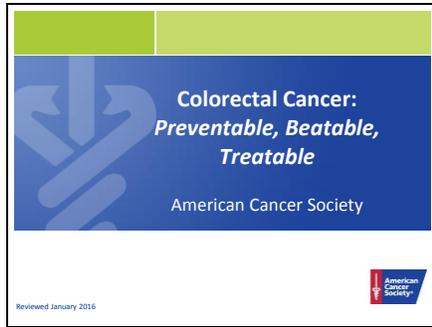


Slide 1

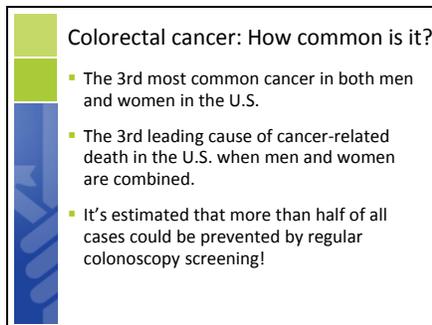


Slide 2



This is a summary of what we'll be talking about today.

Slide 3



Slide 4

What is colorectal cancer?

The **colon** (large bowel or large intestine)

- A muscular tube about 5 feet long
- Part of the digestive system
- Absorbs water and salt from food
- Stores waste matter

The **rectum** is the last 6 inches of the digestive system.



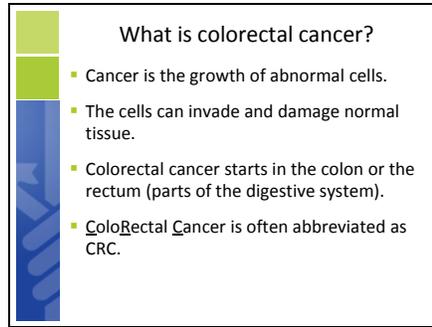
Colorectal cancer is a term that is used to refer to cancer that develops in the colon or the rectum. These cancers are sometimes referred to separately as colon cancer or rectal cancer, depending on where they start. But colon cancer and rectal cancer have many features in common and we will be discussing them together today.

After food is chewed food and swallowed, it travels through the esophagus (ih-**sof**-uh-gus) to the stomach. There it is partly broken down and then sent to the small intestine, also known as the small bowel. The small intestine is the longest part of the digestive system -- about 20 feet. The small intestine continues breaking down the food and absorbs most of the nutrients.

The small bowel joins the colon in the right lower abdomen. The colon (also called the large bowel or large intestine) is a muscular tube about 5 feet long. The colon absorbs water and salt from the food and serves as a storage place for waste matter.

The waste material that's left after going through the colon is known as feces or stool. It goes into the rectum, the final 6 inches of the digestive system. From there it leaves the body through the anus.

Slide 5

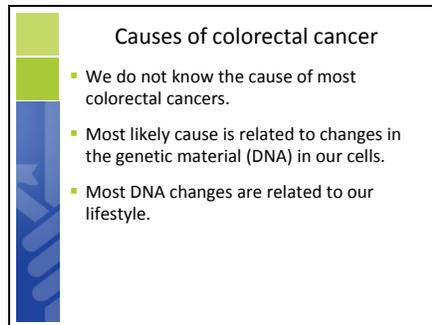


What is colorectal cancer?

- Cancer is the growth of abnormal cells.
- The cells can invade and damage normal tissue.
- Colorectal cancer starts in the colon or the rectum (parts of the digestive system).
- ColoRectal Cancer is often abbreviated as CRC.

In most people, colorectal cancers develop slowly over several years. Before a cancer develops, a growth of tissue or tumor usually begins as a non-cancerous polyp on the inner lining of the colon or rectum. I'll show you a picture of a polyp in a few slides. Some polyps can change into cancer but not all do.

Slide 6

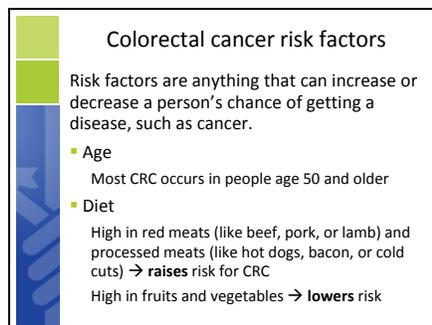


Causes of colorectal cancer

- We do not know the cause of most colorectal cancers.
- Most likely cause is related to changes in the genetic material (DNA) in our cells.
- Most DNA changes are related to our lifestyle.

Some cancer-related DNA mutations can be inherited, which means that the person is born with the mutated DNA in all the body's cells. But most mutations happen after the person is born, and are called acquired mutations.

Slide 7



Colorectal cancer risk factors

Risk factors are anything that can increase or decrease a person's chance of getting a disease, such as cancer.

- Age
 - Most CRC occurs in people age 50 and older
- Diet
 - High in red meats (like beef, pork, or lamb) and processed meats (like hot dogs, bacon, or cold cuts) → **raises** risk for CRC
 - High in fruits and vegetables → **lowers** risk

Different cancers have different risk factors. For example, exposing skin to strong sunlight is a risk factor for skin cancer, using tobacco is a risk factor for lung, bladder, and many other kinds of cancer. But risk factors don't tell us everything.

Having a risk factor, or even several risk factors, does not mean that you will get the disease. And some people who get the disease may not have any known risk factors. Even if a person with colorectal cancer has a risk factor, it is often very hard to know how much that risk factor contributed to the cancer.

Still, researchers have found several risk factors that may increase a person's chance of developing colorectal cancer.

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Colorectal cancer risk factors

- Physical activity
Less active → raises risk
- Overweight
Obesity → raises risk of having and of dying from CRC
- Smoking → raises risk
- Heavy alcohol use → raises risk
- Type 2 diabetes → raises risk



Bullet #1: Increasing activity may help reduce your risk.

Bullet #2: Obesity is a risk that has been shown to raise the risk of colon cancer in both men and women, but the link seems to be stronger in men. Not only does it raise the risk of getting colorectal cancer, obesity raises the risk of dying from it.

Bullet #3: Cancer-causing substances found in tobacco and tobacco smoke are swallowed and can cause digestive system cancers, such as colorectal cancer.

Bullet #4 : Alcohol: Several studies have found a higher risk of colorectal cancer with increased alcohol intake, especially among men.

Bullet # 5: People with type 2 (usually non-insulin dependent) diabetes have an increased risk of developing colorectal cancer.

Slide 9

Colorectal cancer major risk factors

- Some adults have risk factors that make them more likely to develop CRC than others, such as those with:
 - Inflammatory bowel disease, such as ulcerative colitis or Crohn's disease
 - A history of adenomatous polyps
 - A family history of adenomatous polyps, CRC, or certain inherited syndromes
 - Those who have had CRC

Talk to your doctor right away if you have any of these major risk factors.

These are some of the major risk factors to consider.

adenomatous polyp = ad-**no**-muh-tus or ad-uh-**NO**-muh-tus **pa**-lip

Your doctor can help you figure out if you have major risk factors and whether or not you should start screening at a younger age, or be screened more often.

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Polyps

Colorectal cancer can develop from a polyp.



Normal colon to Adenoma to Carcinoma

The transition from normal colon lining → to polyp → to carcinoma (invasive cancer).

This is usually a lengthy process; it takes 10 – 15 years in many cases. This long time for development of cancer provides a unique opportunity for cancer prevention through polyp detection and removal.

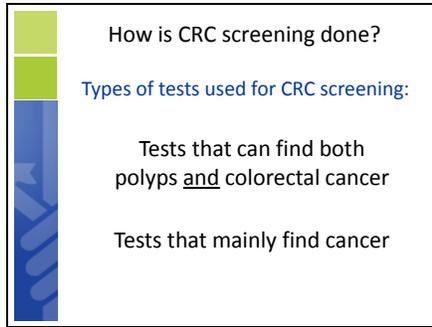
Slide 11

Preventing colorectal cancer

- Some colorectal cancers can be prevented with regular screening.
- Screening is testing to a disease in people who have no symptoms.
- Why screen?
 - To find and remove polyps before they become cancer
 - To find CRC early – when it's small and has not spread, and when treatment can be more effective

We will get into the details of the ACS screening recommendations a little later.

Slide 12



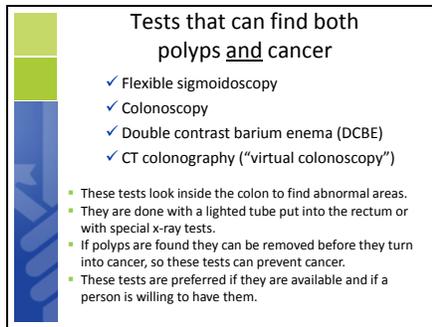
How is CRC screening done?

Types of tests used for CRC screening:

- Tests that can find both polyps and colorectal cancer
- Tests that mainly find cancer

There are several different tests that can be used to screen for colorectal cancers. These tests can be divided into these 2 broad groups.

Slide 13



Tests that can find both polyps and cancer

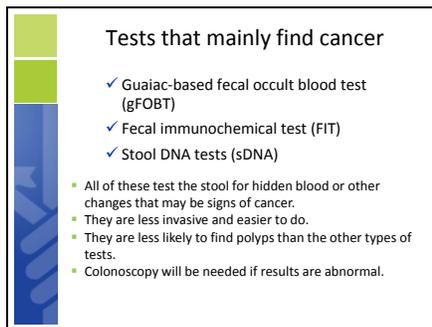
- ✓ Flexible sigmoidoscopy
- ✓ Colonoscopy
- ✓ Double contrast barium enema (DCBE)
- ✓ CT colonography ("virtual colonoscopy")

- These tests look inside the colon to find abnormal areas.
- They are done with a lighted tube put into the rectum or with special x-ray tests.
- If polyps are found they can be removed before they turn into cancer, so these tests can prevent cancer.
- These tests are preferred if they are available and if a person is willing to have them.

Sigmoidoscopy = **sig**-moid-**AH**-skuh-pee
Colonoscopy = **ko**-lun-**AH**-skuh-pee
Colonography = **ko**-lun-**AH**-gruh-fee

These tests look at the structure of the colon itself to find any abnormal areas. This is done either with a scope inserted into the rectum or with special imaging (x-ray) tests. Polyps found before they turn into cancer can be removed, so these tests may help prevent colorectal cancer.

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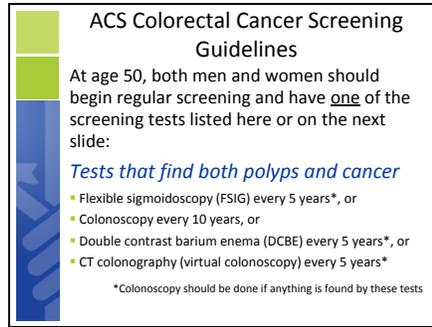
Tests that mainly find cancer

- ✓ Guaiac-based fecal occult blood test (gFOBT)
- ✓ Fecal immunochemical test (FIT)
- ✓ Stool DNA tests (sDNA)

- All of these test the stool for hidden blood or other changes that may be signs of cancer.
- They are less invasive and easier to do.
- They are less likely to find polyps than the other types of tests.
- Colonoscopy will be needed if results are abnormal.

These test the stool (feces) for signs that cancer may be present. These tests are less invasive, easier to do, and can often be done at home -- but they are less likely to find polyps.

Slide 15



ACS Colorectal Cancer Screening Guidelines

At age 50, both men and women should begin regular screening and have one of the screening tests listed here or on the next slide:

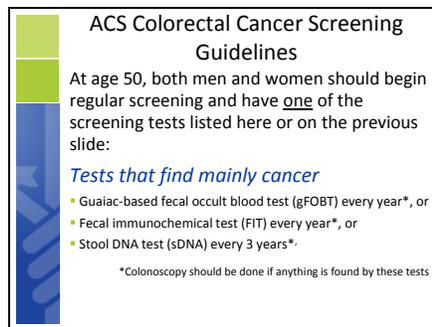
Tests that find both polyps and cancer

- Flexible sigmoidoscopy (FSIG) every 5 years*, or
- Colonoscopy every 10 years, or
- Double contrast barium enema (DCBE) every 5 years*, or
- CT colonography (virtual colonoscopy) every 5 years*

*Colonoscopy should be done if anything is found by these tests

More information on any of these tests is available at cancer.org or by calling 1-800-227-2345.

Slide 16



ACS Colorectal Cancer Screening Guidelines

At age 50, both men and women should begin regular screening and have one of the screening tests listed here or on the previous slide:

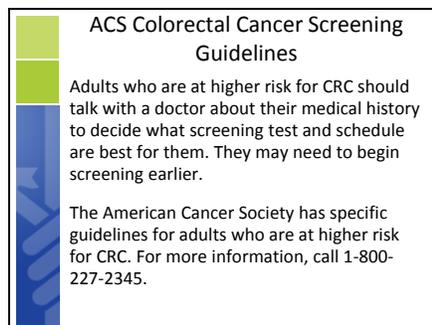
Tests that find mainly cancer

- Guaiac-based fecal occult blood test (gFOBT) every year*, or
- Fecal immunochemical test (FIT) every year*, or
- Stool DNA test (sDNA) every 3 years*

*Colonoscopy should be done if anything is found by these tests

More information on any of these tests is available at cancer.org or by calling 1-800-227-2345.

Slide 17



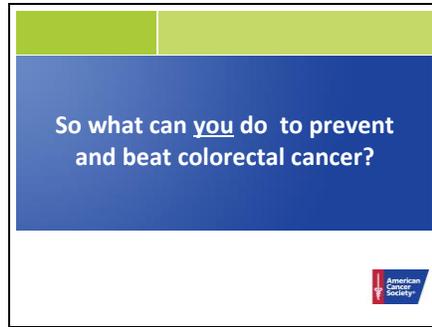
ACS Colorectal Cancer Screening Guidelines

Adults who are at higher risk for CRC should talk with a doctor about their medical history to decide what screening test and schedule are best for them. They may need to begin screening earlier.

The American Cancer Society has specific guidelines for adults who are at higher risk for CRC. For more information, call 1-800-227-2345.

Some people at higher risk may need to start screening at a younger age, be screened more often, and/or be screened with colonoscopy.

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So what can you do to prevent and beat colorectal cancer?



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What you can do

- Stay at a healthy weight
- Be active
 - ✓ At least 150 minutes of moderate or 75 minutes of vigorous intensity activity per week, or an equivalent combination, preferably spread throughout the week
- Limit sedentary behavior



These are some risk factors you can control.

Get to and stay at a healthy weight throughout life.

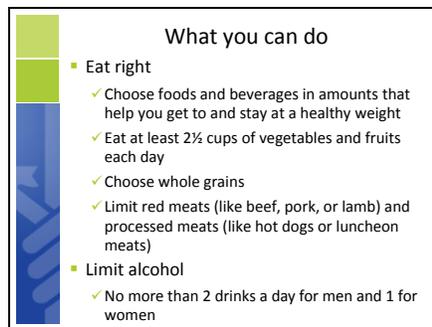
- Be as lean as possible throughout life without being underweight.
- Avoid excess weight gain at all ages. For those who are currently overweight or obese, losing even a small amount of weight has health benefits and is a good place to start.
- Engage in regular physical activity and limit consumption of high-calorie foods and beverages as key strategies for maintaining a healthy weight.

Children and adolescents should engage in at least 1 hour of moderate or vigorous intensity activity each day, with vigorous intensity activity occurring at least 3 days each week.

Moderate intensity activities are those that require effort equivalent to that of a brisk walk.

Vigorous intensity activities generally engage large muscle groups and cause a noticeable increase in heart rate, breathing depth and frequency, and

Slide 20



What you can do

- **Eat right**
 - ✓ Choose foods and beverages in amounts that help you get to and stay at a healthy weight
 - ✓ Eat at least 2½ cups of vegetables and fruits each day
 - ✓ Choose whole grains
 - ✓ Limit red meats (like beef, pork, or lamb) and processed meats (like hot dogs or luncheon meats)
- **Limit alcohol**
 - ✓ No more than 2 drinks a day for men and 1 for women

sweating.

Sedentary behavior = sitting, lying down, watching television or other forms of screen-based entertainment

Being more physically active than usual, no matter what one's level of activity, can have many health benefits.

More risk factors you can control.

The recommended limit of alcohol is lower for women because of their smaller body size and slower metabolism. These limits refer to daily consumption, and do not justify drinking larger amounts on fewer days of the week.

If asked: In the United States, a standard drink is equal to

- 12 ounces of beer
- 8 ounces of malt liquor
- 5 ounces of wine
- 1.5 ounces or a "shot" of 80-proof distilled spirits or liquor (such as gin, rum, vodka, or whiskey)

[From the Centers for Disease Control and Prevention, website:
www.cdc.gov/alcohol/faqs.htm#standardDrink]

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What you can do

- If you are age 50 or older, get tested for colorectal cancer.
- Talk with a doctor about which screening test is best for you.
- Talk with a doctor about your medical history and your family history to find out if you need to start testing earlier or have more frequent tests.

Talk with your doctor about any polyps or previous colon or rectal cancers you have had. Be sure to check with your family about any colon or rectal cancers that they might have had, and how old they were when they were diagnosed, so you can tell your doctor.

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What you can do

- Screening tests offer the best way to prevent CRC or find it early. Finding cancer early gives you a better chance for successful treatment.
- Early CRC usually has no symptoms. Don't wait for symptoms to occur. Treatment is most effective when CRC is found early.

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More information

You can get more information on colorectal cancer on our website, www.cancer.org/colon, or call 1-800-227-2345 and talk with one of our cancer information specialists.

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