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VIDEO CAPSULE ENDOSCOPY

What is a Video Capsule Endoscopy?

Capsule endoscopy is a procedure that uses a tiny wireless camera to take pictures of your digestive tract. A capsule endoscopy camera sits inside a vitamin-sized capsule that you swallow. As the capsule travels through your digestive tract, the camera takes thousands of pictures that are transmitted to a recorder you wear on a belt around your waist.

Capsule endoscopy helps doctors see inside your small intestine — an area that isn't easily reached with more-traditional endoscopy procedures. Traditional endoscopy involves passing a long, flexible tube equipped with a video camera down your throat or through your rectum. Capsule endoscopy is usually initiated in your doctor's office.

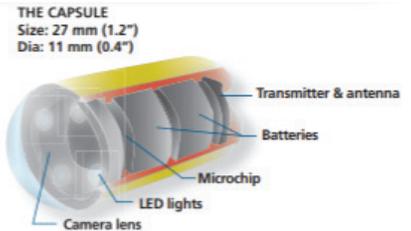
Capsule endoscopy is sometimes referred to as capsule enteroscopy or small bowel endoscopy.

Why is it done?

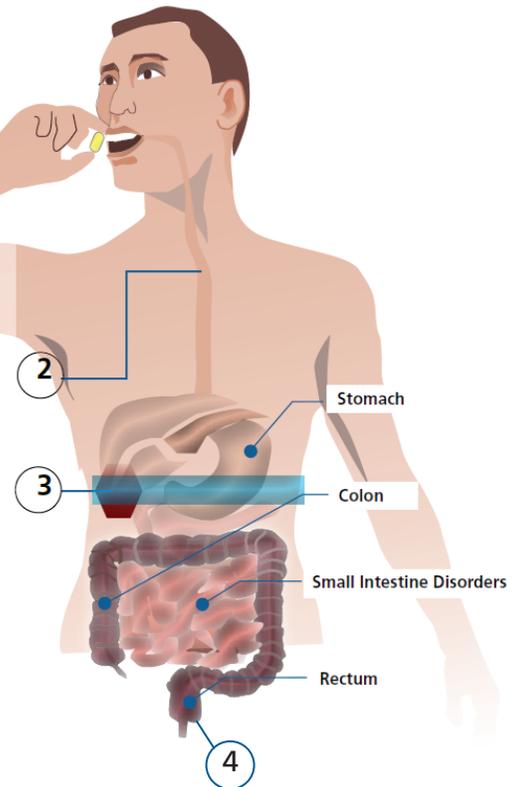
Capsule endoscopy helps your doctor see inside your small intestine. Your small intestine, located between your stomach and your colon, can be difficult to reach with traditional endoscopy procedures and imaging tests.

Situations in which your doctor might recommend a capsule endoscopy procedure include:

- Gastrointestinal bleeding. Capsule endoscopy may help your doctor find the cause of gastrointestinal bleeding if other tests and procedures haven't been conclusive.
- Crohn's disease. Capsule endoscopy may reveal areas of inflammation in the small intestine that can help your doctor diagnose inflammatory bowel diseases, such as Crohn's disease.
- Cancer. Capsule endoscopy may show tumors in the small intestine or other parts of the digestive tract.
- Celiac disease. Capsule endoscopy is sometimes used in diagnosing and monitoring celiac disease.
- Polyps. People who have inherited syndromes that can cause polyps in the small intestine may occasionally undergo capsule endoscopy to screen for polyps.
- Follow-up testing after X-rays or other imaging tests. If results of an X-ray or other imaging test were unusual or unclear, your doctor may recommend a capsule endoscopy as a follow-up test.



1. Fasting is necessary prior to swallowing a capsule
2. Capsule glides smoothly through digestive tract
3. Wireless recorder worn on a belt around waist receives signals transmitted by capsule through sensors placed on patient's body
4. Capsule naturally excreted



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RISK?

Capsule endoscopy is a safe procedure that carries few risks.

In most cases, the capsule that contains the tiny camera will leave your body when you have a bowel movement later in the day or within several days. In rare cases, the capsule can become lodged in your digestive tract.

The risk is thought to be small — about 1 percent of people undergoing capsule endoscopy may experience capsule retention. Put another way, this means that for every 100 people who undergo capsule endoscopy, 1 person might still retain the capsule after two weeks. The risk may be slightly higher in people known to have Crohn's disease.

If the capsule hasn't yet passed in a bowel movement and you're not experiencing any signs and symptoms due to capsule retention, your doctor may wait to see whether the capsule will eventually leave your body on its own. Capsules causing signs and symptoms that indicate bowel obstruction must be removed. Depending on where the capsule is stuck, you may need to undergo surgery to remove the capsule. The capsule may also be retrieved using a traditional endoscopy procedure, which involves inserting a long, thin tube equipped with a camera down your throat or up through your rectum.

HOW YOU PREPARE:

To prepare for your capsule endoscopy, your doctor may ask that you:

- 1) Stop eating at least 8 hours before your capsule endoscopy. To ensure that the camera will capture clear images of your digestive tract, your doctor will ask you to fast before the procedure.
- 2) Stop or delay taking certain medications. In some cases, your doctor may ask that you stop taking certain medications. In other cases, your doctor may ask that you take your medication two hours before or after you swallow the capsule that contains the camera. That way, your medication won't interfere with the camera.
- 3) Plan to take it easy for the day. In most cases, you'll be able to go about your day after you swallow the capsule that contains the camera. But you'll likely be asked not to do any strenuous exercise or heavy lifting. If you have an active job, ask your doctor whether you can go back to work the day of your capsule endoscopy.

In some cases, your doctor may ask you to take a laxative preparation prior to your capsule endoscopy in order to flush out your small intestine. This has been shown to improve the quality of the pictures collected by the capsule's camera.

Follow your doctor's instructions in preparing for your capsule endoscopy. Failure to follow the directions may mean your capsule endoscopy may need to be rescheduled.

WHAT YOU CAN EXPECT DURING A CAPSULE ENDOSCOPY:

On the day of your capsule endoscopy, your health care team will meet with you to review what will be done during the procedure. You may be asked to remove your shirt so that several adhesive patches can be attached to your abdomen. Each patch contains an antenna with wires that connect to a

recorder. Some devices don't require the patches attached to your skin. You wear the recorder on a special belt around your waist. As the camera capsule passes through your intestine taking pictures, the images are transmitted to an antenna on your abdomen, which feeds the data to the recorder. The recorder collects and stores the images.

Once the recorder is connected and ready, your health care team will give you a glass of water and instruct you to swallow the camera capsule. The capsule is about the size of a large vitamin pill. A slippery coating makes it easier to swallow.

You may feel the capsule as you swallow it. But once it has passed beyond your throat, you won't feel it as it moves through your body.

You'll then be allowed to go about your day. You can drive and you may be able to go back to work, depending on your job. Your doctor will discuss any restrictions with you. For instance, you may be asked to avoid strenuous exercise or any activity that disrupts the recorder.

AFTER THE CAPSULE ENDOSCOPY:

Wait two hours after you swallow the capsule to resume drinking clear liquids. Four hours after you swallow the capsule, you can have a light lunch or a snack. The capsule will be far enough along in your digestive system that eating and drinking won't interfere with the pictures.

The capsule endoscopy procedure is complete after eight hours or when you see the camera capsule in the toilet after a bowel movement, whichever comes first. Remove the antenna patches and the recorder. Pack them in a bag and follow your doctor's instructions for returning the equipment.

You don't need to collect the camera capsule — it can be safely flushed down the toilet.

Your body may expel the camera capsule within hours, or it may be expelled after several days. Each person's digestive system is different. If you don't see the capsule in the toilet within two weeks, contact your doctor. An X-ray may be done to see if the capsule is still in your body.

RESULTS:

The camera used in capsule endoscopy takes thousands of color photos as it passes through your digestive tract. The images saved on the recorder are transferred to a computer with special software that strings the images together to create a video. Your doctor watches the video to look for abnormalities within your digestive tract.

It may take a few days to a week to receive the results of your capsule endoscopy. Your doctor will then share the results with you.