Colorectal Cancer Prevention: How to Screen for Colorectal Cancer and Why 45 Is the New 50 When It Comes to Screening

Melissa J. Vilaro, Valeria Westring, and Rebecca M. Elliott

If you are 45 years of age and at average risk, it's time to get screened for colorectal cancer.

Colorectal Cancer Screening Guidelines Explained

The United States Preventive Services Task Force (USPSTF) (Davidson et al., 2021) has new guidelines for colorectal cancer screening. If you are at average risk, now you can start screening when you turn 45 years old. This article is for adults at average risk of getting colorectal cancer. After reading this article, you should understand primary prevention and risk reduction approaches.

What is colorectal cancer?

Colorectal cancer is a disease where cancer cells form in the colon or the rectum. The colon and rectum are part of the digestive system and make up the large intestine. Colorectal cancers usually start with a growth (called a polyp) in the colon or rectum. If cancer forms in a polyp, it can grow into the wall of the colon or rectum. If a polyp grows in the colon, it is called colon cancer. If the polyp begins to grow in the rectum, it is called rectal cancer.

Colorectal cancer is the third most common cancer type in the United States. It is also the second leading cause of cancer death. In 2022, the American Cancer Society documented 151,030 new colorectal cancer cases and 52,580 deaths from colorectal cancer (Siegel et al., 2022). One out of 23 men and 1 out of 25 women will develop colorectal cancer during their lifetime (Siegel et al., 2022).

In the United States, about 18,000 adults under the age of 50 years old are diagnosed with colorectal cancer each year. Unfortunately, new case trends for younger adults are not moving in the right direction. Between 2014 and 2018, colorectal cancer rates in adults younger than 50 years old have been increasing. Currently, colorectal cancer rates increase by 1.5% each year in those under 50 years old (Siegel et al., 2022). In recent years, there have also been more deaths among younger adults from colorectal cancer.

Despite these numbers, colorectal cancer is easily treatable, and it can be cured if found early. The information below can help you reduce your colorectal cancer risk or stop it before it moves to a life-threatening stage.
Why is there a new recommendation for screening age?
One in 24 adults will develop colorectal cancer in their lifetime. Before 2020, the recommended screening age was 50 years old. However, finding colorectal cancer in younger age groups called for a lower age (i.e., 45 years old) to begin regular screening (Hyams et al., 2022; Knudsen et al., 2021).

In the US, between 2012 and 2016, 19 adults per 100,000 people aged 40–44 were diagnosed with colorectal cancer (American Cancer Society, 2020; Siegel et al., 2022). There are actions you can take to reduce your colorectal cancer risk. Various screening methods are available that can help detect and treat colorectal cancer early.

How to reduce your colorectal cancer risk?

Step 1: Get screened for colorectal cancer and stay up to date with screening guidelines.
Regular screening is the best action for preventing colorectal cancer or detecting it at an early and treatable stage.

WHY SHOULD I SCREEN FOR COLORECTAL CANCER?
Screening is a life-saving way to identify colorectal cancer. When caught early, over 90% of colorectal cancers are treatable.

WHO SHOULD SCREEN FOR COLORECTAL CANCER?
Any adult at average risk who is between 45 and 75 years of age should screen for colorectal cancer. In 2021, the USPSTF updated its screening guidelines, resulting in a lower recommended age for screening. This update was due in part to the increasing rates of colorectal cancer identified in adults under the age of 50 years old.

Colorectal cancer can be present even in people who have no symptoms, so staying up to date with screening is important.

HOW TO SCREEN FOR COLORECTAL CANCER?
Several tests are available to screen for colorectal cancer. Talk to your doctor to decide which test is best for you. Choosing a type you are comfortable with is the best way to make sure this important task does not fall off your to-do list.

All tests are effective, so choose the one that you and your doctor feel most comfortable completing. A few of the different ways to screen are:

- Fecal immunochemical test (FIT): every year
- Guaiac-based fecal occult blood test (gFOBT): every year
- Multi-targeted stool DNA test (mt-sDNA): every 1 to 3 years
- Colonoscopy: every 10 years
- CT colonography: every 5 years
- Flexible sigmoidoscopy: every 5 years

Not all screening tests for colorectal cancer must take place in a clinical setting. Some tests, like the FIT and eFOBT, can be done from the comfort of your own home with an at-home stool collection kit. Your doctor’s offices may also mail you a kit and allow you to send it back to them in the mail. You may even be able to access screening via a mobile clinic or community health fair.

Step 2: Get to know the modifiable risk factors for colorectal cancer.
Risk factors are anything that can raise your chance of getting colorectal cancer. Risk factors are modifiable or non-modifiable.

WHAT ARE MODIFIABLE RISK FACTORS?
Modifiable risk factors are things you can change. For example, you can change a lifestyle behavior to reduce your risk of getting colorectal cancer. These factors can be things to limit or avoid, such as drinking alcohol or eating processed meats. A sedentary lifestyle (i.e., not getting enough physical activity) is another modifiable risk factor. Below are five modifiable risk factors.

- Physical inactivity: Stay physically active. Approximately 15% of colon cancers can be attributed to not getting enough physical activity (Oruc & Kaplan, 2019). Physical activity is even beneficial during and after cancer treatment (Singh et al., 2020).
- Smoking: Avoid smoking. People who smoke have a 50% higher risk of getting colorectal cancer compared to those who do not smoke. About 12% of colorectal cancers are linked to smoking (Islami et al., 2018).
- Eating red and processed meats such as beef, pork, lamb, hot dogs, or luncheon meats: Limit consumption
of red meat and processed meats and increase consumption of vegetables, fruits, and whole grains. Eating red and processed meats increases your risk of developing colorectal cancer. For every 100 grams of red meat eaten, there is a 12% increase in risk. For every 50 grams of processed meat eaten, there is an 18% increase in risk (Vieira et al., 2017).

- **Drinking alcohol**: Limit or avoid alcohol consumption. Moderate to heavy alcohol use can raise the risk of developing colorectal cancer; about 13% of colorectal cancers are attributed to drinking alcohol (Islami et al., 2018).

- **Unhealthy weight**: Excess weight over the course of a lifetime is linked to a higher risk of developing colorectal cancer (Li et al., 2022). Colorectal cancer mortality is associated with both excess weight and underweight (Jaspan, Lin, & Popov, 2021). Aim for a body mass index (BMI) range between 18 kg/m$^2$ and 24.9 kg/m$^2$. Elevated BMI comes with a 50% higher risk of developing colon cancer (Xue et al., 2017).

**Step 3: Take up a healthy lifestyle.**

Keeping a healthy lifestyle can help you feel good and reduce your colorectal cancer risk. If you can make a few small changes, you are modifying your risk (Rock et al., 2022). A higher number of healthy lifestyle behaviors is associated with a lower risk of getting colorectal cancer (Yu et al., 2022), but you can start with one behavior. Set a goal to meet recommendations for one or more cancer prevention behaviors. For example, if you want to start with physical activity, see the tips below.

- **Do you have at least 22 minutes a day?** Engaging in any moderately intense activity for 22 minutes each day will help you stay within physical activity guidelines for colorectal cancer prevention.

- **Do you have 10 minutes a day, and feel like you can manage a bit more intensity?** Engaging in any vigorous-intensity activity for at least 10 minutes each day will help you stay within the physical activity guidelines for colorectal cancer prevention.

**Conclusion**

Cancer screening tests are powerful tools to find all kinds of cancers such as breast, colorectal, cervical, and lung cancers (CDC, 2021). Regular colorectal cancer screening can detect cancer before it has a chance to develop into an advanced stage. Colonoscopies or other types of screening tests are the best ways to find colorectal polyps or cancer at an early, treatable stage.

If you are between 45 and 75 years old and at average risk for colorectal cancer (meaning you have no genetic risk factors), get screened for colorectal cancer. The USPSTF recommends starting screening for colorectal cancer at 45, due to the increased number of people under the age of 50 developing it. By screening at a younger age, you are improving your chances of finding the cancer when it is still early and treatable.

A healthy lifestyle can help to control modifiable risk factors associated with cancer. While big changes can be difficult, small but consistent changes can help you reach your goals. The lifestyle habits above are recommended for cancer prevention. Review the resources below for ideas on how to build cancer prevention into your daily routine.

It is never too early to prioritize your health. Try to stay active, eat healthier, limit alcohol, quit smoking, and maintain regular screenings for colorectal cancer.

**Key Terms**

- **Risk factor**: Anything that can increase your chances of developing colorectal cancer.

- **Modifiable risk**: A risk factor that you can change, usually related to lifestyle choices, to decrease your chances of getting colorectal cancer.

- **Non-modifiable risks**: Risk factors such as age, genetics, or family history are not things you can change.

- **Risk reduction**: Actions (e.g., staying up to date with screening) you undertake to catch cancer in its early stages and reduce your risk of serious illness.

- **Primary prevention**: Actions you can undertake to prevent colorectal cancer from developing.

- **Average risk**: Adults 45 years or older who do not have signs or symptoms of colorectal cancer and who do not have personal or family history of genetic risk for colorectal cancer, inflammatory bowel disease, or adenomatous polyps that increase colorectal cancer risk.
REDUCE YOUR COLORECTAL CANCER RISK

KNOW THE RISKS

Age: 45 years old
Health: Family history (e.g., polyps or cancer)
Diet: Alcohol, red meats, and processed meats

FOLLOW RECOMMENDATIONS

Get Screened: Stay up to date on colorectal cancer screening with colonoscopy or a home screening kit like Cologuard or F.I.T. (feco-immunochemical test)
Limit Red Meat: Limit to 3 servings or less each week.
One serving of red meat is about 300 grams.
Avoid Alcohol: Avoid if possible. Any reduction will reduce risk.
Avoid Processed meat: Avoid if possible. Any reduction will reduce risk.

SEEK HELP TO GET SCREENED

Talk to your doctor about screening options.
FIT or Cologuard are accurate options for average risk adults. Home-based stool tests can be delivered to your home by mail. Collect a sample at home and send it back in the mail. Contact your healthcare team to follow up with the results. Colonoscopy is another common screening option that you can schedule with your doctor and get at the clinic.

START WITH SMALL CHANGES

Plan a meal without meat. Cut your portion of steak in half. Find substitutions that fit your life and budget. Have one less drink.

For more resources and information visit:
www.preventcancerwithalex.org

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MAINTAIN A HEALTHY WEIGHT

- Make half your plate colorful fruits and vegetables
- Include whole grains
- Lean protein choices
- Incorporate low fat dairy or nondairy options

CHOOSE LEAN PROTEIN

Protein foods should be from fresh, frozen, or canned, and in lean forms (e.g., chicken breast or ground turkey) of meat, poultry, fish, dry beans and nuts versus red meat and processed meats (e.g., hot dogs, sausages, ham, luncheon meats).

LIMIT RED MEAT TO 3 SERVINGS OR LESS EACH WEEK

What is a serving?
3 ounces (size of deck of cards)

MOVE MORE AND SIT LESS

Aim for at least 150 minutes of activity a week.
Moderate: Walking, biking, gardening or housework
Vigorous: Cycling, swimming, Zumba, hiking
- Take mini physical activity breaks
- Stretch with a resistance band or with squats
- Take a walk outside

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<th><strong>Table 1. Physical activity type and intensity.</strong></th>
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<td><strong>Moderate Intensity</strong> (Get 150–300 minutes each week or 22 minutes each day)</td>
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<td><strong>Sports and leisure</strong></td>
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