Adrenal Insufficiency

The adrenal glands
Your body has 2 adrenal glands, 1 on top of each kidney. The adrenal glands make hormones called cortisol and aldosterone.

Another gland, the pituitary gland, controls the release of cortisol through a hormone it makes called ACTH (adrenocorticotropic hormone).

**Cortisol** helps the body use sugar and protein for energy and helps you respond to stress and infections.

**Aldosterone** helps the body regulate blood pressure by keeping the right amount of salt, potassium, and water in your body.
Adrenal insufficiency
Adrenal insufficiency happens when your adrenal glands do not make enough hormones. Your body needs the right amount of these hormones in order to live. Adrenal insufficiency may be permanent or temporary.

When it is permanent, you must take medication for the rest of your life.

Permanent adrenal insufficiency can be caused by:
› Addison disease (adrenal glands do not make enough hormones)
› pituitary tumours
› removal of your pituitary gland
› removal of your adrenal glands
› congenital adrenal hyperplasia (CAH) (group of inherited disorders of the adrenal glands)

Temporary adrenal insufficiency can be caused by:
› using steroid medications
› pituitary gland surgery
› adrenal gland surgery
› medications that lower your cortisol levels (such as ketoconazole)
Symptoms of adrenal insufficiency
If your body is not making enough adrenal hormones, you may not feel well. Your symptoms may include:
› unusual tiredness and weakness
› dizziness when standing up
› nausea (feeling sick to your stomach)
› vomiting (throwing up), diarrhea
› loss of appetite (not hungry)
› stomachache

Everyone’s symptoms may be different.

Over time you may have:
› weight loss
› darkening of your skin
› cravings for salt

What are your questions?
Please ask. We are here to help you.
Medication to treat adrenal insufficiency
To keep your adrenal insufficiency under control, **you must take medication every day**.

The amount prescribed by your family health care provider is the amount your adrenal glands would normally make in a **non-stressful situation**. **This is often called your ‘replacement dose’**. This pill must be taken in the amounts and at the times prescribed by your family health care provider. **This dose is not harmful to you. It is not the same as larger doses of steroids given for treatment of other medical conditions**.

If you have problems with cortisol, you can take these medications: hydrocortisone, prednisone, cortisone acetate, Cortef®, or Solu-Cortef®.

If you have problems with aldosterone (Aldactone®), you can take a medication called Florinef®.

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**When should I take more than my regular medication dose?**
Normal adrenal glands make more cortisol when the body is under some types of stress. **During stressful times, you will need to take double the amount of your prescribed cortisol dose. Talk to your family health care provider about this.**
Stressful times are when you have:
› fever over 38° C or 100.4° F
› infection
› surgery
› vomiting (throwing up)
› diarrhea
› flu
› severe (really bad) cold
› any illness that stops you from doing your normal activities
› major emotional stresses, such as the death of a loved one, going to a funeral, a family illness, a personal problem, a dental visit, or a new job

Remember: during these stressful times, you need to double the amount of cortisol medication you are taking for at least 3 days. Once you are feeling better, go back to the usual dose.

There may be times when you do not feel well because you are physically tired or emotionally stressed. You don’t usually need to take more than your regular dose at these times, but it is important to remember to take your regular prescribed dose. When you are not sure, it is better to double your dose. Taking too much for a short time will not harm you.
Serious illness
If you are too sick to take your pills, or if you keep throwing them up, you must take cortisol by injection (Solu-Cortef®). You and someone you live with should learn how to give this injection. You will not cause any harm by giving an injection of Solu-Cortef® that later turns out to be unneeded.

Missing a needed dose can be life-threatening. It is important that you give the dose first, then go to the Emergency Department or call your family health care provider. High doses of steroid replacement are always needed in any stressful situation. This includes having surgery or being in a serious accident.

Returning to a regular dose
As soon as your illness is over and your symptoms (such as fever, vomiting, and diarrhea) are gone, you can go back to your regular dose of medication.
MedicAlert™
You must wear a MedicAlert™ bracelet or tag so that Emergency Department staff will know you are ‘steroid deficient’.

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The information in this pamphlet is to be updated every 3 years or as needed.