Colorectal cancer (which includes cancer of the colon, rectum, anus, and appendix) has ranked second for both males and females in Singapore for the past 20 years and is now the most common cancer when both genders are combined. There were more than 6000 new cases in the period 1998-2002. Colorectal cancer incidence has been declining in the United States, and to a lesser extent in Europe. In Singapore, it increased 3-4% each year from 1968 to 2002, though a decreasing trend for rectal cancer in females was observed from 1998-2002. The risk begins to increase sharply in the 40-45 year age group. For colon cancer, Malays and Indians have a risk 30-50% that of Chinese; for rectal cancer, rates for Indians are 30-50% that of Chinese with Malays intermediate between the two.

There is about 5% chance of a person developing colorectal cancer during his or her lifetime. Colorectal cancer can affect anyone - men or women alike - and your risk increases as you age. Everyone above age 50 years is considered as average risk. But some people have a greater inherited or genetic risk for the disease:

• Personal or family history of benign colorectal polyps
• Personal or family history of colorectal cancer
• Personal history of inflammatory bowel disease
• Personal or family history of ovarian, uterine or breast cancer

Dietary and environmental risk which can be modified include:

• High animal fat and calorie intake, low-fibre diet
• Obesity, lack of exercise
• Smoking
• Alcohol intake

Colorectal cancer is known as a "silent" disease as many people do not have symptoms (see Table), such as per rectal bleeding, abdominal pain or change in bowel habit and stool calibre until the cancer is difficult to cure. In fact, the possibility of curing patients after symptoms develop is only about 50%. On the other hand, if colorectal cancer is found and treated at an early stage, before symptoms develop, the opportunity for cure is 80% or better. Most colon cancers start as non-cancerous growths called polyps. If the polyps are removed, then the cancer may be prevented and major surgery, chemotherapy, radiotherapy or a stoma can be avoided.

The simplest screening test for colorectal cancer is testing of the stool to detect tiny amounts of invisible blood called faecal occult blood test (FOBT). FOBT offered free by the Singapore Cancer Society to people aged 50 years and above, is the most cost-effective and simple screening method but its accuracy is limited as it only detects cancer or polyps that are bleeding at the time of the test. Only about 50% of cancers and 10% of polyps bleed enough to be detected by this test. A negative FOBT needs to be repeated every year, while further test is necessary for accurate detection of cancers and polyps if the FOBT is positive.

Endoscopy is the most reliable means of visually examining the lining of the colon and rectum, to perform biopsies and remove colon polyps. Sigmoidoscopy examines the lower one-third of the colon and rectum, which accounts for most polyps and cancers. Colonoscopy examines the entire lower intestine but its use in population-based screening is limited by cost and availability of qualified specialists. Barium enema or x-ray of the colon is almost as good as colonoscopy in detecting large tumors, but it is not as accurate for small tumors or polyps.

The current recommendation is for average-risk people to begin screening at 50 years. This would include asymptomatic individuals and individuals who have a family history of colorectal cancer limited to distant relatives and no other risk factors. They should have FOBT annually with or without flexible sigmoidoscopy every 5 years, barium enema every 5 years or colonoscopy every 10 years. Newer screening methods such as stool genetic testing and virtual colonoscopy are still being evaluated and hold promise for the future.
6 steps to reduce your risk for colon cancer:

1. Get regular colorectal cancer screenings beginning at age 50. If you have a personal or family history of colorectal cancer or colorectal polyps, or a personal history of another cancer or inflammatory bowel disease, talk to your doctor about earlier screening. In general, high-risk individuals will require screening by colonoscopy starting at an earlier age and at more frequent intervals.

2. Eat between 25 to 30 grams of fiber each day from fruits, vegetables, whole grain bread and cereals, nuts and beans.

3. Eat a diet low in fat, refined carbohydrates and animal protein.

4. Eat foods with folate such as leafy green vegetables. A daily multivitamin containing folic acid, Vitamin D and calcium may also be helpful.

5. If you use alcohol, drink only in moderation. Alcohol and tobacco in combination are linked to colorectal cancer and other gastrointestinal cancers. If you use tobacco, quit. If you don’t use tobacco, don’t start.

6. Exercise for at least 20 minutes three to four days each week. Moderate exercise such as walking,
gardening, or climbing steps may help reduce your risk.

In summary,

The best way to reduce risk of colorectal cancer – and other diseases – is to use COMMON SENSE: eat a healthy, balanced, low-fat diet with lots of fresh vegetables and fruits; avoid smoking; reduce alcohol intake; exercise regularly.

Colorectal cancers are preventable, treatable and beatable.

Screening and early detection save lives.

Appendix

Table – Symptoms of colorectal cancer
• Blood in stool
• Change in bowel habit – alternating diarrhoea and constipation, narrow calibre stool
• Straining during bowel movement
• Abdominal pain
• Weakness, fatigue, loss of weight and appetite

Note – If you have symptoms, you don’t need screening; you need to see your doctor for further evaluation.

Figure - The colon is the end section of the intestine, and is 1.5 to 2 metres in length. It begins on the right lower area of the abdomen, goes up along the right side, across the top of the abdomen, down the left side and ends at the anus. The last 10-15cm of the large intestine above the anus is the rectum. The primary function of the colon is water absorption. Very little nutritional absorption takes place in the colon. As a result, a portion or the entire colon can be removed and your body can continue to have good nutrition. The rectum serves as a reservoir or holding tank for the stool before a bowel movement occurs. The distribution of cancer along the large intestine (colorectum) is as shown.