

# Colonoscopy

*National Digestive Diseases Information Clearinghouse*



U.S. Department  
of Health and  
Human Services

NATIONAL  
INSTITUTES  
OF HEALTH

**NIDDK**  
NATIONAL INSTITUTE OF  
DIABETES AND DIGESTIVE  
AND KIDNEY DISEASES

## What is colonoscopy?

Colonoscopy is a procedure used to see inside the colon and rectum. Colonoscopy can detect inflamed tissue, ulcers, and abnormal growths. The procedure is used to look for early signs of colorectal cancer and can help doctors diagnose unexplained changes in bowel habits, abdominal pain, bleeding from the anus, and weight loss.

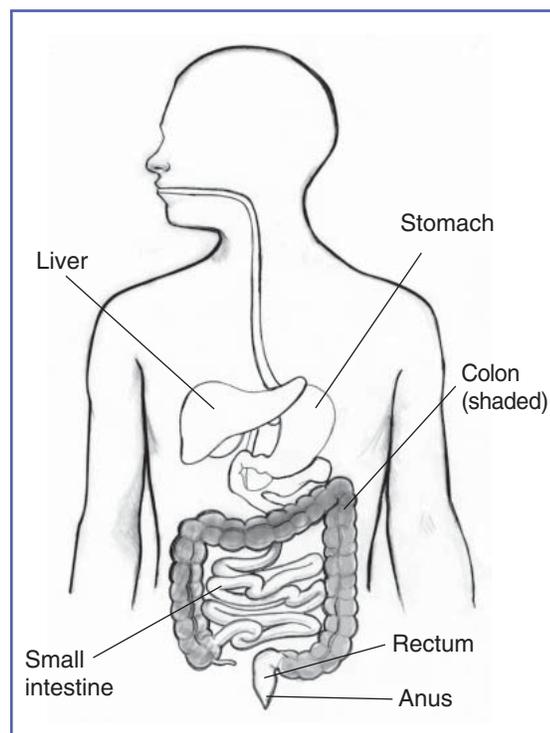
## What are the colon and rectum?

The colon and rectum are the two main parts of the large intestine. Although the colon is only one part of the large intestine, because most of the large intestine consists of colon, the two terms are often used interchangeably. The large intestine is also sometimes called the large bowel.

Digestive waste enters the colon from the small intestine as a semisolid. As waste moves toward the anus, the colon removes moisture and forms stool. The rectum is about 6 inches long and connects the colon to the anus. Stool leaves the body through the anus. Muscles and nerves in the rectum and anus control bowel movements.

## How to Prepare for Colonoscopy

The doctor usually provides written instructions about how to prepare for colonoscopy. The process is called a bowel prep. Generally, all solids must be emptied from the gastrointestinal tract by following a clear liquid diet



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for 1 to 3 days before the procedure. Patients should not drink beverages containing red or purple dye. Acceptable liquids include

- fat-free bouillon or broth
- strained fruit juice
- water
- plain coffee
- plain tea
- sports drinks, such as Gatorade
- gelatin

A laxative or an enema may be required the night before colonoscopy. A laxative is medicine that loosens stool and increases bowel movements. Laxatives are usually swallowed in pill form or as a powder dissolved in water. An enema is performed by flushing water, or sometimes a mild soap solution, into the anus using a special wash bottle.

Patients should inform the doctor of all medical conditions and any medications, vitamins, or supplements taken regularly, including

- aspirin
- arthritis medications
- blood thinners
- diabetes medications
- vitamins that contain iron

Driving is not permitted for 12 hours after colonoscopy to allow the sedative time to wear off. Before the appointment, patients should make plans for a ride home.

## How is colonoscopy performed?

### Examination of the Large Intestine

During colonoscopy, patients lie on their left side on an examination table. In most cases, a light sedative, and possibly pain medication, helps keep patients relaxed. Deeper sedation may be required in some cases. The doctor and medical staff monitor vital signs and attempt to make patients as comfortable as possible.



During colonoscopy, patients lie on their left side on an examination table.

The doctor inserts a long, flexible, lighted tube called a colonoscope, or scope, into the anus and slowly guides it through the rectum and into the colon. The scope inflates the large intestine with carbon dioxide gas to give the doctor a better view. A small camera mounted on the scope transmits a video image from inside the large intestine to a computer screen, allowing the doctor to carefully examine the intestinal lining. The doctor may ask the patient to move periodically so the scope can be adjusted for better viewing.

Once the scope has reached the opening to the small intestine, it is slowly withdrawn and the lining of the large intestine is carefully examined again. Bleeding and puncture of the large intestine are possible but uncommon complications of colonoscopy.

## Removal of Polyps and Biopsy

A doctor can remove growths, called polyps, during colonoscopy and later test them in a laboratory for signs of cancer. Polyps are common in adults and are usually harmless. However, most colorectal cancer begins as a polyp, so removing polyps early is an effective way to prevent cancer.

The doctor can also take samples from abnormal-looking tissues during colonoscopy. The procedure, called a biopsy, allows the doctor to later look at the tissue with a microscope for signs of disease.

The doctor removes polyps and takes biopsy tissue using tiny tools passed through the scope. If bleeding occurs, the doctor can usually stop it with an electrical probe or special medications passed through the scope. Tissue removal and the treatments to stop bleeding are usually painless.

## Recovery

Colonoscopy usually takes 30 to 60 minutes. Cramping or bloating may occur during the first hour after the procedure. The sedative takes time to completely wear off. Patients may need to remain at the clinic for 1 to 2 hours after the procedure. Full recovery is expected by the next day. Discharge instructions should be carefully read and followed.

Patients who develop any of these rare side effects should contact their doctor immediately:

- severe abdominal pain
- fever
- bloody bowel movements
- dizziness
- weakness

## At what age should routine colonoscopy begin?

Routine colonoscopy to look for early signs of cancer should begin at age 50 for most people—earlier if there is a family history of colorectal cancer, a personal history of inflammatory bowel disease, or other risk factors. The doctor can advise patients about how often to get a colonoscopy.

## Points to Remember

- Colonoscopy is a procedure used to see inside the colon and rectum.
- All solids must be emptied from the gastrointestinal tract by following a clear liquid diet for 1 to 3 days before colonoscopy.
- During colonoscopy, a sedative, and possibly pain medication, helps keep patients relaxed.
- A doctor can remove polyps and biopsy abnormal-looking tissues during colonoscopy.
- Driving is not permitted for 12 hours after colonoscopy to allow the sedative time to wear off.

## Hope through Research

The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) conducts and supports basic and clinical research into many digestive disorders. The NIDDK is working to improve colonoscopy by developing new tools, including tools that improve the ability to detect all colon polyps and to identify people at increased risk of colorectal cancer. Such tools will help train doctors to perform colonoscopy, improve safety, and make the procedure more comfortable for patients.

Participants in clinical trials can play a more active role in their own health care, gain access to new research treatments before they are widely available, and help others by contributing to medical research. For information about current studies, visit [www.ClinicalTrials.gov](http://www.ClinicalTrials.gov).

## For More Information

Fact sheets about other diagnostic tests are available from the National Digestive Diseases Information Clearinghouse at [www.digestive.niddk.nih.gov](http://www.digestive.niddk.nih.gov), including

- *ERCP (Endoscopic Retrograde Cholangiopancreatography)*
- *Flexible Sigmoidoscopy*
- *Lower GI Series*
- *Liver Biopsy*
- *Upper GI Series*
- *Upper GI Endoscopy*
- *Virtual Colonoscopy*

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You may also find additional information about this topic by

- searching the NIDDK Reference Collection at [www.catalog.niddk.nih.gov/resources](http://www.catalog.niddk.nih.gov/resources)
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Publications produced by the Clearinghouse are carefully reviewed by both NIDDK scientists and outside experts. This publication was reviewed by Michael Wallace, M.D., Mayo Clinic.

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