



## **20 MOST FREQUENTLY ASKED QUESTIONS ABOUT COLON CANCER ANSWERED**

### **What causes a polyp to form?**

The exact causes of polyps are uncertain, but they appear to be caused by both inherited and lifestyle factors. Genetic factors may determine a person's susceptibility to the disease, whereas dietary and other lifestyle factors may determine which individuals at risk actually go on to form polyps (and later cancers). Diets high in fat and low in fruits and vegetables may increase the risk of polyps. Lifestyle factors such as cigarette smoking, a sedentary lifestyle and obesity may also increase the risk.

### **How can you prevent polyps from forming?**

Few studies have been able to show that modifying lifestyle reduces the risk of colon polyps or cancer. However, lifestyle modifications such as reducing dietary fat, increasing fiber, ensuring adequate vitamin and micro-nutrient intake and exercise, may improve general health. Studies have shown that getting adequate calcium in the form of diet or supplement can reduce the risk of polyps.

### **Exactly what is a “precancerous” polyp? If the polyp is removed, does that mean I am cured?**

The term "precancerous" polyp can have two possible interpretations. One interpretation describes the evolution of the lining of the colon from normal colon cells to colon cancer. In this evolution, the patient first develops a polyp, and the cells on the polyp then become atypical or dysplastic. Next, the polyp degenerates into an early cancer, and finally, there is an invasive colon cancer.

Some people refer to all polyps up to the point of cancer as “precancerous” polyps. The other interpretation relates to classification of polyps and their malignant potential. There are two broad categories of polyps that are commonly found during cancer screening: adenomatous polyps and hyperplastic polyps. Adenomatous polyps are associated with an increased risk of colon cancer and are sometimes referred to as "precancerous." Types of polyps in this category include villous adenomas, tubulo-villous adenomas, tubular adenomas, serrated adenomas and adenomatous polyps. Hyperplastic polyps, on the other hand, are not associated with an increased risk of colon cancer.

If an adenomatous polyp is discovered on sigmoidoscopy, many physicians would recommend a full colonoscopy to examine the remainder of the bowel. Removal of a benign polyp does prevent a cancer from developing at that one location, but the patient is likely to develop polyps at other locations. Close follow up is indicated for these patients.

### **Can polyps "fall off" or take care of themselves without having them removed?**

Polyps have a slow growth rate and studies show polyps that are 10 millimeters or less have a fairly stable size over a three-year interval. A true polyp will never "fall off" or take care of itself on its own.

### **What foods or what diet should I follow to prevent colorectal cancer from occurring? Are there any foods that actually cause colorectal cancer?**

There are no foods that cause colorectal cancer. However, studies of different populations have identified associations that may affect your risk of developing colorectal cancer or the precancerous lesions called polyps. There appears to be a slightly increased risk of developing colorectal cancer in countries with higher red meat or non-dairy (meat-associated) fat intake. For example, the United States and Canada have much higher rates of colorectal cancer than countries like Japan or Nigeria, and this correlates to meat and fat consumption. Similarly, there has been an association with decreased rates of colorectal cancer and increased fiber intake. Recent studies have questioned this association, but in general, we recommend a diet high in vegetable fiber, low in fat and moderate to low in red meat. Finally, calcium and folic acid appear to have protective effects in the colon. There remain many unanswered questions in this area. No matter what your dietary intake is, do not forget to ask your doctor about the appropriate screening test to identify polyps and early cancers.

### **Can flax seed or green tea prevent colorectal cancer?**

Green vegetables, which are rich in the antioxidant vitamins C, E, and beta-carotene and a good source of dietary fiber, seem to provide some protection against colorectal cancer. Tea catechins and related polyphenols may have an inhibitor effect on colon cancer. Grape juice also may have a similar inhibitory effect to green tea on human colon cancer cell lines. Clinical trials are needed to determine true efficacy.

### **Does fiber play a protective role in colorectal cancer?**

The question of whether fiber plays a protective role against colorectal cancer has become quite controversial. Early studies suggested that fiber is indeed protective, whereas more recent and highly publicized studies find no protective effect. Pending additional studies that may resolve this controversy, a high-fiber diet is recommended because of its overall nutritional value and because it promotes good bowel function. Furthermore, fiber is also beneficial for individuals with diabetes, heart disease, hypertension and a variety of other medical conditions.

### **Does food or lactose intolerance increase your risk for colon cancer?**

Very little hard data about lactose intolerance or consumption of lactose products as a risk factor for colorectal cancer currently exist. However, there is a huge amount of new

literature suggesting probiotic therapy is healthy and that microflora of the colon may be altered by dietary dairy products such that the risk for colon cancer is retarded.

### **What are early symptoms of this type of cancer?**

Colorectal cancer can be associated with blood in your stools, narrower than normal stools, unexplained abdominal pain, unexplained change in bowel habits, unexplained anemia or unexplained weight loss. It is also important to remember that colon cancer may be silent and not associated with any symptoms. That is why early detection through screening is so important.

### **Is it possible to have colon cancer without having polyps?**

Colorectal cancer can occur without polyps, but it is uncommon. Individuals with long-standing inflammatory bowel diseases, such as chronic ulcerative colitis and Crohn's colitis, are at increased risk for developing colorectal cancer that occurs in the absence of polyps. The greater the extent of colonic involvement by inflammatory bowel disease and the greater the duration of the disease, the greater the risk of colorectal cancer. Colorectal cancers in individuals with chronic inflammatory bowel disease may appear as flat, plaque-like lesions or may even be indistinguishable from the surrounding colon tissue. Large, mass-like lesion with distinct margins seen with most colorectal cancers are uncommon inflammatory bowel disease.

Colorectal cancer associated with inflammatory bowel disease accounts for less than one percent of all colorectal cancers diagnosed in the United States each year. There are also reports that suggest some tiny colon cancers may arise in flat colon tissue, which is either entirely normal or contains a small flat area of adenomatous (precancerous) tissue. This type of colorectal cancer is the exception to the rule and is considered rare. The vast majority of colorectal cancers arise from pre-existing adenomatous (precancerous) polyps.

### **Is it possible to have blood in your stool, but not have colon cancer?**

Yes, it is possible to have blood in your stool but not have colon cancer. Hemorrhoids, anal fissures or tears, infections of the colon (infectious diarrhea), inflammatory bowel disease (ulcerative colitis or Crohn's colitis), colonic diverticula and abnormal blood vessels (arteriovenous malformations or angiodysplasia) may all be associated with bleeding from the rectum or colon. Blood in the stool may also occur from lesions in the stomach and small intestine such as peptic ulcer disease, angiodysplasia and Crohn's disease of the small intestine. Rectal bleeding of any amount or blood in or on the stool is never normal and should not be ignored, as some causes are more serious than others. Speak with your gastroenterologist about any rectal bleeding and schedule a colonoscopy to get the bleeding properly checked out.

### **Are intestinal obstructions an early symptom of colon cancer?**

Colonic obstruction is a late symptom of colon cancer. It occurs when the tumor has grown so large that it blocks the bowel. When it occurs, urgent surgery is required to relieve the blockage. Screening for colon cancer with colonoscopy can detect tumors long before they cause symptoms, let alone serious complications like obstruction. Obstruction may also be the symptom of something else.

### **Is a conspicuous lump in the side a symptom of colon cancer? Can a polyp in the colon be felt through the skin?**

A palpable lump in the abdomen can be a symptom of colon cancer, but it could also be a symptom of other conditions. Your doctor would be able to examine you and give you a more personalized opinion, ordering testing as appropriate to determine the cause of a lump. A polyp inside the colon can not be felt from the outside. Polyps are found by looking inside the colon with various procedures: a sigmoidoscopy, which only looks at a portion of the colon; a colonoscopy, which can look at the whole colon; or a virtual colonoscopy, which is an X-ray technique as with a barium enema.

Colonoscopy is considered the gold standard test for this condition and offers the physician both diagnostic and therapeutic capabilities.

### **What is the best colon cancer screening test?**

Colonoscopy is the only method that has a high sensitivity for all polyps, both small and large, and which presents the capability of removing them at the time of the procedure. Virtual colonoscopy is a possibility for screening, but is not endorsed by ASGE or other professional GI societies. The American Cancer Society updated their screening guidelines in 2008 to include virtual colonoscopy. With this screening procedure, there is a probability of missing small or flat lesions. In addition, any abnormality which is seen will require a colonoscopic examination to verify the finding or to remove the polyp. Other, newer screening procedures include testing for abnormal DNA in the stool and the possible combination of a flexible sigmoidoscopy and a barium enema. The barium enema is currently suggested if colonoscopy is not available. Colonoscopy, however, is the only screening method that allows for the detection and removal of precancerous polyps before they turn into cancer.

### **What is a PET scan? Can it be used for detection instead of a colonoscopy?**

PET scanning is still at an early stage of development in the detection and staging of gastrointestinal tumors. At the present time it is not replacing colonoscopy for diagnosing colon cancer.

**Are colorectal screening tests done by your general practitioner or should they be done by gastroenterologists or other experts?**

There are several types of colorectal cancer screening tests. Fecal occult blood tests are usually provided by your general practitioner for you to take home with instructions for the test and how to return them to the laboratory for development and analysis. Flexible sigmoidoscopy, which only evaluates the lower third of the colon with an endoscope, is performed by some but not all general practitioners. General practitioners who do not perform flexible sigmoidoscopies in their office typically refer patients to a gastroenterologist or other specialist for the procedure. Colonoscopy is a more extensive endoscopic evaluation of the entire length of the colon and is not done by general practitioners; it is done by gastroenterologists or other gastrointestinal specialists. The colonoscopy is considered the gold standard procedure for colon cancer screening by the American Cancer Society and many other professional organizations. It is highly recommended that your general practitioner refer you to a board certified gastroenterologist or endoscopist to have the test done.

Visit [www.screen4coloncancer.com](http://www.screen4coloncancer.com) or [www.asge.org](http://www.asge.org) and click on "Find a Doctor" to locate a qualified gastroenterologist in your area.

**Is there a correlation between the length of your colon and colon cancer?**

There is no known correlation with the length of the colon and colon cancer. Cancer is at least as common in men as in women, but women tend to have longer colons.

**Is there a connection between stomach cancer and colorectal cancer?**

There is no association between stomach (gastric) cancer and colorectal cancer, except in individuals with Hereditary Non-Polyposis Colorectal Cancer. This is a rare genetic syndrome in which affected individuals are at risk of colorectal cancer at a young age, as well as other cancers, including gastric cancer. Individuals with a strong family history of colorectal cancer or colorectal cancer and endometrial (uterus) cancer may have this syndrome and may warrant genetic testing and/or screening with colonoscopy. Family history is defined as three or more affected relatives spanning two generations with at least one affected relative under age 50. Patients with familial polyposis also have an increased risk of gastric cancer. A personal or family history of "stomach cancer" should not be confused with colorectal cancer.

**Is Irritable Bowel Syndrome a risk factor for developing colorectal cancer?**

Irritable Bowel Syndrome (IBS) is a chronic functional problem of the gut usually characterized by patterns of diarrhea and loose stools alternating with constipation. IBS may also be associated with abdominal cramping and pain. IBS is not associated with an increased risk of developing colorectal cancer. Patients with IBS have normal life expectancies. Although patients with IBS are not at increased risk for colorectal cancer,

they are not at decreased risk either and should follow the recommended screening guidelines appropriate to their population. If your IBS symptoms change from their usual behavior or regular pattern, or if you see blood in your stool, please notify your physician and gastroenterologist.

**Can young people get colon cancer? If there is no family history and if the person is under 30, should they be concerned about getting colon cancer?**

In general, it is very uncommon for young people to get colorectal cancer. There are, however, two well recognized hereditary syndromes in which cancer can develop in young people. The first is Familial Adenomatous Polyposis (FAP). This is a disease in which there is a mutation of a tumor suppressor gene and affected people develop hundreds to thousands of precancerous polyps in the colon. Unless the colon is removed, 100 percent of these patients will get colorectal cancer, usually by their late 30s. The disease is inherited directly from an affected parent (autosomal dominant inheritance), which means that each child has a 50 percent or one in two chance of inheriting the abnormal gene. If the gene is inherited, the child will eventually develop polyps. The average age for polyp development in this syndrome is the mid-teens, although children as young as eight or 10 sometimes have been found with polyps.

If a family is known to have FAP, the affected parent and at-risk children may be screened for a gene mutation with a genetic test. Children from families who refuse or cannot have genetic tests should start having sigmoidoscopies or colonoscopies at about 10 or 12 years old and every six to 12 months to look for the presence of polyps. Once numerous polyps start developing, surgery is planned. The good news about this disease is that the surgical options are very good and now the colon can often be removed by a laparoscopic approach called colostomy. The bowel is put directly back together and no bag is necessary. People move their bowels normally.

The other inherited disorder is Hereditary Non-Polyposis Colorectal Cancer (HNPCC). In this syndrome cancers also occur early and develop from polyps. But here, there are not the hundreds of polyps seen in FAP. The disease presents at a later age, too. The standard recommendation is colonoscopy in at risk children of affected families beginning at age 25 and repeated every two years. Genetic testing may also be helpful here.

There are specific recommendations for children in families with high rates of colorectal cancer, but the specific syndrome must be known. It is very important for children from families like these to be seen by experts who have experience with these syndromes and in institutions where genetic counseling and testing services are available.

It is possible, although quite rare, for sporadic colon cancer to occur in young people outside of those affected by FAP or HNPCC.