TEST

Colon cancer screening

Colon cancer screening uses stool tests, a camera, or imaging to find colorectal cancer or precancerous growths before symptoms appear.

WHAT IT MEASURES
Hidden stool blood or bowel growths, depending on method

SAMPLE
Stool, or none for camera and imaging tests

FASTING NEEDED?
Sometimes, before colonoscopy or CT colonography

HOW LONG IT TAKES
Minutes at home; about 30-60 minutes for colonoscopy

RESULTS IN
Days to weeks, based on test and laboratory

USED FOR
Screening for colorectal cancer and precancerous polyps

MAIN LIMITATION
Positive non-colonoscopy tests usually require colonoscopy

Overview

Colon cancer screening looks for colorectal cancer before symptoms develop. It can also find polyps, which are growths in the bowel lining. Most are not cancer, but some can become cancer over time. Removing certain polyps can prevent cancer.

Options include stool tests, colonoscopy, flexible sigmoidoscopy, and CT colonography. The right method depends on your risk, preferences, health, local screening program, and access to follow-up care.

Screening is for people without symptoms. Blood in your stool, persistent bowel changes or abdominal pain, unexplained weight loss, or iron-deficiency anaemia may require diagnostic assessment instead.

Why the test is ordered

Early colorectal cancer may not cause symptoms. Screening can find cancer when treatment

may be more effective and identify precancerous polyps before they become cancer.

The main methods are:

A positive stool, sigmoidoscopy, or CT result does not diagnose cancer. It usually means colonoscopy is needed to examine the area and take or remove tissue.

- Stool tests: Look for hidden blood, abnormal DNA, or both
- Colonoscopy: Examines the whole colon with a flexible camera
- Flexible sigmoidoscopy: Examines the rectum and lower colon
- CT colonography: Uses X-rays and computer imaging

Who should have the test

In the United States, major guidelines generally recommend routine screening for average-risk adults ages 45 through 75. From 76 through 85, decisions usually depend on previous screening, overall health, preferences, and potential benefit. Recommendations vary by country and program.

You may need earlier or more frequent screening if you have:

These conditions may require a specialist plan rather than a standard home test.

Seek prompt medical advice for new rectal bleeding, black stools, ongoing bowel changes, persistent abdominal pain, unexplained weight loss, or unusual tiredness.

- Previous colorectal cancer or certain polyps
- A parent, sibling, or child with colorectal cancer or advanced polyps
- Inflammatory bowel disease affecting the colon
- Lynch syndrome, familial adenomatous polyposis, or another inherited risk

How to prepare

Preparation depends on the method.

FIT usually requires no fasting or dietary changes. Collect a small stool sample with the supplied kit and follow its storage and return instructions. Delays or heat may affect the sample. A gFOBT may have food or medicine restrictions, so follow your specific kit's directions.

Colonoscopy and CT colonography require bowel preparation, usually a temporary low-fibre or

clear-liquid diet and a strong laxative. Remaining stool can hide polyps, so follow every instruction carefully.

Tell the testing service about pregnancy, kidney or heart problems, diabetes, allergies, and all medicines and supplements. Blood thinners and diabetes medicines may need adjustment. Do not stop prescribed medicine unless instructed.

If you receive sedation for colonoscopy, arrange for someone to take you home and follow restrictions on driving and important decisions.

What happens during the test

For FIT, you collect stool with a small probe and place it in a tube. The laboratory checks for human blood protein. Some stool DNA tests require a larger sample.

During colonoscopy, a clinician passes a flexible camera through the anus and around the colon. Air or carbon dioxide opens the bowel. Polyps can often be removed, and tissue samples can be taken.

Flexible sigmoidoscopy is similar but examines only the lower colon and may not require sedation.

For CT colonography, a small rectal tube fills the colon with air or carbon dioxide before CT images are taken. It usually needs no sedation but cannot remove polyps or take tissue.

Understanding your results

A negative stool test means blood or abnormal DNA was not detected above the test cutoff. It lowers the likelihood of cancer at that time but does not rule it out. Repeat screening at the recommended interval.

A positive stool test may result from cancer, polyps, inflammation, haemorrhoids, or another source of bleeding. Colonoscopy is generally needed to find the cause.

Colonoscopy may show a normal bowel, polyps, inflammation, cancer, or another condition. Removed tissue is examined under a microscope before the final result.

Cutoffs and interpretation vary by method and laboratory. Results are considered alongside your history and risk factors.

What affects the results

A cancer or polyp may bleed only occasionally, causing a negative stool test. Incorrect sampling, delayed return, heat, toilet-water contamination, or an expired kit can also reduce reliability.

Menstrual blood, bleeding haemorrhoids, or visible urinary bleeding may contaminate a sample. Ask the screening program whether to delay collection.

FIT is not usually affected by food. Some gFOBT kits can be affected by red meat, vitamin C, or medicines.

Colonoscopy accuracy depends on bowel preparation, completion of the examination, bowel anatomy, and detection of subtle growths. CT colonography may be affected by retained stool or poor bowel inflation. Pregnancy can change which test is appropriate because CT uses radiation and colonoscopy may involve sedation.

Accuracy and limitations

No method finds every cancer or polyp. Stool tests can miss growths that are not bleeding or shedding abnormal DNA. A negative result should never be used to dismiss concerning symptoms.

Colonoscopy examines the whole colon and allows biopsy or removal, but it can miss small, flat, or hidden lesions. Poor preparation or an incomplete examination may require an earlier repeat.

Flexible sigmoidoscopy does not examine the upper colon. CT colonography may miss some polyps and can identify unrelated findings that need assessment. Colonoscopy is usually preferred after an abnormal stool or imaging result because it can inspect, sample, and remove tissue.

Risks and complications

Home stool tests have no direct procedural risk.

Bowel preparation can cause nausea, bloating, diarrhoea, dehydration, or changes in body salts. People with kidney, heart, or fluid-balance problems may need tailored preparation.

Colonoscopy can cause temporary wind, cramps, or light bleeding. Uncommon serious complications include heavy bleeding, a tear in the bowel, or a reaction to sedation.

CT colonography uses a small amount of radiation and may cause temporary bloating or cramps. Injury to the inflated colon is rare.

After a bowel procedure, seek urgent medical care for severe or worsening abdominal pain, fever, repeated vomiting, persistent heavy bleeding, fainting, breathing difficulty, or a swollen, rigid abdomen. Contact the procedure service for advice about mild bloating or a small amount of blood after polyp removal.

What happens next

After a negative result, repeat screening at the interval recommended for that method and your risk. Keep a record of the test and date.

After a positive stool test or abnormal CT colonography, colonoscopy is usually the next step. Repeating the stool test is generally not enough.

If polyps are removed, future colonoscopy timing depends on their number, size, and type, examination quality, and your personal and family history.

Contact your healthcare service if symptoms develop before your next screening date. A recent negative result does not rule out every cause of bleeding or bowel changes.

Common questions

Can I drink coffee before the test?

Usually before FIT. Before colonoscopy, only black coffee may be allowed as a clear liquid; milk or cream is generally not allowed. Follow your instructions exactly.

Does the time of day matter?

Usually not for stool collection. Store and return the sample as instructed. Colonoscopy timing determines when you take each part of the preparation.

Can I exercise beforehand?

Normal exercise does not usually affect stool results. During bowel preparation, avoid strenuous activity if you feel weak, dizzy, or dehydrated.

Can I do a stool test during my period?

Menstrual blood may contaminate the sample. Many programs advise waiting until bleeding stops, but follow your kit's instructions.

Do I need to stop my medicines?

Usually not for FIT. Colonoscopy may require changes to blood thinners like warfarin or apixaban , iron, or diabetes medicines. Make changes only when instructed by the testing

service.

Does a positive result mean I have cancer?

No. It means further testing is needed. Polyps, haemorrhoids, inflammation, and other bleeding sources can also cause a positive result.

Sources

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