

What is colorectal cancer?

Colorectal cancer is cancer that starts in either the colon or the rectum. Colon cancer and rectal cancer have many features in common. They are discussed together here except for the section about treatment, where they are discussed separately.

What are some questions I can ask my doctor about colorectal cancer?

As you cope with cancer and cancer treatment, you need to have honest, open talks with your doctor. You should feel free to ask any question that's on your mind, no matter how small it might seem. Here are some questions you might want to ask. Be sure to add your own questions as you think of them. Nurses, social workers, and other members of the treatment team may also be able to answer many of your questions.

Would you please write down the [exact kind of cancer](#) I have.

Where is my cancer?

Has it spread beyond the place where it began?

What is the [stage](#) of my cancer, and what does that mean in my case?

Are there other [tests](#) that need to be done before we can decide on treatment?

What [treatment choices](#) do I have?

What treatment do you suggest and why?

How long will treatment last? What will it involve? Where will it be done?

How will I pay for treatment? Will my insurance cover it?

What is the goal of this treatment?

What risks or side effects are there to the treatments you suggest?

What can I do to reduce the side effects of treatment?

Will I need a colostomy? Will it be permanent?

What are the chances my cancer will come back with these treatment plans? What would we do if that happens?

What should I do to be ready for treatment?

Should I follow a special diet?

What type of follow-up will I need after treatment?

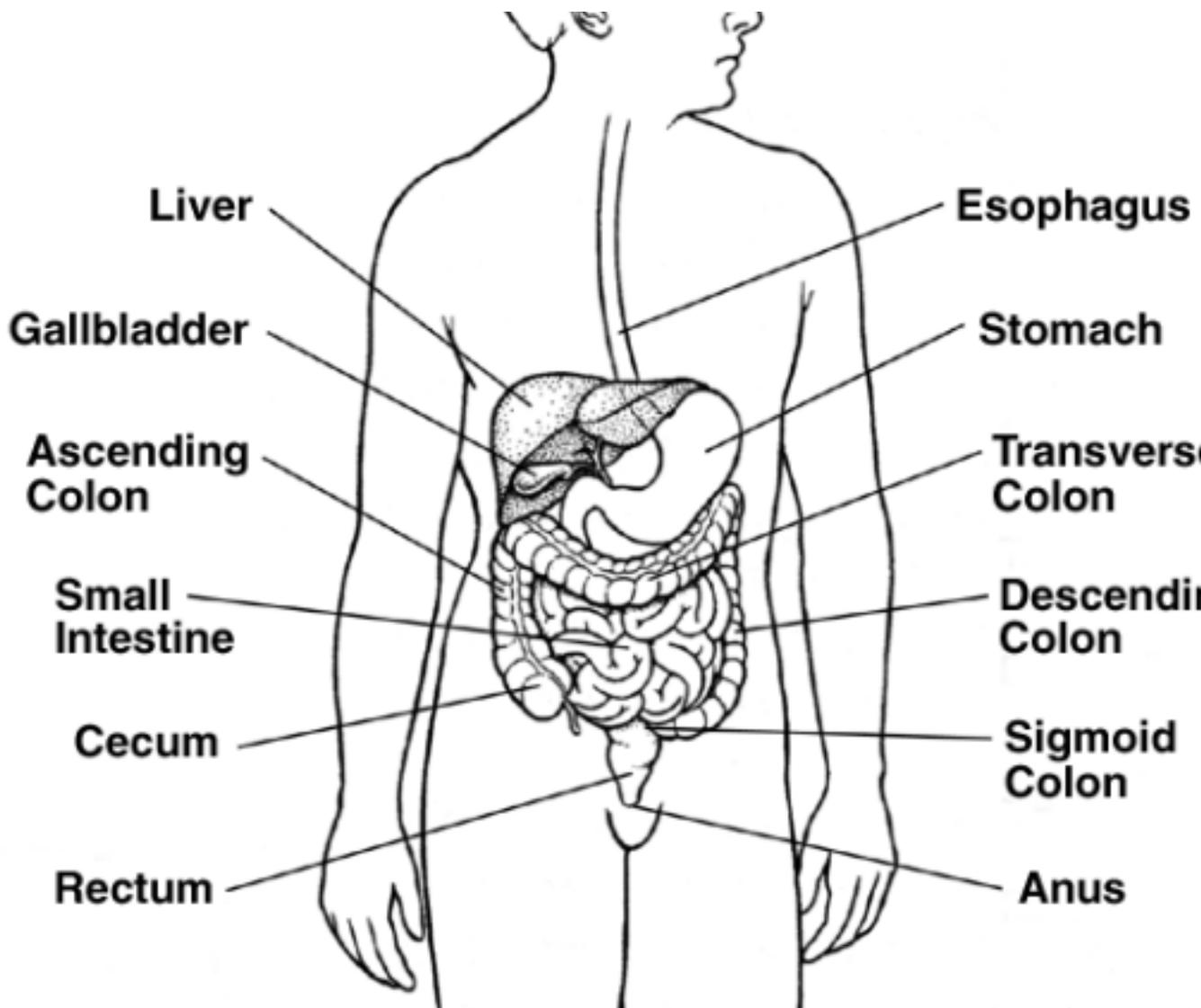
Add your own questions below:

The normal digestive system

In order to understand colorectal cancer, it helps to know something about the structure of the digestive system and how it works.

After food is chewed and swallowed, it travels to the stomach. There it is partly broken down and sent to the small intestine. The small intestine is only called small because it isn't very wide compared to the colon. In fact, the small intestine is the longest part of the digestive system -- about 20 feet. The small intestine also breaks down the food and absorbs most of the nutrients.

What remains goes into the colon (large intestine), a muscular tube about 5 feet long. The colon absorbs water and nutrients from the food and also serves as a storage place for waste matter (stool). Stool moves from the colon into the rectum, which is the last 6 inches of the digestive system. From there, stool passes out of the body through the opening called the anus.



The colon begins at the end of the small intestine – on the right side of the body at a place called the cecum. It goes up (the ascending colon in the picture) and bends to go across the top of the belly (the transverse colon in the picture), and turns down again on the left side (the descending colon in the picture). The rectum is in the lower part of the pelvis.

Abnormal growths in the colon or rectum

Most colorectal cancers start as a *polyp* (pah-lip) – a growth that starts in the inner lining of the colon or rectum and grows toward the center. Most polyps are not cancer. Only certain types of *polyps* (called adenomas (ad-uh-NO-muhs)) can become cancer. Taking out a polyp early, when it is small, may keep it from becoming cancer.

Over 95% of colon and rectal cancers are *adenocarcinomas*. These are cancers that start in gland cells, like the cells that line the inside of the colon and rectum. There are some other, more rare, types of tumors of the colon and rectum.

The information here is only for adenocarcinomas in the colon or rectum.

How many people get colorectal cancer?

The American Cancer Society's estimates for colorectal cancer in the United States for 2014 are:

About 96,830 new cases of colon cancer

About 40,000 new cases of rectal cancer

About 50,310 deaths from colorectal cancer

Not counting skin cancers, colorectal cancer is the third most common cancer found in men and women in this country. Overall, the lifetime risk of developing colorectal cancer is about 1 in 20.

The death rate from colorectal cancer has been going down for more than 20 years. One reason is that there are fewer cases. Thanks to [colorectal cancer screening](#), polyps can be found and removed before they turn into cancer. And colorectal cancer can also be found earlier when it is easier to cure. [Treatments](#) have improved, too.

What are the risk factors for colorectal cancer?

While we do not know the exact cause of most colorectal cancers, there are certain known risk factors. A risk factor is something that affects a person's chance of getting a disease. Some risk factors, like smoking, can be controlled. Others, such as a person's age, can't be changed.

But risk factors don't tell us everything. Having a risk factor, or even several, does not mean that you will get the disease. And some people who get colorectal cancer 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 what part that risk factor may have played in the development of the disease.

Researchers have found some risk factors that may increase a person's chance of getting polyps or colorectal cancer.

Risk factors you cannot change

Age: your risk gets higher as you get older

Having had colorectal cancer or certain kinds of polyps before

Having a history of ulcerative colitis or Crohn's disease

Family history of colorectal cancer

Race or ethnic background, such as being African American or Ashkenazi

Type 2 diabetes

Certain family syndromes, like familial adenomatous polyposis (FAP) or hereditary non-polyposis colon cancer (HNPCC, also called Lynch syndrome)

Risk factors linked to things you do

Some lifestyle-related factors have been linked to an higher risk of colorectal cancer.

Certain types of [diets](#): a diet that is high in red meats (beef, lamb, or liver) and processed meats (like hot dogs, bologna, and lunch meat) can increase your colorectal cancer risk. Cooking meats at very high heat (frying, broiling, or grilling) can create chemicals that might increase cancer risk.

Lack of [exercise](#)

Being very [overweight](#) (or obese)

[Smoking](#)

Heavy [alcohol](#) use

For more information about risk factors for colorectal cancer, see our more detailed document [Colorectal Cancer](#).

Can colorectal cancer be prevented?

Even though we don't know the exact cause of most colorectal cancers, it is possible to prevent many of them.

Screening tests

Screening is the process of looking for cancer in people who don't have any symptoms of the disease. Regular colorectal cancer screening is one of the best ways to help prevent colorectal cancer. Some polyps, or growths, can be found and removed before they have the chance to turn into cancer. Screening can also help find colorectal cancer early, when it is small and more likely to be cured. People who have no known [risk factors](#) (other than age) should begin screening at age 50. Those who have a family history or other risk factors for colorectal polyps or cancer (such as inflammatory bowel disease) should talk with their doctor about starting screening at a younger age or getting screened more often.

If you have a history of colorectal cancer in your family, you should talk with your doctor about when and how often to have screening tests.

Genetic testing, screening, and treatment for those with a strong family history

If you have a strong family history of colorectal polyps or cancer, you should think about getting genetic counseling to help you decide whether genetic testing or earlier screening may be right for you. Before getting genetic testing, it's good to know ahead of time what the results may or may not tell you about your risk. These tests are not perfect, and in some cases they may not be able to give you solid answers. This is why meeting with a cancer genetics expert before testing is a key part of choosing whether testing is right for you.

Diet, exercise, and body weight

Most studies have found that being [overweight](#) or obese increases the risk of colorectal cancer in both men and women, but the link seems to be stronger in men. Having more belly fat (that is, a larger waistline) has also been linked to colorectal cancer.

Overall, diets that are high in vegetables, fruits, and whole grains (and low in red and processed meats) have been linked with lower colorectal cancer risk, although it's not exactly clear which factors are important. Many studies have found a link between red meat or processed meat intake and a higher risk of colorectal cancer risk.

Studies show a lower risk of colorectal cancer and polyps with higher levels of activity. Moderate activity on a regular basis lowers the risk, but vigorous activity may have an even greater benefit.

In recent years, some large studies have suggested that fiber intake, especially from whole grains, may lower colorectal cancer risk. Research in this area is still under way.

Several studies have found a higher risk of colorectal cancer with increased [alcohol](#) intake, especially among men.

At this time, the best advice about [diet and activity](#) to perhaps reduce your risk of colorectal cancer is to:

- Increase the intensity and amount of physical activity.

- Limit intake of red and processed meats.

- Get the recommended levels of calcium and vitamin D (see below).

- Eat more vegetables and fruits.

- Avoid obesity and weight gain around the midsection.

- Avoid too much alcohol. Men should drink no more than 2 drinks a day, while women should limit themselves to one drink a day.

To find out more about diet and physical activity, refer to our document [American Cancer Society Guidelines on Nutrition and Physical Activity for Cancer Prevention](#).

Vitamins and minerals

Studies looking to see if taking a vitamin or mineral supplement could help lower risk have not had clear results. Some studies suggested that taking a daily multi-vitamin that contained folic acid or folate could help lower colorectal cancer risk, but other studies did not. In fact, some studies have hinted that folic acid might help existing tumors grow. More research is needed in this area.

Some studies have suggested that vitamin D, which you can get from the sun, in certain foods, or in a vitamin pill, can lower colorectal cancer risk. Because of concerns that too much sun exposure can cause skin cancer, most experts do not recommend this as a way to lower colorectal cancer risk at this time.

Other studies suggest that getting more calcium may lower colorectal cancer risk. But because of the possible increased risk of prostate cancer in men with high calcium intake, the American Cancer Society does not recommend increasing calcium intake specifically to try to lower cancer risk.

Some studies found a link between a diet high in magnesium and lower colorectal cancer risk, with the strongest link in women. But not all studies have found this lowered risk. More research is needed on this subject.

Aspirin and other drugs

Aspirin and drugs like ibuprofen (Motrin®, Advil®) and naproxen (Aleve®) seem to lower the risk of colorectal cancer and polyps. But these medicines can have serious or even life-threatening side effects such as stomach bleeding. For this reason, experts do not advise the general public to take them to try to prevent colorectal cancer. If you are at high risk for colorectal cancer, talk to your doctor about what you should do.

Female hormones

Taking estrogen and progesterone after menopause (sometimes called *menopausal hormone therapy* or *combined hormone replacement therapy*) may reduce the risk of colorectal cancer in women after menopause. But cancers found in women taking these hormones after menopause may be at a more advanced stage. While taking these hormones after menopause lowers the risk of developing osteoporosis (bone thinning), it can also increase a woman's risk of heart disease, blood clots, and cancers of the

breast and lung.

The decision to use hormones should be based on a careful talk about the benefits and risks with your doctor.

Some studies have found that the use of birth control pills may lower the risk of colorectal cancer in women. More research is needed to confirm this link.

How is colorectal cancer found?

Colorectal cancer screening tests

Screening tests are used to look for disease in people who do not have any symptoms. In many cases, these tests can find colorectal cancers at an early stage and greatly improve treatment outcomes. Screening tests can also help prevent some cancers by allowing doctors to find and remove polyps that might become cancer. Screening tests for colorectal cancer include:

Fecal occult blood test (FOBT) and fecal immunochemical test (FIT): Samples of stool (feces) are checked for blood, which might be a sign of a polyp or cancer.

Sigmoidoscopy: A flexible, lighted tube is put into the rectum and lower colon to check for polyps and cancer.

Colonoscopy: A longer, flexible tube is used to look at the entire colon and rectum.

Double contrast barium enema: This is an x-ray test of the colon and rectum.

CT colonography (virtual colonoscopy): This is a type of CT scan of the colon and rectum.

FOBT and FIT mainly find cancer, but can find some polyps.

Sigmoidoscopy, colonoscopy, double contrast barium enema, and CT colonography are good at finding cancer and polyps. Polyps found before they become cancer can be removed, so these tests may prevent

colorectal cancer. This is why these tests are preferred if they are available and you are willing to have them.

For more details about these tests, please see [Colorectal Cancer Early Detection](#).

Preventing colorectal cancer or finding it early

Colon cancer begins with a growth (a polyp) that is not yet cancer. Testing can help your doctor tell whether there is a problem, and some tests can find polyps before they become cancer. Most people who have polyps removed never get colon cancer. If colon cancer is found early, you have a good chance of beating it with [treatment](#). Testing can find it early.

The American Cancer Society believes that *preventing* colorectal cancer (not just finding it early) should be a major reason for getting tested. Finding and removing polyps keeps some people from getting colorectal cancer. Tests that have the best chance of finding both polyps and cancer should be your first choice if these tests are available to you and you are willing to have them.

Doctors will take into account a number of things when they talk to you about the tests you should have, how often you should have them, and when you should begin testing. These factors include whether you are at average, increased, or high risk for colorectal cancer. If you are at increased or high risk, the type of test used and how often it is done will depend on whether you have had polyps, cancer, or certain other diseases, as well as your family history.

In general, both men and women at average risk of colorectal cancer should begin screening tests at age 50. But you should talk with your doctor about your own health and your family history so that you can choose the best screening plan for you.

For more detailed information about the American Cancer Society's recommendations for screening, please see our document [Colorectal Cancer Early Detection](#). This document also has information about insurance coverage for colorectal cancer screening.

Importance of colorectal cancer screening

Excluding skin cancers, colorectal cancer is the third most common cancer diagnosed in both men and women in the United States. The American Cancer Society's estimates for the number of colorectal cancer cases in the United States for 2014 are:

96,830 new cases of colon cancer

40,000 new cases of rectal cancer

the lifetime risk for developing colorectal cancer is about 1 in 20 (5%). This risk is slightly higher in men than in women. A number of other factors (described in the section "[Risk factors for colorectal cancer](#)") can also affect a person's risk for developing colorectal cancer.

Colorectal cancer is the third leading cause of cancer-related deaths in the United States when men and women are considered separately, and the second leading cause when both sexes are combined. It is expected to cause about 50,310 deaths during 2014.

The death rate (the number of deaths per 100,000 people per year) from colorectal cancer has been dropping for more than 20 years. There are a number of likely reasons for this. One is that polyps are being found by screening and removed before they can develop into cancers. Screening also allows more colorectal cancers to be found earlier, when the disease is easier to cure. In addition, treatment for colorectal cancer has improved over the last several years. As a result, there are now more than 1 million survivors of colorectal cancer in the United States.

Regular colorectal cancer screening or testing is one of the most powerful weapons for preventing colorectal cancer. Screening is the process of looking for cancer in people who have no symptoms of the disease.

It can take many years (as many as 10 to 15) for a polyp to develop into colorectal cancer. Regular screening can prevent many cases of colorectal cancer altogether by finding and removing certain types of polyps before they have the chance to turn into cancer. Screening can also result in finding colorectal cancer early, when it is highly curable.

Several tests are used to screen for colorectal cancer in people with an average risk of colorectal cancer. Ask your doctor which tests are available where you live and which options might be right for you.

People who have no identified risk factors (other than age) should begin regular screening at age 50. Those who have a family history or other risk factors for colorectal polyps or cancer (see section “[Risk factors for colorectal cancer](#)”) should talk with their doctor about starting screening when they are younger and/or getting screened more frequently.

Risk factors for colorectal cancer

A risk factor is anything that affects your chance of getting a disease such as cancer. Different cancers have different risk factors. For example, exposing skin to strong sunlight is a risk factor for skin cancer. Smoking is a risk factor for lung cancer, as well as many others.

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's often very hard to know how much that risk factor might have contributed to the cancer.

Researchers have found several risk factors that may increase a person's chance of developing colorectal polyps or colorectal cancer.

Risk factors you cannot change

Age

Younger adults can develop colorectal cancer, but the chances increase markedly after age 50; More than 9 out of 10 people diagnosed with colorectal cancer are at least 50 years old.

Personal history of colorectal polyps or colorectal cancer

If you have a history of adenomatous polyps (adenomas) in the colon or rectum, you are at increased risk of developing colorectal cancer. This is especially true if the polyps are large or if there are many of them. Other types of polyps, like hyperplastic polyps, do not increase your risk of colorectal cancer.

If you have had colorectal cancer, even though it has been completely removed, you are more likely to develop new cancers in other areas of the colon and rectum. The chances of this happening are greater if you had your first colorectal cancer when you were younger.

Personal history of inflammatory bowel disease

Inflammatory bowel disease (IBD), which includes *ulcerative colitis* and *Crohn's disease*, is a condition in which the colon is inflamed over a long period of time. People who have had IBD for many years often develop dysplasia. Dysplasia is a term used to describe cells in the lining of the colon or rectum that look abnormal (but not like true cancer cells) when seen under a microscope. These cells can change into cancer over time.

If you have IBD, your risk of developing colorectal cancer is increased, and you may need to be screened for colorectal cancer more frequently.

Inflammatory bowel disease is different from *irritable bowel syndrome (IBS)*, which does not carry an increased risk for colorectal cancer.

Family history of colorectal cancer or adenomatous polyps

Most colorectal cancers occur in people without a family history of colorectal cancer. Still, as many as 1 in 5 people who develop colorectal cancer have other family members who have been affected by this disease.

Those with a history of colorectal cancer in one or more first-degree relatives (parents, siblings, or children) are at increased risk. The risk is about doubled in those with a single affected first-degree relative. It is even higher if the first-degree relative was diagnosed when they were younger than 45, or if more than one first-degree relative is affected.

The reasons for the increased risk are not clear in all cases. Cancers can “run in the family” because of inherited genes, shared environmental factors, or some combination of these.

Having family members who have had adenomatous polyps is also linked to a higher risk of colon cancer. (Adenomatous polyps are the kind of polyps that can become cancerous.)

People with a family history of adenomatous polyps or colorectal cancer should talk with their doctor about screening before age 50. If you have had adenomatous polyps or colorectal cancer, it’s important to tell your close relatives so that they can pass along that information to their doctors and start screening at the right age.

Inherited syndromes

About 5% to 10% of people who develop colorectal cancer have inherited gene defects (mutations) that cause the disease. Often, these defects lead to cancer that occurs at a younger age than is common. Identifying families with these inherited syndromes is important because it allows doctors to recommend specific steps, such as screening and other preventive measures, at an early age.

Several types of cancer can be linked with these syndromes, so it’s important to check your family medical history not just for colon cancer and polyps, but also for any other type of cancer. While cancer in close (first-degree) relatives is most concerning, any history of cancer in more distant relatives is also important. This includes aunts, uncles, grandparents, nieces, nephews, and cousins. People with a family history of cancer or colorectal polyps should discuss this history with their doctor. They may benefit from genetic counseling to review their family medical tree to see how likely it is that they have a family cancer syndrome and a discussion about whether or not gene testing is right for them. People who have an abnormal gene can take steps to prevent colon cancer, such as getting screened at an early age or even having surgery.

The 2 most common inherited syndromes linked with colorectal cancers are familial adenomatous polyposis (FAP) and hereditary non-polyposis colorectal cancer (HNPCC), but other rarer syndromes can also increase colorectal cancer risk.

Familial adenomatous polyposis (FAP): FAP is caused by changes (mutations) in the *APC* gene that a person inherits from his or her parents.

About 1% of all colorectal cancers are due to FAP.

People with this disease typically develop hundreds or thousands of polyps in their colon and rectum, usually in their teens or early adulthood. Cancer usually develops in 1 or more of these polyps as early as age 20. By age 40, almost all people with this disorder will have developed colon cancer if the colon isn't removed first to prevent it.

Gardner syndrome is a type of FAP that also involves benign (non-cancerous) tumors of the skin, soft connective tissue, and bones.

Hereditary non-polyposis colon cancer (HNPCC): HNPCC, also known as Lynch syndrome, accounts for about 2% to 4% of all colorectal cancers. In most cases, this disorder is caused by an inherited defect in either the gene *MLH1* or the gene *MSH2*, but other genes can also cause HNPCC. Most of the genes involved normally help repair DNA damage.

The cancers in this syndrome also develop when people are relatively young. People with HNPCC can have polyps, but they only have a few, not hundreds as in FAP. The lifetime risk of colorectal cancer in people with this condition may be as high as 80%.

Women with this condition also have a very high risk of developing cancer of the endometrium (lining of the uterus). Other cancers linked with HNPCC include cancer of the ovary, stomach, small bowel, pancreas, kidney, brain, ureters (tubes that carry urine from the kidneys to the bladder), and bile duct.

For more information on HNPCC, see the sections “Do we know what causes colorectal cancer?” and “Can colorectal cancer be prevented?” in our longer document, [Colorectal Cancer](#).

Turcot syndrome: This is a rare inherited condition in which people are at increased risk of adenomatous polyps and colorectal cancer, as well as brain tumors. There are actually 2 types of Turcot syndrome:

One can be caused by gene changes similar to those seen in FAP, in which cases the brain tumors are medulloblastomas.

The other can also be caused by gene changes similar to those seen in HNPCC, in which cases the brain tumors are glioblastomas.

Peutz-Jeghers syndrome: People with this rare inherited condition tend to have freckles around the mouth (and sometimes on their hands and feet) and a special type of polyp in their digestive tracts (called *hamartoma*). They are at a greatly increased risk for colorectal cancer, as well as several other cancers, which usually appear at a younger age than usual. This syndrome is caused by mutations in the gene *STK1*.

MUTYH-associated polyposis: People with this syndrome develop colon polyps which will become cancerous if the colon is not removed. They also have an increased risk of cancers of the small intestine, skin, ovary, and bladder. This syndrome is caused by mutations in the gene *MUTYH*.

Racial and ethnic background

African Americans have the highest colorectal cancer incidence and mortality rates of all racial groups in the United States. The reasons for this are not yet understood.

Jews of Eastern European descent (Ashkenazi Jews) have one of the highest colorectal cancer risks of any ethnic group in the world. Several gene mutations leading to an increased risk of colorectal cancer have been found in this group. The most common of these DNA changes, called the I1307K APC mutation, is present in about 6% of American Jews.

Type 2 diabetes

People with type 2 (usually non-insulin dependent) diabetes have an increased risk of developing colorectal cancer. Both type 2 diabetes and colorectal cancer share some of the same risk factors (such as excess weight). But even after taking these factors into account, people with type 2 diabetes still have an increased risk. They also tend to have a less favorable prognosis (outlook) after diagnosis.

Lifestyle-related factors

Several lifestyle-related factors have been linked to colorectal cancer. In fact, the links between diet, weight, and exercise and colorectal cancer risk are some of the strongest for any type of cancer.

Certain types of diets

A diet that is high in red meats (such as beef, pork, lamb, or liver) and processed meats (hot dogs and some luncheon meats) can increase

colorectal cancer risk. Cooking meat at very high temperatures (frying, broiling, or grilling) creates chemicals that might increase cancer risk, although it's not clear how much this might contribute to an increase in colorectal cancer risk. Diets high in vegetables, fruits, and whole grains have been linked with a decreased risk of colorectal cancer, but fiber supplements do not seem to help. Whether other dietary components (like certain types of fats) affect colorectal cancer risk is not clear.

Physical inactivity

If you are not physically active, you have a greater chance of developing colorectal cancer. Increasing activity may help reduce your risk.

Obesity

If you are [very overweight](#), your risk of developing and dying from colorectal cancer is increased. Obesity raises the risk of colon cancer in both men and women, but the link seems to be stronger in men.

Smoking

Long-term smokers are more likely than non-smokers to develop and die from colorectal cancer. [Smoking](#) is a well-known cause of lung cancer, but it is also linked to other cancers, like colorectal. If you smoke, you can learn about stopping in our [Guide to Quitting Smoking](#)

Heavy alcohol use

Colorectal cancer has been linked to the heavy use of [alcohol](#). Limiting alcohol use to no more than 2 drinks a day for men and 1 drink a day for women could have many health benefits, including a lower risk of colorectal cancer.

Factors with uncertain, controversial, or unproven effects on colorectal cancer

Night shift work

Results of one study suggested working a night shift at least 3 nights a month for at least 15 years may increase the risk of colorectal cancer in women. The study authors suggested this might be due to changes in levels of melatonin (a hormone that responds to changes in light) in the body. More research is needed to confirm or refute this finding.

Previous treatment for certain cancers

Some studies have found that men who survive [testicular cancer](#) seem to have a higher rate of colorectal cancer and some other cancers. This might be due to the treatments they have received.

Several studies have suggested that men who received radiation therapy to treat [prostate cancer](#) may have a higher risk of rectal cancer, because the rectum receives some radiation during treatment. Most of these studies are based on men treated in the 1980s and 1990s, and the effect of more modern radiation methods on rectal cancer risk is not clear. There are many possible side effects of prostate cancer treatment that men should consider when making treatment decisions. Some doctors recommend that the risk of rectal cancer be considered as one of those possible side effects.

The American Cancer Society and several other medical organizations recommend earlier screening for people with an increased colorectal cancer risk. These recommendations differ from those for people at average risk. For more information, speak with your doctor and refer to the tables in the section "[American Cancer Society recommendations for colorectal cancer early detection.](#)"

Finding colorectal cancer early

Colorectal cancer is often found after symptoms appear, most people with early colon or rectal cancer have no symptoms of the disease. Symptoms usually appear only with more advanced disease. This is why getting the recommended screening tests (as described in the section "[Colorectal cancer screening tests](#)") before any symptoms develop is so important.

Regular screening can often find colorectal cancer early, when it is most likely to be curable. In many cases, screening can also prevent colorectal cancer altogether. This is because some polyps, or growths, can be found and removed before they have the chance to turn into cancer.

If your doctor finds something suspicious during a screening exam, or if you have any of the symptoms of colorectal cancer described in the section "[Signs and symptoms of colorectal cancer,](#)" your doctor will

probably recommend exams and test to find the cause.

Signs and symptoms of colorectal cancer

Colorectal cancer may cause one or more of the symptoms below. If you have any of the following you should see your doctor:

A change in bowel habits, such as diarrhea, constipation, or narrowing of the stool, that lasts for more than a few days

A feeling that you need to have a bowel movement that is not relieved by doing so

Rectal bleeding, dark stools, or blood in the stool (often, though, the stool will look normal)

Cramping or abdominal (belly) pain

Weakness and fatigue

Unintended weight loss

Most of these symptoms are more often caused by conditions other than colorectal cancer, such as infection, hemorrhoids, irritable bowel syndrome, or inflammatory bowel disease. Still, if you have any of these problems, it's important to see your doctor right away so the cause can be found and treated, if needed.

Colorectal cancer screening tests

Screening is the process of looking for cancer in people who have no symptoms of the disease. Several different tests can be used to screen for colorectal cancers. These tests can be divided into 2 broad groups:

Tests that can find both colorectal polyps and cancer:

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 become cancerous can be removed, so these tests may prevent colorectal cancer. Because of this, these tests are preferred if they are available and you are willing to have them.

Tests that mainly find cancer: These involve testing the stool (feces) for signs that cancer may be present. These tests are less invasive and easier to have done, but they are less likely to detect polyps.

These tests as well as others can also be used when people have symptoms of colorectal cancer and other digestive diseases.

Tests that can find both colorectal polyps and cancer

Flexible sigmoidoscopy

During this test, the doctor looks at part of the colon and rectum with a sigmoidoscope – a flexible, lighted tube about the thickness of a finger with a small video camera on the end. It is inserted through the rectum and into the lower part of the colon. Images from the scope are viewed on a display monitor.

Using the sigmoidoscope, your doctor can view the inside of the rectum and part of the colon to detect (and possibly remove) any abnormality. Because the sigmoidoscope is only 60 centimeters (about 2 feet) long, the doctor is able to see the entire rectum but less than half of the colon with this procedure.

Before the test: The colon and rectum must be empty and clean so your doctor can view the lining of the sigmoid colon and rectum. Your doctor will give you specific instructions to follow to clean them out. You may be asked to follow a special diet (such as drinking only clear liquids) for a day before the exam. You may also be asked to use enemas or to use strong laxatives to clean out your colon before the exam. Be sure to tell your doctor about any medicines you are taking, as you might need to change how you take them before the test.

During the test: A sigmoidoscopy usually takes 10 to 20 minutes. Most people do not need to be sedated for this test, but this may be an option you can discuss with your doctor. Sedation may make the test less uncomfortable, but you will need some time to recover from it, you'll need someone with you to take you home after the test.

You will probably be asked to lie on a table on your left side with your knees positioned near your chest. Your doctor should do a digital rectal exam, or DRE (inserting a gloved, lubricated finger into the rectum), before inserting the sigmoidoscope. The sigmoidoscope is lubricated to make it easier to insert into the rectum. The scope may feel cold. The sigmoidoscope may stretch the wall of the colon, which may cause bowel spasms or lower abdominal pain. Air will be placed into the sigmoid colon through the sigmoidoscope so the doctor can see the walls of the colon better. During the procedure, you might feel pressure and slight cramping in your lower abdomen. To ease discomfort and the urge to have a bowel movement, it helps to breathe deeply and slowly through your mouth. You will feel better after the test once the air leaves your colon.

If a small polyp is found during the test your doctor may remove it with a small instrument passed through the scope. The polyp will be sent to a lab to be looked at by a pathologist. If a pre-cancerous polyp (an adenoma) or colorectal cancer is found during the test, you will need to have a colonoscopy later to look for polyps or cancer in the rest of the colon.

Possible complications and side effects: This test may be uncomfortable because of the air put into the colon, but it should not be painful. Be sure to let your doctor know if you feel pain during the procedure. You might see a small amount of blood in your first bowel movement after the test. Significant bleeding and puncture of the colon are possible complications, but they are very uncommon.

Colonoscopy

For this test, the doctor looks at the entire length of the colon and rectum with a colonoscope, which is basically a longer version of a sigmoidoscope. It is inserted through the rectum into the colon. The colonoscope has a video camera on the end that is connected to a display monitor so the doctor can see and closely examine the inside of the colon. Special instruments can be passed through the colonoscope to biopsy (sample) or remove any suspicious-looking areas such as polyps, if needed.

Colonoscopy may be done in a hospital outpatient department, in a clinic, or in a doctor's office.

Before the test: Be sure your doctor knows about any medicines you are taking, as you might need to change how you take them before the test. The colon and rectum must be empty and clean so your doctor can see their inner linings during the test. You will need to take laxatives (usually a large volume of a liquid, but sometimes pills, as well) the day before the test and possibly an enema that morning.

Your doctor will give you specific instructions. It is important to read these carefully a few days ahead of time, since you may need to shop for special supplies and get laxatives from a pharmacy. If you are not sure about any of the instructions, call the doctor's office and go over them step by step with the nurse. Many people consider the bowel preparation the worst part of the test, as it usually requires you to be in the bathroom much of the night before the exam.

You might be given other instructions as well. For example, your doctor may tell you to drink only clear liquids (water, apple or cranberry juice, and any gelatin except red or purple) for at least a day before the exam. Plain tea or coffee with sugar is usually okay, but no milk or creamer is allowed. Clear broth, ginger ale, and most soft drinks or sports drinks are usually allowed unless they have red or purple food colorings, which could be mistaken for blood in the colon.

You will probably also be told not to eat or drink anything after midnight the night before your test. If you normally take prescription medicines in the mornings, talk with your doctor or nurse about how to manage them for the day.

You usually need to arrange for someone to drive you home from the test because a sedative is used during the test that can leave you groggy and affect your ability to drive. Most doctors require that someone you know drive you home (not a taxi).

During the test: The test itself usually takes about 30 minutes, but it may take longer if a polyp is found and removed. Before the colonoscopy begins, you will be given a sedating medicine (usually through your vein) to make you feel comfortable and sleepy during the procedure. You will probably be awake, but not be aware of what is going on and probably won't remember the procedure afterward. Most people will be fully awake by the time they get home from the test.

During the procedure, you will be asked to lie on your side with your knees flexed and a drape will cover you. Your blood pressure, heart rate, and breathing rate will be monitored during and after the test.

Your doctor should do a digital rectal exam (DRE) before inserting the colonoscope. The colonoscope is lubricated so it can be easily inserted into the rectum. Once in the rectum, the colonoscope is passed all the way to the beginning of the colon, called the cecum. You may feel an urge to have a bowel movement when the colonoscope is inserted or pushed further up the colon. To ease any discomfort it may help to breathe deeply and slowly through your mouth. The colonoscope will deliver air into the colon so that it is easier for the doctor to see the lining of the colon and use the instruments to perform the test. Suction will be used to remove any blood or liquid stools.

The doctor will look at the inner walls of the colon as he or she slowly withdraws the colonoscope. If a small polyp is found, the doctor may remove it. Some small polyps may eventually become cancerous. For this reason, they are usually removed. This is usually done by passing a wire loop through the colonoscope to cut the polyp from the wall of the colon with an electrical current. The polyp can then be sent to a lab to be checked under a microscope to see if it has any areas that have changed into cancer.

If your doctor sees a larger polyp or tumor or anything else abnormal, a biopsy may be done. For this procedure, a small piece of tissue is taken out through the colonoscope. The tissue is looked at under a microscope to determine if it is a cancer, a benign (non-cancerous) growth, or a result of inflammation.

Possible side effects and complications: The bowel preparation before the test is unpleasant. The test itself may be uncomfortable, but the sedative usually helps with this, and most people feel normal once the effects of the sedative wear off. Some people may have gas pains or cramping for a while after the test.

In some cases, people may have low blood pressure or changes in heart rhythms due to the sedation during the test, although these are rarely serious.

If a polyp is removed or a biopsy is done during the colonoscopy, you may notice some blood in your stool for a day or 2 after the test. Significant bleeding is slightly more likely with colonoscopy than with sigmoidoscopy,

but it is still uncommon. In rare cases, continued bleeding might require treatment.

Colonoscopy is a safe procedure, but on rare occasions the colonoscope can puncture the wall of the colon or rectum. This is called a *perforation*. It can be a serious complication leading to a serious abdominal (belly) infection, and it may require surgical repair. Talk to your doctor about the risk of this complication.

You can read more about colonoscopy and sigmoidoscopy in our document [Frequently Asked Questions About Colonoscopy and Sigmoidoscopy](#).

Double-contrast barium enema

The double-contrast barium enema (DCBE) is also called an *air-contrast barium enema* or a *barium enema with air contrast*. It may also be referred to as a *lower GI series*. It is basically a type of x-ray test. Barium sulfate, which is a chalky liquid, and air are used to outline the inner part of the colon and rectum to look for abnormal areas on x-rays. If suspicious areas are seen on this test, a colonoscopy will be needed to explore them further.

Before the test: As with colonoscopy, it is very important that the colon and rectum are empty and clean so your doctor can see them during the test. Your doctor will give you specific instructions on preparing for the test. Be sure to follow them. For example, you may be asked to clean your bowel the night before with laxatives and/or take an enema the morning of the exam. You will probably be asked to follow a clear liquid diet for a day or 2 before the procedure. You may also be told to avoid eating or drinking dairy products the day before the test, and to not eat or drink anything after midnight on the night before the procedure. Many people consider the bowel preparation the most unpleasant part of the test, as it usually requires you to be in the bathroom quite a bit.

During the test: The procedure takes about 30 to 45 minutes, and it does not require sedation. For this test, you lie on a table on your side in an x-ray room. A small, flexible tube is inserted into the rectum, and barium sulfate is pumped in to partially fill and open up the colon. When the colon is about half-full of barium, you are turned on the x-ray table so the barium spreads throughout the colon. Then air is pumped into the colon through the same tube to make it expand. This may cause some cramping and discomfort, and you may feel the urge to have a bowel movement.

X-ray pictures of the lining of your colon are then taken, allowing the doctor to look for polyps or cancers. You may be asked to change positions so that different views of the colon and rectum can be seen on the x-rays.

If polyps or other suspicious areas are seen on this test, you will probably need a colonoscopy to remove them or to explore them fully.

Possible side effects and complications: You may have bloating or cramping after the test, and will likely feel the need to empty your bowels soon after the test is done. The barium can cause constipation for a few days, and your stool may appear grey or white until the barium leaves the body. There is a very small risk that inflating the colon with air could injure or puncture the colon, but this risk is thought to be much less than with colonoscopy. Like other x-ray tests, this test also exposes you to a small amount of radiation.

CT colonography (virtual colonoscopy)

This test is an advanced type of computed tomography (CT or CAT) scan of the colon and rectum. A CT scan is an x-ray test that produces detailed cross-sectional images of your body. Instead of taking one picture, like a regular x-ray, a CT scanner takes many pictures as it rotates around you while you lie on a table. A computer then combines these pictures into images of slices of the part of your body being studied.

For CT colonography, special computer programs create both 2-dimensional x-ray pictures and a 3-dimensional “fly-through” view of the inside of the colon and rectum, which lets the doctor look for polyps or cancer.

This test may be especially useful for some people who can't have or don't want to have more invasive tests such as colonoscopy. It can be done fairly quickly and does not require sedation. But even though this test is not invasive like colonoscopy, it still requires the same type of bowel preparation and uses a tube placed in the rectum (similar to the tube used for barium enema) to fill the colon with air. Another possible drawback is that if polyps or other suspicious areas are seen on this test, a colonoscopy will still probably be needed to remove them or to explore them fully.

Before the test: It is important that the colon and rectum are emptied before this test to provide the best images, so the preparation for this test is similar to that for a double-contrast barium enema or colonoscopy. You

will probably be told to follow a clear liquid diet for a day or 2 before the test. You will also be given instructions for taking strong laxatives and/or enemas the night before or morning of the exam. This will probably require you to be in the bathroom quite a bit.

During the test: This test is done in a special room with a CT scanner, and takes about 10 minutes. You may be asked to drink a contrast solution before the test to help “tag” any remaining stool in the colon or rectum, which helps the doctor when looking at the test images. You will be asked to lie on a thin table that is part of the CT scanner, and will have a small, flexible tube inserted into your rectum. Air is pumped through the tube into the colon to expand it to provide better images. The table then slides into the CT scanner, and you will be asked to hold your breath while the scan takes place. You will likely have 2 scans: one while you are lying on your back and one while you are on your stomach. Each scan typically takes only about 10 to 15 seconds.

Possible side effects and complications: There are usually very few side effects after CT colonography. You may feel bloated or have cramps because of the air in the colon, but this should go away once the air passes from the body. There is a very small risk that inflating the colon with air could injure or puncture the colon, but this risk is thought to be much less than with colonoscopy. Like other types of CT scans, this test also exposes you to a small amount of radiation.

Tests that mainly find colorectal cancer

These tests look at the stool for signs of cancer. Most people find these tests to be easier because they are not invasive and can often be done at home. But these tests aren't as good as the ones described that find polyps. A positive result on one of these screening tests will probably require a more invasive test such as colonoscopy.

Fecal occult blood test

The fecal occult blood test (FOBT) is used to find occult blood (blood that can't be seen with the naked eye) in feces. The idea behind this test is that blood vessels at the surface of larger colorectal polyps or cancers are often fragile and easily damaged by the passage of feces. The damaged vessels usually release a small amount of blood into the feces, but only rarely is there enough bleeding for blood to be visible in the stool.

The FOBT detects blood in the stool through a chemical reaction. This test

cannot tell if the blood is from the colon or from other parts of the digestive tract (such as the stomach). If this test is positive, a colonoscopy will be needed to find the reason for the bleeding. Although cancers and polyps can cause blood in the stool, other causes of bleeding can occur, such as ulcers, hemorrhoids, diverticulosis (tiny pouches that form at weak spots in the colon wall), or inflammatory bowel disease (colitis).

This screening test is done with a kit that you can use in the privacy of your own home that allows you to check more than one stool sample. *An FOBT done during a digital rectal exam in the doctor's office is not sufficient for screening* (it only checks one stool sample). Also, unlike some other tests (like colonoscopy), this one must be repeated every year.

People having this test will receive a kit with instructions from their doctor's office or clinic. The kit will explain how to take a stool or feces sample at home (usually specimens from 3 consecutive bowel movements that are smeared onto small squares of paper). The kit should then be returned to the doctor's office or medical lab (usually within 2 weeks) for testing.

Before the test: Some foods or drugs can affect the test, so your doctor may suggest that you avoid the following before this test:

Nonsteroidal anti-inflammatory drugs (NSAIDs), such as ibuprofen (Advil), naproxen (Aleve), or aspirin (more than 1 adult aspirin per day), for 7 days before testing. (They can cause bleeding, which can lead to a false-positive result.) Acetaminophen (Tylenol) can be taken as needed.

Vitamin C in excess of 250 mg daily from either supplements or citrus fruits and juices for 3 days before testing. (This can affect the chemicals in the test and make it appear negative, even when blood is present.)

Red meats (beef, lamb, or liver) for 3 days before testing. (Components of blood in the meat may cause the test to show positive.)

Some people who are given the test never do it or don't give it to their doctor because they worry that something they ate may interfere with the test. For this reason, many doctors tell their patients it isn't essential to follow any restrictions in their diet. The most important thing is to get the test done. People should try to avoid taking aspirin or related drugs for minor aches. But if you take these medicines daily for heart problems or

other conditions, don't stop them for this test without talking to your doctor first.

Collecting the samples: Have all of your supplies ready and in one place. Supplies will include a test kit, test cards, either a brush or wooden applicator, and a mailing envelope. The kit will give you detailed instructions on how to collect the specimen. The instructions below can be used as a guide, but your kit instructions might be a little different. Always follow the instructions on your kit.

You will need to collect a sample from your bowel movement. You can place a sheet of plastic wrap or paper loosely across the toilet bowl to catch the stool or you can use a dry container to collect the stool. Do not let the stool specimen mix with urine. After you obtain a sample, you can flush the remaining stool down the toilet.

Use a wooden applicator or a brush to smear a thin film of the stool sample onto one of the slots in the test card or slide.

Next, collect a specimen from a different area of the same stool and smear a thin film of the sample onto the other slot in the test card or slide.

Close the slots and put your name and the date on the test kit. Store the kit overnight in a paper envelope to allow it time to dry.

Repeat the test on your next 2 bowel movements if instructed. Most tests require collecting more than one sample from different bowel movements. This improves the accuracy of the test because many cancers don't bleed all of the time, and blood may not be present in all stool samples.

Place the test kit in the mailing pouch provided and return it to your doctor or lab as soon as possible (but within 14 days of taking the first sample).

If this test finds blood, a colonoscopy will be needed to look for the source. It is not sufficient to simply repeat the FOBT or follow up with other types of tests.

Fecal immunochemical test

The fecal immunochemical test (FIT), also called an immunochemical fecal

occult blood test (iFOBT), is a newer kind of test that also detects occult (hidden) blood in the stool. This test reacts to part of the human hemoglobin protein, which is found in red blood cells.

The FIT is done essentially the same way as the FOBT, but some people may find it easier to use because there are no drug or dietary restrictions (vitamins or foods do not affect the FIT) and sample collection may take less effort. This test is also less likely to react to bleeding from parts of the upper digestive tract, such as the stomach.

Like the FOBT, the FIT may not detect a tumor that is not bleeding, so multiple stool samples should be tested. And if the results are positive for hidden blood, a colonoscopy is required to investigate further. In order to be beneficial the test must be repeated every year.

Collecting the samples: Have all of your supplies ready and in one place. Supplies will include a test kit, test cards, long brushes, waste bags, and a mailing envelope. The kit will give you detailed instructions on how to collect the specimen. The instructions below can be used as a guide, but the instructions on your kit might be a little different. Always follow the instructions on your kit.

Flush the toilet before your bowel movement. After you go, place used toilet paper in the waste bag from the kit, not in the toilet.

Brush the surface of the stool with one of the brushes, then dip the brush in the toilet water. Dab the end of the brush onto one of the slots in the test card or slide.

Close the slot and put your name and the date on the test kit.

Repeat the test on your next bowel movement if instructed. Most tests require collecting more than one sample from different bowel movements. This improves the accuracy of the test because many cancers don't bleed all of the time, and blood may not be present in all stool samples.

Place the test kit in the mailing envelope provided and return it to your doctor or lab as soon as possible (but within 14 days of taking the first sample).

Stool DNA tests

Instead of looking for blood in the stool, these tests look for certain abnormal sections of DNA (genetic material) from cancer or polyp cells. Colorectal cancer cells often contain DNA mutations (changes) in certain genes. Cells from colorectal cancers or polyps with these mutations are often shed into the stool, where tests may be able to detect them.

Although stool DNA tests have been used for colorectal screening in the past, they are no longer available in the US.

How is colorectal cancer diagnosed?

If something of concern turns up as a result of screening or if you have symptoms, you will need more tests to find out if the disease is really present and, if so, to see how far it has spread. Some of these tests are the same ones that are used for screening people who do not have symptoms. (See the [“How is colorectal cancer found?”](#) section.)

Medical history and physical exam

Your doctor will ask you questions about your health, talk to you about your family history, and do a complete physical exam.

Blood tests

Your doctor might do certain blood tests to help find out if you have colorectal cancer. People with colorectal cancer often have low red blood cell counts (anemia) because of bleeding from the tumor. You might also have blood tests to check your liver function because colorectal cancer can spread to the liver.

There are other substances (called tumor markers) in the blood that can help tell how well treatment is working. But these tumor markers are not used to find cancer in people who have not had cancer and who seem to be healthy. They are most often used for follow-up of people who have already been treated for colorectal cancer.

Colonoscopy

In a colonoscopy a thin, flexible, lighted tube (a colonoscope) is put into the colon through the rectum. This allows the doctor to look at the inside of

the rectum and part of the colon for cancer or polyps. If something abnormal is found, a piece of it can be removed to send for tests (this is called a biopsy). Polyps can also be removed completely during a colonoscopy. This test may be uncomfortable because air is put into the colon, but it should not be painful. During the test, drugs are given to make you sleepy so you will probably not be aware that the test is going on at all. Because of this you must have someone to drive you home afterward.

In order to have a colonoscopy, the colon must be empty and clean, so you must use special laxatives the day before (often called a “prep”). Many patients say that the prep is the worst part of the colonoscopy.

For more information about colonoscopy, see our document [*Frequently Asked Questions About Colonoscopy and Sigmoidoscopy*](#).

Biopsy and lab test of samples

The tissue removed in a biopsy is sent to the lab where it is looked at under a microscope to see if cancer is present. Even though other tests might suggest colorectal cancer, a biopsy is the only way to know for sure.

Other lab tests may also be done on biopsy samples to reveal more details about the cancer. Doctors may look for certain gene changes in the cancer cells that might affect how the cancer is best treated.

Imaging tests

The tests described below make pictures of the inside of your body. Imaging tests may be done for many reasons. They may be done to help find out whether an area might be cancer, to learn how far cancer may have spread, or to help learn whether treatment is working.

Computed tomography (CT or CAT) scan

A CT scan uses x-rays to take many pictures of the body that are then combined by a computer to give a detailed picture. A CT scan can often show whether the cancer has spread to the liver, lungs, or other organs. CT scans take longer than regular x-rays. The patient has to lie still on a table while the CT scan is being done. A contrast dye may be put into a vein or a special drink to help outline the area being looked at. The dye can cause some flushing (redness and warm feeling). Some people are allergic and get hives or, rarely, more serious reactions like trouble breathing and low blood pressure. Be sure to tell the doctor if you have any

allergies or if you ever had a reaction to any contrast dye used for x-rays.

CT scans can also be used to guide a biopsy needle into a tumor. For this to be done, the patient stays on the CT table while a radiologist moves a biopsy needle through the skin and toward the mass. A tiny piece of tissue or a thin cylinder of tissue is then removed and looked at under a microscope.

Ultrasound

Ultrasound uses sound waves to make a picture of the inside of the body. Most people know about ultrasound because it is often used to look at a baby during pregnancy. This is an easy test to have. For most kinds of ultrasounds, the patient simply lies on a table while a kind of wand is moved over the skin of the belly.

Two special types of ultrasound might be used for people with colon or rectal cancer. In one, the wand that gives off sound waves is placed into the rectum to look for cancer there and to see if it has spread to nearby organs or tissues. In the other test, used during [surgery](#), the wand is placed against the surface of the liver to see if the cancer has spread there.

Magnetic resonance imaging (MRI) scans

Like CT scans, MRIs show a cross-section of the body. But MRI uses radio waves and strong magnets instead of radiation to take pictures. As with CT scans, a contrast dye may be used, but it isn't needed for all MRIs. MRI scans are sometimes useful in looking at places in the liver where cancer might have spread. They can also help the doctor learn whether rectal cancers have spread into nearby tissues. MRIs take longer than CT scans and the patient has to lie inside a narrow tube for the test. This can feel confining and upset people with a fear of closed spaces. The machine also makes thumping and buzzing noises, but some places give you headphones with music to block this out.

Chest X-ray

This test may be done to see whether colorectal cancer has spread to the lungs.

Positron emission tomography (PET) scan

In this test, a type of radioactive sugar is put into your vein. The sugar moves through the body and is taken in by the cancer cells. Then you are put into the PET machine where a special camera can detect the radioactivity. Because the cancer cells absorb large amounts of the sugar they show up on the pictures as dark "hot spots." PET looks at your whole body, and is useful when the doctor thinks the cancer has spread, but doesn't know where. Special machines are able to do both a PET and CT scan at the same time (called a PET/CT scan). This allows the doctor to compare hot spots on the PET scan with the more detailed pictures from the CT scan.

Angiography

Angiography is an x-ray done to look at blood vessels. For this test, a thin tube (called a catheter) is put into a blood vessel and moved until it reaches the area to be studied. (The skin is numbed before the tube is put in.) Then a dye is pushed through the catheter and x-ray pictures are taken. When the pictures are done, the catheter is taken out. Surgeons sometimes use this test to show blood vessels next to cancer that has spread to the liver. This can help surgeons decide whether a cancer can be removed and if so, it can help in planning the operation.

Staging of colorectal cancer

Staging is the process of finding out how far the cancer has spread. This is very important because your treatment and the outlook for your recovery depend on the stage of your cancer. For early cancer, [surgery](#) may be all that is needed. For more advanced cancer, other treatments like [chemotherapy](#) or [radiation therapy](#) may be used.

There is more than one system for staging colorectal cancer. Some use numbers and others use letters. But all systems describe the spread of the cancer through the layers of the wall of the colon or rectum. Colorectal cancer starts in the inner layer and can grow through some or all of the other layers. Staging also takes into account whether the cancer has spread to nearby organs and lymph nodes or to organs farther away.

Stages are often labeled using Roman numerals I through IV (1-4). As a rule, the lower the number, the less the cancer has spread. A higher number, such as stage IV (4), means a more advanced cancer.

Grade of colorectal cancer

Another factor that can affect the outlook for survival is the *grade* of the cancer. Grade is a description of how closely the cancer looks like normal colorectal tissue under a microscope.

Low-grade means the tissue looks more normal; high-grade means the tissue looks less normal. Most of the time, the outlook is not as good for high-grade cancers as it is for low-grade cancers. Doctors sometimes use the grade to help decide whether a patient should get more treatment with chemotherapy after surgery.

Survival rates for colorectal cancer

Some people with cancer may want to know the survival rates for their type of cancer. Others may not find the numbers helpful, or may even not want to know them. If you decide that you don't want to know them, stop reading here and skip to the [next section](#).

The 5-year survival rate is the percentage of patients who are alive 5 years after their cancer is found. The numbers here include people diagnosed with colon cancer who may have later died from other causes, such as heart disease.

People with colon cancer tend to be older and may have other serious health conditions. This means the percentage of people surviving the colon cancer itself is likely to be higher, and many of them live much longer than 5 years.

While the numbers below are among the most current we have, they are from people who were first treated many years ago. Because cancer treatment continues to improve, the survival rates for people now may be higher. These numbers come from the 7th edition of the AJCC staging manual published in 2010.

Survival rates for colon cancer by stage

| Sta | 5-Year Observed <input type="checkbox"/> Survi |
|-----|---|
|-----|---|

| Stage | Survival Rate |
|-------|---------------|
| I | 74% |
| IIA | 67% |
| IIB | 59% |
| IIC | 37% |
| IIIA | 73%* |
| IIIB | 46%* |
| IIIC | 28% |
| IV | 6% |

**In this study, survival was better for some stage IIIA than for some stage IIB. The reasons for this are not clear.*

Survival rates for rectal cancer by stage

| Stage | 5-Year Observed Survival Rate |
|-------|-------------------------------|
| I | 74% |
| IIA | 65% |
| IIB | 52% |
| IIC | 32% |
| IIIA | 74%* |
| IIIB | 45%* |
| IIIC | 33% |

| | |
|----|----|
| IV | 6% |
|----|----|

**In this study, survival was better for some stage III cancers than for some stage II cancers. The reasons for this are not clear.*

These numbers give you an overall picture, but keep in mind that every person is different and statistics can't predict exactly what will happen in your case. Talk with your cancer care team if you have questions about your own chances of a cure or how long you might survive your cancer. They know your situation best.

How is colorectal cancer treated?

This information represents the views of the doctors and nurses serving on the American Cancer Society's Cancer Information Database Editorial Board. These views are based on their interpretation of studies published in medical journals, as well as their own professional experience.

The treatment information in this document is not official policy of the Society and is not intended as medical advice to replace the expertise and judgment of your cancer care team. It is intended to help you and your family make informed decisions, together with your doctor.

Your doctor may have reasons for suggesting a treatment plan different from these general treatment options. Don't hesitate to ask him or her questions about your treatment options.

About treatment

The 4 main types of treatment for colorectal cancer are:

[Surgery](#)

[Radiation therapy](#)

[Chemotherapy](#) ("chemo")

[Targeted therapies](#) (like monoclonal antibodies)

Depending on the [stage](#) of your cancer, 2 or more types of treatment may be used at the same time, or used one after the other.

Take your time and think about all of your treatment choices. You may want to get a second opinion. This can give you more information and help you feel better about the treatment plan you choose. Your chances of having a good outcome are highest in the hands of a medical team that has experience in treating colorectal cancer.

Surgery for colorectal cancer

Surgery is the main treatment for early colorectal cancer. Often, a piece of the colon or rectum with the tumor is removed and the ends are sewn back together. Surgeries using this method go by different names, such as colectomy (kuh-lek-tuh-me), segmental resection (seg-men-tuhl re-sek-shun), low anterior resection (low an-teer-ee-yeer re-sek-shun), and proctectomy with colo-anal anastomosis (pros-tuh-TECK-tuh-me with ko-lo-a-nul uh-nas-tuh-MO-sis).

Sometimes, especially with rectal cancer, there isn't enough tissue left on one side to sew the ends back together. In that case, one end is attached to the wall of the belly so that stool can empty into a bag outside the body. This is called a *colostomy* (kuh-lahs-tuh-me). An abdominoperineal (AP) resection (ab-dah-muh-no-pair-uh-NEE-uhl re-sek-shun) is a surgery for rectal cancer where one end comes out to form a colostomy.

Sometimes, if there is a problem like the cancer growing through the wall of the colon or rectum, a colostomy is needed at first. Sometimes instead of the end of the colon forming a colostomy, the end of the small intestine must be used. This is called an *ileostomy* (ill-ee-OSS-tuh-me). Then later, after the belly has a chance to heal, the ends of the colon can be reconnected again.

If the rectal cancer is growing into nearby organs, a surgery called a pelvic exenteration (ex-en-ter-A-shun) is needed. In this operation the rectum as well as affected nearby organs such as the bladder, prostate, or uterus are removed. A colostomy is needed after this operation. If the bladder is removed, a urostomy (yur-ahs-tuh-me – an opening to collect urine) is also needed.

Some colorectal cancers are just in the end of a polyp. These cancers are treated by just removing the polyp completely (often during colonoscopy). If there may be cancer left behind (like in the stalk of the polyp), you may need surgery to remove part of the colon or rectum. The doctor bases this on looking at the polyp under the microscope.

If you have a colostomy or ileostomy, you'll need help in learning how to manage it. Nurses with special training will do this. To learn more, please

see [Colostomy: A Guide](#) or [Ileostomy: A Guide](#).

Side effects of colorectal surgery

Side effects of surgery depend on several factors like the extent of the operation and a person's general health before surgery. Most people will have at least some pain after the operation, but it most often can be controlled with medicines if needed. Eating problems usually get better within a few days of surgery.

Other problems may include bleeding from the surgery, blood clots in the legs, and damage to nearby organs. Rarely, the new connections between the ends of the intestine may not hold together and may leak, which can lead to infection. After the surgery, you might have scar tissue forming around the bowel that can cause organs or tissues to stick together. These can later lead to the bowel becoming blocked.

Surgery for colorectal cancer that has spread

For cancer that has spread to other organs, sometimes surgery can help you to live longer or, depending on the extent of the disease, may even cure you. If the colorectal cancer has spread to a few areas in the liver or lungs but not anywhere else, the cancer can sometimes be removed by surgery.

For spread to the liver, there are methods other than surgery which might be used to destroy the cancer. These include things like blocking the blood supply to the tumor or destroying the cancer by freezing it or killing it with high-energy radio waves. These methods are less likely to cure the cancer.

Since these cancers can often be hard to treat, you may also want to talk with your doctor about [clinical trials](#) of newer treatments that might be right for you.

For more information about surgery for colorectal cancer, please see our document [Colorectal Cancer](#).

Radiation treatment for colorectal cancer

Radiation treatment is the use of high-energy rays (such as x-rays) to kill

cancer cells or shrink tumors.

When is it used?

Before surgery: If the size or place of a tumor makes it hard to take it out, radiation may be used before surgery to shrink the tumor. Radiation is also used sometimes before surgery for rectal cancers, because it lowers the risk of the cancer coming back later. When it is used for rectal cancers before surgery, radiation is often combined with **chemotherapy**. This is called *chemoradiation*. The chemo helps the radiation work better, but adds to the side effects.

After surgery: Radiation can also be used after surgery, to kill any cancer cells that may have been left behind (but couldn't be seen). This lowers the chance that the cancer will come back later.

For people who can't have surgery: Radiation can be given to help control rectal cancers in people who are not healthy enough for surgery.

For advanced cancers: Radiation can also be used to ease symptoms of advanced cancer, such as intestinal blockage, bleeding, or pain. It is also be used to treat colon cancer that has spread, most often if the spread is to the bones or brain.

Types of radiation treatment

External-beam radiation therapy: In this treatment, radiation is focused on the cancer from a machine outside the body. This is the type most often used for people with colon or rectal cancer. Treatments are given 5 days a week for many weeks. Each treatment lasts only a few minutes, but the setup time -- getting you into place for treatment -- usually takes longer.

Endocavitary radiation therapy: For some small rectal tumors radiation can be given with a small device that is placed through the anus and into the rectum. Each treatment takes just a few minutes and then the device is removed. This is repeated about 3 more times about 2-weeks apart for the full dose. This treatment allows radiation to reach the rectum without passing through the skin and other nearby tissues.

Brachytherapy (internal radiation therapy): In this method, small pellets or seeds of radioactive material are placed next to or right into the cancer. The radiation travels only a short distance, limiting the effects on nearby healthy tissues. This method is sometimes used in treating people with

rectal cancer, particularly sick or older people who would not be able to go through surgery.

Radioembolization: Some patients who have a lot of spread to the liver but little or no spread to other distant parts of the body may get treatment with infusion through the artery that goes to the liver. The doctor injects tiny glass "beads" that are coated with a radioactive atom (yttrium-90). These beads block some of the small blood vessels that feed the tumors and their radioactivity helps kill the cancer cells.

Side effects of radiation therapy

Some of the common side effects of radiation therapy for colon or rectal cancer include:

- Skin changes in the area where the radiation passes

- Nausea and vomiting

- Diarrhea

- Rectal irritation, which can lead to trouble controlling your bowels

- Bladder irritation which can make you feel like you have to pass urine often

- Tiredness.

Sexual problems may also occur.

Side effects often go away or lessen over time after treatment is finished, but problems such as rectal and bladder irritation may remain. If you have these or other side effects, talk to your doctor. There are often ways to reduce or relieve many of these problems.

You can learn more about radiation in [Radiation Therapy – What It Is, How It Helps](#).

Chemotherapy for colorectal cancer

Chemotherapy (chemo) is the use of drugs to fight cancer. The drugs may be put into a vein or given by mouth. These drugs enter the bloodstream

and spread throughout the body, making this treatment useful for cancers that have spread to distant organs.

Chemo is sometimes used before [surgery](#) to try to shrink the cancer and make surgery easier. It may also be given after surgery to lower the chance of the cancer coming back. Chemo can also help relieve symptoms of advanced cancer and help some people live longer.

Chemo is sometimes given along with [radiation](#). This is called chemoradiation. The chemo helps the radiation work better, but adds to the side effects. This can be given before or after surgery for rectal cancer.

In some cases, chemo drugs can be put into an artery leading to the part of the body with the tumor. This approach is called *regional chemotherapy*. Since the drugs go straight to area with the cancer, there may be fewer side effects. Regional chemotherapy is sometimes used for colon cancer that has spread to the liver

The chemo drugs that are used for colorectal cancer include:

[5-Fluorouracil \(5-FU\)](#), which is often given with the vitamin-like drug [leucovorin](#) (also called folinic acid)

[Capecitabine](#) (Xeloda®).

[Irinotecan](#) (Camptosar®)

[Oxaliplatin](#) (Eloxatin®)

Side effects of chemo

While chemo kills cancer cells, it also damages some normal cells and this can cause side effects. These side effects will depend on the type of drugs given, the amount given, and how long treatment lasts. Common side effects could include:

Diarrhea

Hair loss

Mouth sores

Loss of appetite

Nausea and vomiting

Increased chance of infection (from low white blood cell counts)

Easy bleeding or bruising after minor cuts or injuries (from low levels of platelets, which help the blood clot)

Severe tiredness (fatigue) (from low levels of red blood cells)

There are also some side effects that only happen with certain drugs. For example, some drugs can cause something called hand-foot syndrome, where the palms of the hands and the soles of the feet get red and irritated and may even blister or develop open, painful sores. Some drugs can cause nerve damage which can be painful. Ask your doctor what you can expect with the drugs you will receive.

Most side effects go away when treatment is over. Anyone who has problems with side effects should talk with their doctor or nurse, as there are often ways to help.

More detailed information about chemotherapy for colorectal cancer can be found in our document [Colorectal Cancer](#).

To learn more about chemo, please see our document [Understanding Chemotherapy: A Guide for Patients and Families](#).

Targeted therapies for colorectal cancer

Targeted therapies are drugs that attack the parts of cancer cells that make them different from normal cells. These targeted drugs work differently from standard [chemotherapy](#) (chemo) drugs. They often have different (and less severe) side effects. For colorectal cancer, these drugs are often used to treat advanced cancers.

The targeted drugs used to treat colorectal cancer include:

[Bevacizumab](#) (Avastin®)

[Ziv-aflibercept](#) (Zaltrap®)

[Cetuximab](#) (Erbix®)

[Panitumumab](#) (Vectibix®)

Regorafenib (Stivarga®)

Some side effects seen with these drugs include:

Tiredness

Diarrhea

Headaches

Blood pressure problems

Some side effects are more common with certain drugs. For example, cetuximab and panitumumab often cause a bothersome skin rash. Bevacizumab and ziv-aflibercept can cause problems with wound healing or even holes in the colon. Ask your doctor what you can expect with the drugs you will receive.

More detailed information about the targeted drugs used for colorectal cancer can be found in our document [Colorectal Cancer](#).

More information about these kinds of drugs can be found in our document [Targeted Therapy](#).

Complementary and alternative therapies for colorectal cancer

When you have cancer you are likely to hear about ways to treat your cancer or relieve symptoms that your doctor hasn't mentioned. Everyone from friends and family to Internet groups and websites may offer ideas for what might help you. These methods can include vitamins, herbs, and special diets, or other methods such as acupuncture or massage, to name a few.

What are complementary and alternative therapies?

It can be confusing because not everyone uses these terms the same way, and they are used to refer to many different methods. We use *complementary* to refer to treatments that are used *along with* your regular medical care. *Alternative* treatments are used *instead of* a doctor's medical treatment.

Complementary methods: Most complementary treatment methods are not offered as cures for cancer. Mainly, they are used to help you feel better. Some examples of methods that are used along with regular treatment are meditation to reduce stress, acupuncture to help relieve pain, or peppermint tea to relieve nausea. Some complementary methods are known to help, while others have not been tested. Some have been proven not to be helpful, and a few are even harmful.

Alternative treatments: Alternative treatments may be offered as cancer cures. These treatments have not been proven safe and effective in clinical trials. Some of these methods may be harmful, or have life-threatening side effects. But the biggest danger in most cases is that you may lose the chance to be helped by standard medical treatment. Delays or interruptions in your medical treatments may give the cancer more time to grow and make it less likely that treatment will help.

Finding out more

It is easy to see why people with cancer think about alternative methods. You want to do all you can to fight the cancer, and the idea of a treatment with few or no side effects sounds great. Sometimes medical treatments like chemotherapy can be hard to take, or they may no longer be working. But the truth is that most of these alternative methods have not been tested and proven to work in treating cancer.

As you think about your options, here are 3 important steps you can take:

Look for "red flags" that suggest fraud. Does the method promise to cure all or most cancers? Are you told not to have regular medical treatments? Is the treatment a "secret" that requires you to visit certain providers or travel to another country?

Talk to your doctor or nurse about any method you are thinking of using.

Contact us at 1-800-227-2345 to learn more about complementary and alternative methods in general and to find out about the specific methods you are looking at. You can also learn more in the "[Complementary and Alternative Medicine](#)" section of our website.

The choice is yours

Decisions about how to treat or manage your cancer are always yours to

make. If you want to use a non-standard treatment, learn all you can about the method and talk to your doctor about it. With good information and the support of your health care team, you may be able to safely use the methods that can help you while avoiding those that could be harmful.

Moving on after treatment for colorectal cancer

For some people with colorectal cancer, treatment may remove or destroy the cancer. It can feel good to be done with treatment, but it can also be stressful. You may find that you now worry about the cancer coming back. This is a very common concern among those who have had cancer. (When cancer comes back, it is called a *recurrence*.)

It may take a while before your recovery begins to feel real and your fears are somewhat relieved. You can learn more about what to look for and how to learn to live with the chance of cancer coming back in [Living With Uncertainty: The Fear of Cancer Recurrence](#).

For other people, the cancer may never go away completely. These people may get regular treatments to try to help keep the cancer in check. Learning to live with cancer that does not go away can be hard and stressful. It has its own type of uncertainty. Our document [When Cancer Doesn't Go Away](#), talks more about this.

Follow-up care

Even if your treatment ends, your doctors will still want to watch you closely. During these visits, your doctor will ask about symptoms, do physical exams, and may order blood tests or imaging studies (like CT scans or MRIs). Follow-up is needed to watch for treatment side effects and to check for cancer that has come back or spread.

Almost any cancer treatment can have side effects. Some may last for a few weeks or months, but others can be permanent. To some extent, how often you have follow up visits and tests will depend on the stage of your

cancer and the chance of it coming back. Please tell your cancer care team about any symptoms or side effects that bother you so they can help you manage them. Use this time to ask your health care team questions and discuss any concerns you might have.

It is also important to keep health insurance. While you hope your cancer won't come back, it could happen. If it does, you don't want to have to worry about paying for treatment. Should your cancer come back, our document [When Your Cancer Comes Back: Cancer Recurrence](#) helps you manage and cope with this phase of your treatment.

Colonoscopy

In most cases, your doctor will recommend a colonoscopy within a year after surgery. If this is normal, it should be done again in 3 years. If that exam is normal, then future exams should be done about every 5 years.

Blood tests for tumor markers

Carcinoembryonic antigen (CEA) and CA 19-9 are tumor markers - substances found in the blood of some people with colorectal cancer. Tests for one or both of these are helpful for some patients during follow-up. They tend to be most useful in the first 2 years after treatment, when the cancer is most likely to come back.

If the cancer does recur at some point, further treatment will depend on where the cancer is found, what treatments you've had before, and your health. For more information on how recurrent cancer is treated, see the sections "Treatment by stage of colon cancer" and "Treatment by stage of rectal cancer" in our document [Colorectal Cancer](#). To learn more about dealing with a recurrence, you may also want to see our document [When Your Cancer Comes Back: Cancer Recurrence](#).

For patients with a colostomy or ileostomy

If you have a colostomy or ileostomy, you may feel worried or isolated from normal activities. Whether your colostomy or ileostomy is temporary or permanent, an enterostomal therapist (a health care professional trained to help people with ostomies) can teach you about the care of your colostomy or ileostomy. You can also ask the American Cancer Society about programs offering information and support in your area. For more information, see our documents [Colostomy: A Guide](#) and [Ileostomy: A Guide](#).

Seeing a new doctor

At some point after your cancer is found and treated, you may find yourself in the office of a new doctor. It is important that you be able to give your new doctor the exact details of your diagnosis and treatment. Make sure you have this information handy and always keep copies for yourself:

A copy of your pathology report from any biopsy or surgery

If you had [surgery](#), a copy of your operative report

If you were in the hospital, a copy of the discharge summary that the doctor wrote when you were sent home from the hospital

If you had [radiation treatment](#), a copy of your treatment summary.

If you had [chemo](#) or [targeted therapies](#), a list of your drugs, drug doses, and when you took them

Copies of imaging studies such as CT scans, MRI scans, or PET scans. Often these can be placed on a DVD

The doctor may want copies of this information for his records, but always keep copies for yourself.

Lifestyle changes after treatment of colorectal cancer

Having cancer and dealing with treatment can take a lot of time and energy, but it can also be a time to look at your life in new ways. Maybe you are thinking about how to improve your health over the long term.

Make healthier choices

Think about your life before you learned you had cancer. Were there things you did that might have made you less healthy? Maybe you drank too much alcohol, ate more than you needed, used tobacco, or didn't exercise very often.

For many people, finding out they have cancer helps them focus on their

health in ways they may not have thought much about in the past. Are there things you could do that might make you healthier? Maybe you could try to eat better or get more exercise. Maybe you could cut down on the alcohol, or give up tobacco. Even things like keeping your stress level under control may help. Now is a good time to think about making changes that can have good effects for the rest of your life. You will feel better and you will also be healthier.

You can start by working on those things that worry you most. Get help with those that are harder for you. For instance, if you are thinking about [quitting smoking](#) and need help, call the American Cancer Society for information and support.

Eating better

Eating right can be hard for anyone, but it can get even tougher during and after cancer [treatment](#). Treatment may change your sense of taste. Nausea can be a problem. You may not feel like eating and lose weight when you don't want to. Or you may have gained weight that you can't seem to lose. All of these things can be very frustrating.

If treatment caused weight changes or eating or taste problems, do the best you can and keep in mind that these problems usually get better over time. You may find it helps to eat small portions every 2 to 3 hours until you feel better. You may also want to ask your cancer team about seeing a dietitian, an expert in nutrition who can give you ideas on how to deal with these treatment side effects.

One of the best things you can do after cancer treatment is [put healthy eating habits into place](#). You may be surprised at the long-term benefits of some simple changes, like increasing the variety of healthy foods you eat. Try to eat 5 or more servings of vegetables and fruits each day. Choose whole grain foods instead of those made with white flour and sugars. Try to limit meats that are high in fat. Cut back on processed meats like hot dogs, bologna, and bacon. Better yet, don't eat any of these, if you can. If you drink alcohol, limit yourself to 1 or 2 drinks a day at the most.

Rest, fatigue, and exercise

Feeling tired (fatigue) is a very common problem during and after cancer treatment. This is not a normal type of tiredness but a "bone-weary" exhaustion that doesn't get better with rest. For some people, fatigue lasts a long time after treatment and can keep them from staying active. But

exercise can actually help reduce fatigue and the sense of depression that sometimes comes with feeling so tired.

If you are very tired, though, you will need to balance activity with rest. It is OK to rest when you need to. To learn more about fatigue, please see our documents [Fatigue in People With Cancer](#) and [Anemia in People With Cancer](#).

If you were very ill or weren't able to do much during treatment, it is normal that your fitness, staying power, and muscle strength declined. You need to find an exercise plan that fits your own needs. Talk with your health care team before starting. Get their input on your exercise plans. Then try to get an exercise buddy so that you're not doing it alone.

Exercise can improve your physical and emotional health.

- It improves your cardiovascular (heart and circulation) fitness.

- It makes your muscles stronger.

- It reduces fatigue.

- It lowers anxiety and depression.

- It can make you feel generally happier.

- It helps you feel better about yourself.

And long term, we know that getting regular physical activity plays a role in helping to lower the risk of some cancers, as well as having other health benefits.

Can you reduce your risk for colorectal cancer recurrence?

Most people want to know if there are things they can do to reduce their risk of getting cancer again (either a recurrence or a new cancer). For most cancers there is little solid evidence that can guide people in this direction. This doesn't mean that nothing will help -- it's just that for the most part this is an area that hasn't been well-studied. Most studies have looked at ways of preventing cancer in the first place.

However, some studies have pointed to things people can do that *might* help reduce the risk of colorectal cancer returning.

Colonoscopy: One thing that we know that can help is going for follow-up exams, especially colonoscopy. We know that colonoscopy can find polyps before they become cancers. Having this test on schedule can help prevent any new colon cancers.

Physical activity: Some studies of people with earlier stage (I, II, or III) colorectal cancers showed that increasing physical activity after diagnosis reduced the risk of death from colorectal cancer by as much as half. The level of activity needed to reduce risk was about 4 to 5 hours of brisk walking per week. More studies are needed to further define this possible benefit.

Diet: Eating a healthy diet may also lower the risk of colorectal cancer coming back. In a large study of patients with stage III colon cancer, those with the highest intakes of meat, fat, refined grains (sugars), and desserts were about 3 times more likely to have a recurrence than those who ate the lowest levels. More research is needed to confirm these results and to figure out which of these factors are most strongly linked to cancer recurrence.

How does having colorectal cancer affect your emotional health?

Once your treatment ends, you may be surprised by the flood of emotions you go through. This happens to a lot of people. You may find that you think about the effect of your cancer on things like your family, friends, and career. Money may be a concern as the medical bills pile up. Or you may begin to think about the changes that cancer has brought to your relationship with your spouse or partner. Unexpected issues may also cause concern -- for instance, as you get better and need fewer doctor visits, you will see your health care team less often. This can be hard for some people.

This is a good time to look for emotional and social support. You need people you can turn to. Support can come in many forms: family, friends, cancer support groups, church or spiritual groups, [online support communities](#), or private counselors.

The cancer journey can feel very lonely. You don't need to go it alone. Your friends and family may feel shut out if you decide not to include them. Let them in -- and let in anyone else who you feel may help. If you aren't sure who can help, call your American Cancer Society at 1-800-227-2345 and we can put you in touch with a [group or resource](#) that may work for you.

You can't change the fact that you have had cancer. What you can change is how you live the rest of your life -- making healthy choices and helping your body and mind feel well.

If treatment for colorectal cancer stops working

When a person has had many different [treatments](#) and the cancer has not been cured, over time the cancer tends to resist all treatment. At this time you may have to weigh the possible benefits of a new treatment against the downsides, like treatment side effects and clinic visits.

This is likely to be the hardest time in your battle with cancer -- when you have tried everything within reason and it's just not working anymore. Your doctor may offer you new treatment, but you will need to talk about whether the treatment is likely to improve your health or change your outlook for survival.

No matter what you decide to do, it is important for you to feel as good as possible. Make sure you are asking for and getting treatment for pain, nausea, or any other problems you may have. This type of treatment is called "palliative" treatment. It helps relieve symptoms but is not meant to cure the cancer.

At some point you may want to think about hospice care. Most of the time it is given at home. Your cancer may be causing symptoms or problems that need to be treated. Hospice focuses on your comfort. You should know that having hospice care doesn't mean you can't have treatment for the problems caused by your cancer or other health issues. It just means that the purpose of your care is to help you live life as fully as possible and to feel as well as you can.

You can learn more about this in our document [*Hospice Care*](#).