

# Adrenocorticotrophic Hormone (ACTH) Stimulation Test

## What is an ACTH stimulation test?

This is a test ordered by your endocrinologist to see if your adrenal glands are able to make enough cortisol. Adrenal glands are located on top of your kidneys and are responsible for making hormones. Cortisol is one of these hormones. It assists in regulating your metabolism and helps your body to respond to stress.

This test is performed to see if your adrenal glands can respond appropriately after stimulation by Cosyntropin (synthetic form of ACTH). It is used to test for adrenal insufficiency or non-classic (late onset) congenital adrenal hyperplasia.

## How is the test performed?

An appointment will be scheduled for you to have the test performed. You will be provided with the location and arrival time. Please plan for at least 3 hours of testing.

An intravenous (IV) cannula will be inserted into a vein in one of your arms and will remain there for the duration of the test. All of your blood samples will be drawn through this catheter, so you will not require any further needle pokes. Once the first blood tests are obtained, the nurse will inject Cosyntropin into the IV line. Cosyntropin is a synthetic version of ACTH (adrenocorticotrophic hormone), which your pituitary gland releases to stimulate the adrenal glands to make cortisol.

After the medication is injected, the nurse will withdraw blood samples from the IV line every 30 minutes for 1-2 hours, according to the directions from your endocrinologist. Once this is completed, the IV line will be removed and you will be able to go home.

CARING FOR THE BODY, MIND & SPIRIT SINCE 1869

---

Renowned for compassionate care, St. Joseph's is one of the best academic health care organizations in Canada dedicated to helping people live to their fullest by minimizing the effects of injury, disease and disability through excellence in care, teaching and research.



[sjhc.london.on.ca](http://sjhc.london.on.ca)

## **Are there any risks or side effects to this test?**

As with any blood test or IV insertion, you may have some bruising or redness at the site where the catheter was inserted. There is also a very small risk of infection.

The Cosyntropin may cause a brief period of side effects such as nausea, flushing and increase blood pressure. The nurse will give you medication slowly– over about 2 minutes – to minimize these effects, and will monitor your blood pressure. These side effects will disappear after a few minutes and you will feel well for the remainder of the test.

## **How do I prepare for the test?**

You will need to fast (no food or drinks other than water) after 10:00 pm the night before your test. Please DO drink water the morning of the test. You can bring a snack to eat once the test is completed.

Your doctor may also want you to take dexamethasone at 11:00 pm the night before the test. This will be discussed with you at your clinic appointment and tablets or a prescription will be given to you at that time.

Ask your doctor if there are any medications you should stop prior to your test and when you should restart them. **DO NOT STOP ANY MEDICATION UNLESS INDICATED BY HEALTH CARE PROVIDER**

Bring your daily dose of medications to the appointment in case appointment takes longer than expected.

## **What should I do if I need to cancel?**

If you need to cancel your appointment, please call 519-646-6000 ext. 64424 and state your name and test date. It's important to know that there may be a delay in rescheduling your appointment as the availability of test times are limited. If you need to cancel, we ask that you call as soon as possible.