroids are used with other medicines to prevent nausea and vomiting due to chemotherapy.
- **Reduce autoimmune responses** – Some medical conditions happen when the body's infection-fighting system, called the "immune system," attacks healthy tissues and organs. This is called an "autoimmune response." Steroid medicines can help reduce or prevent this attack. That's why steroid medicines can help with autoimmune conditions such as lupus, rheumatoid arthritis, and multiple sclerosis.
- **Prevent organ rejection** – Steroids are also used with other medicines to keep your immune system from attacking a transplanted kidney or other transplanted organ.
- **Replace cortisol hormone when your body does not have enough** – Some medical conditions occur when the body makes too little of the hormone cortisol. Your body requires cortisol to respond to stress, infection, injury, physical strain, low blood sugar, and other changes. Steroid medicines are used when your body does not have enough of its own cortisol, such as in Addison's disease or congenital adrenal hyperplasia (also called CAH).

Steroid medicines are an important part of treating many medical conditions. If you have a serious condition, they can even save your life. As with most medicines, steroids can sometimes have serious side effects. These are reviewed below.

There are separate patient education articles in UpToDate that discuss the range of medical conditions treated with steroid medicines. Several are listed at the end of this article. Ask your doctor or nurse for the UpToDate

patient education article about your disease or condition.

**What are the different forms of steroids?** — The list below gives some basic information on the different types of steroid medicines and what they are used for. The table lists the names of some commonly used steroid medicines ([table 1](#)).

- **Oral steroid medicines** – Oral steroids come in pills or liquids you take by mouth.

If you take oral steroids, you might sometimes need to get your medicine in other ways, too. For example:

- If you are in the hospital, you might get steroids through a thin tube that goes into a vein, called an "IV."
- If you have Addison's disease or CAH, your doctor might give you steroids in the form of a shot, to give yourself in certain situations. You might need the shot if you are vomiting and cannot take your steroid pills, or if you get a serious injury.

If your condition changes, or you get sick or need surgery while taking oral steroids long-term, your doctor might change your steroid dose. If and when you stop taking oral steroids, your doctor will tell you how to lower the dose slowly over time. Stopping oral steroids suddenly can cause bothersome symptoms. It can even be dangerous, since your body needs time to adjust, especially if you've been taking steroids for several weeks or longer.

- **Inhaled steroid medicines** – Inhaled steroids come in a device called an "inhaler" that helps you breathe in the medicine. This is a common treatment for asthma and other lung diseases.
- **Topical steroid medicines** – Topical steroids are in lotions, ointments, gels, and creams you put on your skin. These can reduce skin itchiness and redness. This is a common treatment for eczema or skin rash.
- **Steroid drops or sprays that go in your eyes, ears, or nose** – These medicines reduce itchiness, congestion, and redness or pain in your eyes, ears, or nose. Steroid nose spray is a common treatment for allergies.
- **Steroid injections** – Steroid medicines can be injected directly into a joint, the spine, or another part of the body. This type of steroid injection is usually used to treat certain types of pain, such as the pain caused by arthritis. The steroids can relieve pain and also help you regain motion in that area.

**What side effects can the different types of steroids cause?** — Side effects depend on the type of steroids you take, and how long you take them for:

- **Skin creams, ointments, gels, and sprays** – Steroids that go on your skin do not usually have serious side effects. If you use them for a long time or at high doses, side effects can include thin or red skin in the areas that were treated.
- **Nasal sprays** – These also do not usually come with serious side effects. In some cases, they can cause dryness in the nose or a nosebleed. You can help this by using a moisturizing spray in between doses, to keep the inside of your nose from getting too dry.
- **Inhaled steroids** – Inhaled steroids used for lung diseases (like asthma) do not have as many side effects as steroids taken as pills. But some people who need to use inhalers for a long time at a high dose might have side effects. The more common side effects are thrush (an infection of the mouth and throat) or a hoarse voice. Rarely, there can also be side effects in other parts of the body. These are similar to the side effects that can happen with steroid pills (see below). Your doctor will adjust your dose and show you how to use your inhaler correctly to reduce the chance of side effects.

- Oral steroids – Side effects are most likely if your condition requires you to use oral steroids for a long time or at high doses. These can include:
  - Increased appetite and possibly weight gain
  - Changes in mood and thinking
  - Trouble sleeping
  - Thin skin
  - Eye problems
  - High blood pressure
  - Heart problems
  - Osteoporosis and other bone problems
  - Growth problems in children and adolescents
  - High blood sugar
  - Higher chance of getting infections

Your doctor will give you the lowest dose for the shortest possible time. This lowers the risk of side effects from oral steroids or makes them less severe. If you take steroid medicines for a long time, you need regular exams and tests. Your doctor or nurse will check for side effects and treat them if they happen.

**What else should I know about steroid medicines?** — Always take steroid medicines exactly the way your doctor or nurse tells you. This helps the medicines work better and can help reduce side effects. For example, if your doctor prescribes a steroid cream, only use it as often as the prescription says. If you take an inhaled steroid, make sure you know how to use the inhaler correctly. Keep using it as the prescription says, even if you do not feel the medicine working. For any steroid medicine, ask your doctor for instructions and make sure you understand them.

If you take oral steroids for more than 3 weeks, your body's ability to make its own cortisol can be decreased. It is important that all healthcare providers who treat you know this. Carry a card that lists the name and dose of the steroid you take, as well as all of your other medicines. Show this card to anyone who treats you (doctor, surgeon, dentist, nurse).

Call your doctor or nurse if you have any questions.

For more detailed information about your medicines, ask your doctor or nurse for information from Lexicomp available through UpToDate. The Lexicomp handouts explain how to use and store your medicines. They also list possible side effects and warn you if your medicines should not be taken with certain other medicines or foods.

### More on this topic

[Patient education: Addison's disease \(The Basics\)](#)

[Patient education: Adrenal crisis \(The Basics\)](#)

[Patient education: Dermatitis \(The Basics\)](#)

[Patient education: Kidney transplant \(The Basics\)](#)

[Patient education: Liver transplant \(The Basics\)](#)

[Patient education: Medicines for asthma \(The Basics\)](#)

[Patient education: Medicines for chronic obstructive pulmonary disease \(COPD\) \(The Basics\)](#)

[Patient education: Multiple sclerosis in adults \(The Basics\)](#)

[Patient education: Nausea and vomiting with cancer treatment \(The Basics\)](#)

[Patient education: Psoriasis \(The Basics\)](#)

[Patient education: Psoriatic arthritis in adults \(The Basics\)](#)

[Patient education: Rheumatoid arthritis \(The Basics\)](#)

[Patient education: Seasonal allergies in adults \(The Basics\)](#)

[Patient education: Reducing the costs of medicines \(Beyond the Basics\)](#)

[Patient education: Asthma treatment in adolescents and adults \(Beyond the Basics\)](#)

[Patient education: Chronic obstructive pulmonary disease \(COPD\) treatments \(Beyond the Basics\)](#)

[Patient education: Allergic rhinitis \(seasonal allergies\) \(Beyond the Basics\)](#)

[Patient education: Adrenal insufficiency \(Addison's disease\) \(Beyond the Basics\)](#)

[Patient education: Atopic dermatitis \(eczema\) \(Beyond the Basics\)](#)

[Patient education: Rheumatoid arthritis treatment \(Beyond the Basics\)](#)

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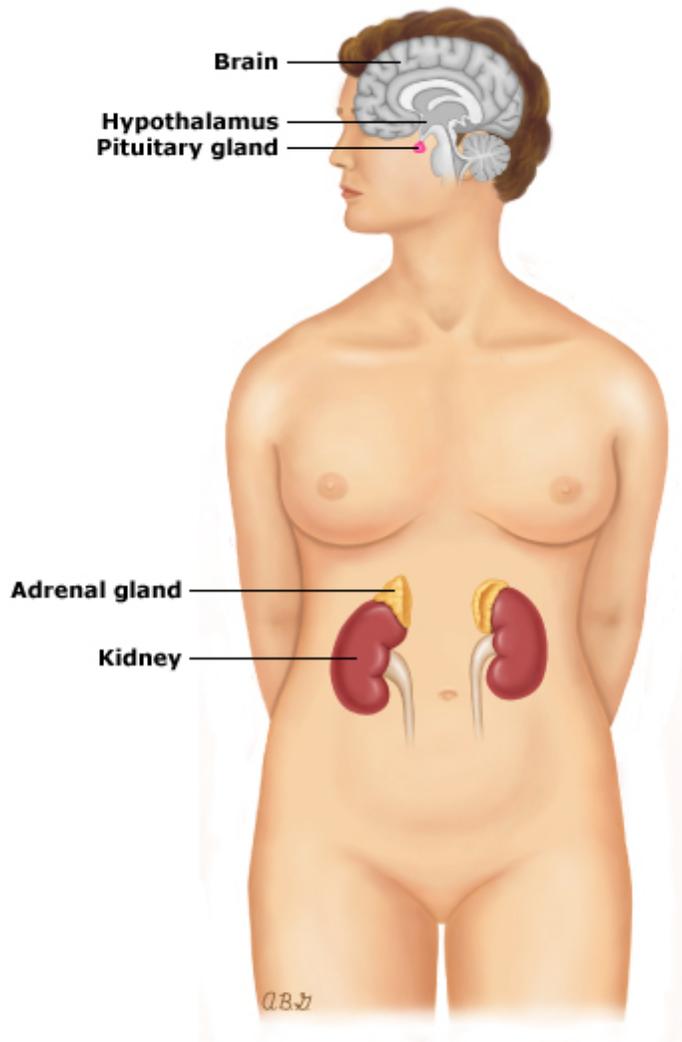
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## GRAPHICS

### Endocrine glands

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This figure shows the location of the adrenal glands, hypothalamus, and pituitary.

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## Some examples of steroid medicines

	<b>Generic name</b>	<b>Sample US brand names</b>
<b>Oral steroids</b>	Dexamethasone	Decadron
	Prednisone	Deltasone
	Prednisolone	Orapred
	Methylprednisolone	Medrol
<b>Inhaled steroids</b>	Fluticasone	Flovent HFA, Flovent Diskus
	Beclomethasone	QVAR
	Budesonide	Pulmicort Flexhaler
	Mometasone	Asmanex
<b>Topical steroids (creams, lotions, ointments, shampoos)</b>	Hydrocortisone	Cortaid, Preparation H Hydrocortisone
	Triamcinolone	Kenalog
	Betamethasone	Diprolene
<b>Steroid eye drops</b>	Prednisolone	Pred Forte
<b>Steroid ear drops</b>	Fluocinolone	DermOtic
<b>Steroid nose sprays</b>	Fluticasone	Flonase
	Mometasone	Nasonex
	Triamcinolone	Nasacort Allergy 24HR
<b>Steroid injections for joints or spine</b>	Triamcinolone	Aristospan
<b>Steroid injections in a vein (IV)</b>	Dexamethasone	Decadron
	Hydrocortisone	Solu-Cortef
	Methylprednisolone	Solu-Medrol

This table gives the names of some common steroid medicines. There are many others that are not listed here. If you want to know if your medicine is a steroid, ask your doctor, nurse, or pharmacist.

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