Colorectal Cancer

One in 20 Americans will get cancer of the colon or rectum in their lifetime. In fact, **colorectal cancer is the second most frequently diagnosed cancer in the United States**. Although the disease strikes men and women in almost equal numbers, men are more likely to die of it.

The American Cancer Society estimates that 57,100 Americans will die of colorectal cancer this year!!! It estimates that over 147,000 new cases will be diagnosed this year! **Colon Cancer is the third deadliest cancer for men after that of the lung and prostate.** Whereas the mortality rate for women has dropped by 30 percent over the last 30 years, the rate for men decreased by only 7 percent for the same period! The reason for this wide discrepancy is largely unknown, but delayed detection in men may be partially to blame.

This is one of the most important points to remember about colorectal cancer: while it is one of the most serious cancers, **it is also one of the most curable when caught early**. The overall cure rate is about 50 percent, but odds increase dramatically to more than 95 percent if the cancer is detected before it has had a chance to penetrate the colon walls or spread to nearby lymph nodes.

Risk Factors

Colorectal cancer is seen more in industrialized countries, suggesting that environmental factors contribute significantly to its development.

- **The most important of these is diet!** There is a **very strong correlation** between the **high-fat, low-fiber diet** common in the Western world and the high incidence of colorectal cancer!
- **Age** is another factor. As a person ages, their risk of getting colorectal cancer increases. The risk rises after the age of 40, with more than 94 percent of cases occurring after age 50. The average age at diagnosis is 62.
- **A family history of colon cancer, or even of uterine, or breast cancer.** The risk is greater if the cancer occurred in close relatives like parents, children or siblings. In fact, about 15 percent of all colorectal cancer patients have a family history of colorectal cancer in a close relative. **A family history of Colon Cancer should be discussed with your doctor to determine whether you should begin screening earlier or be tested more frequently than generally recommended.**
- **Having colon polyps.** These **tumor-like growths** are known as ***polyps*.** They usually form in the colon or rectum during puberty, and are a precursor to cancer. Their cells have a tendency to undergo malignant change, and cancer generally develops in the colon within about 15

years. Since doctors believe most colon and rectal cancers begin as polyps, it's best to detect and remove these as soon as possible. A hereditary condition, known as *familial polyposis*, characterized by hundreds or thousands of these polyps, accounts for a very small percent of all colorectal cancer cases. **Inflammatory Bowel Diseases, such as Ulcerative Colitis and Crohn's Disease.** These conditions cause inflammation of the lining and wall of the bowel. Scientists believe that colorectal cancer may result from cell overgrowth when new cells are generated to replace the diseased tissue. **Having been treated for colorectal cancer or polyps in the past.**

Screening

How do you find out if you are at risk for colon cancer? **Screening for Colon Cancer is vitally important!** While there is still controversy over which methods are best and most cost-effective, **there is no controversy that you should be screened**. **Click here for a CDC pamphlet on screening** (**Click cancel when the password box pops up - be patient as it loads slowly on a modem connection!**).

Here are some of your screening options explained:

- **Digital rectal exam.** This test, often performed together with the fecal occult blood screening are the most commonly performed. Both are completely safe and generally painless. In the digital rectal exam, the doctor inserts a gloved finger into the rectum to check for abnormalities on its walls. But this exam, which can be done in the doctor's office, is limited to the distance in the rectum that can be reached by the examining finger and cannot detect abnormalities in the colon.
- **The fecal occult blood test** checks for blood in the stool. Last year, a University of Minnesota trial found that such **annual screening reduced colorectal cancer mortality by one third**. But the test is not foolproof since bleeding does not always accompany colon cancer and blood in the stool can be caused by any number of other non-cancerous conditions. **Order a screening kit today.** It will be sent to your home with instructions for use to make sure you do not have any occult blood in the stools!
- **Flexible Sigmoidoscopy.** The doctor uses an *endoscope*, a thin, flexible optical device, to examine the inside of the last two feet of the colon, where more than 40 percent of colon cancers occur. This test is highly accurate, but it has a one-in-2,500 risk of perforating the colon wall. Another draw-back: A sigmoidoscopy does not examine the entire colon.
- **Colonoscopy.** This test often combines detection and treatment. Using a longer endoscope the doctor can look at the lining of the entire colon. Most polyps and some small cancers may be removed or biopsied at the time of the exam. A biopsy is where a sample of tissue is removed to

determine if there are any malignant cells. Colonoscopy has several concerns: First, they are usually done in the hospital with intravenous anesthesia adding considerable cost, and second colonoscopy has a one-in-500 risk of perforation.

- **Virtual Colonoscopy.** This is a test performed using the CT scanner and Hi Tech virtual image software to examine the inside of the colon. This was recently publicized when the *Today Show* host Katie Couric underwent her virtual colonoscopy, and it is actually available for review on the MSNBC website! It does involve preparation of the colon prior to the test, but it does not require that barium or any tube or instrument be placed into the colon. It is a very good screening only tool. If anything is found during this screening exam, you will most likely still need to have a colonoscopy to evaluate the abnormality and to take a biopsy specimen to determine what the abnormality is. A recent article in the New England Journal of Medicine, December 4, 2003, showed that it was just as accurate as screening colonoscopy at detecting potential signs of colon and rectal cancer!
- **Colon x-ray (sometimes called a barium enema).** This procedure allows the doctor to check the entire colon by releasing a chalky liquid (barium) into the colon and taking multiple x-rays of the colon wall. This is generally not used for screening these days, but instead to confirm other diagnoses.

Preventive Measures

There are several ways you can help lower your risk of colorectal cancer. Here are some of the most important:

- **Diet:** A low-fat, high-fiber diet seems to reduce the risk of colorectal cancer by speeding the elimination of wastes from the body. This minimizes the amount of time the bowels are exposed to any carcinogens (cancer causing elements) that may be in your stools. Researchers at the Harvard School of Public Health found that men who ate more fiber and less fat were 3.6 times less likely to develop intestinal polyps than those who ate high-fat, low-fiber foods. **Limit your dietary fat** to 30 percent of your daily caloric intake, with no more than 10 percent coming from saturated animal fats like butter and tropical oils, like palm oil. **Calcium and folic acid contribute positively to the prevention of colorectal cancer!** Good sources of calcium include skim or low-fat milk and dairy products, broccoli, kale, salmon and sardines with bones. Folic acid can be found in fortified cereals, dark green leafy vegetables, some nuts and seeds, and dried beans. Because of our western diet, most people will need to **supplement their folate and calcium intake**!
- **Fiber is the key!** The National Cancer Institute (NCI) recommends at least **30 grams of fiber** a day, **twice as much as the average adult now**

consumes! Insoluble fiber is the type that matters most. Good sources: Whole-grain breads, cereals and pastas, beans, brown rice, and plenty of fruits and vegetables - at least five servings a day. Most people will need to **supplement their daily fiber intake** to get to 30 grams per day! **See our great Fiber Article**

- **Smoking.** Studies at the Harvard School of Public Health and Brigham and Women's Hospital in Boston provide the strongest evidence to date linking cigarette smoking to colon cancer. In addition, the studies found that unlike with heart disease and lung cancer, in which quitting can reverse risk, **early smoking (through your twenties) increases your lifetime risk of colorectal cancer**. But remember that the longer you smoke, the greater your risk, so stop now!
- **Exercise.** Studies suggest that regular physical activity cuts colon cancer risk practically in half (there is no evidence of a similar protection against rectal cancer), possibly by speeding up the digestive process and shortening the bowels' exposure to carcinogens. But researchers point out that the beneficial effects of exercise may be due to other aspects of a healthy lifestyle common in people concerned about fitness.
- **Aspirin.** Preliminary research points to a protective effect of aspirin against colorectal cancer. But the research is still inconclusive and other risks associated with aspirin (such as erosion of the stomach lining and tumors of the urinary tract) need to be explored before regular use is recommended.

Future News

The possible discovery of two genes which account for a large percentage of cases of hereditary colon cancer—up to 95 percent—as well as many cancers that don't appear to have a family connection. This may help scientists develop a blood test to screen for these genes making early detection and intervention easier for those with a family history of colon cancer. An accurate blood test for the general population is further away.

When to Get Tested

The American Cancer Society recommends men and women get an annual digital rectal exam after age 40, an annual fecal occult blood test after age 50, and a sigmoidoscopy (preferably flexible) every three to five years after age 50. If any of these tests indicate a problem, other exams, such as a colonoscopy and a colon x-ray may be needed. Your primary care doctor can do a digital rectal exam and fecal occult blood test during your annual physical. Some will also perform the other tests.

Treatment Options

Unlike with other cancerous tumors, in the case of colon cancer the size of the tumor has little influence on prognosis and method of treatment. Surgery is the primary therapy. The extent of the colon removed, and the use of additional therapy depends on the degree of the tumor's penetration into the bowel wall, the involvement of regional lymph nodes and if the cancer has spread to distant areas. **Remember - prevention first - change your lifestyle NOW!!!**