Talk to your doctor about Screening and Genetic Tests.

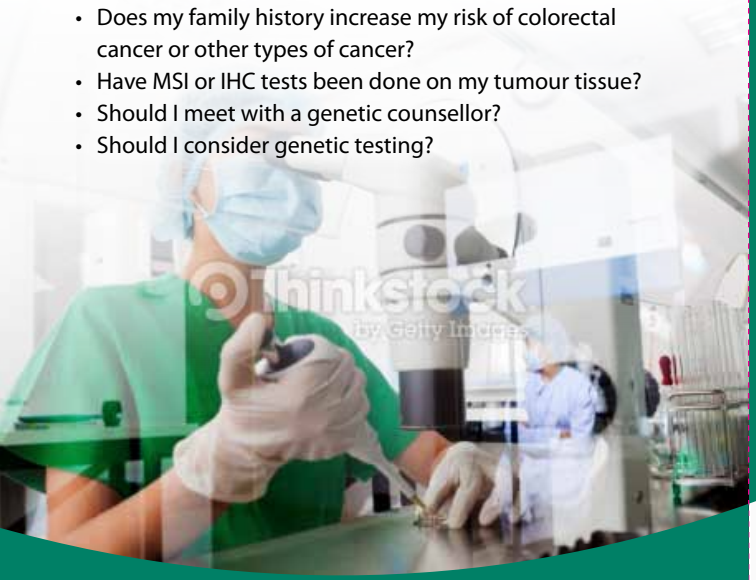
Screening saves lives.

If you are concerned about your risk of colorectal cancer or other types of cancer, talk with your doctor. Consider asking the following questions of your doctor:

- What is my risk of developing colorectal cancer or other types of cancer?
- What can I do to reduce my risk of cancer?
- What are my options for cancer screening?

If you are concerned about your family history and think your family may have Lynch syndrome, consider asking the following questions:

- Does my family history increase my risk of colorectal cancer or other types of cancer?
- Have MSI or IHC tests been done on my tumour tissue?
- Should I meet with a genetic counsellor?
- Should I consider genetic testing?



Colorectal cancer is now the most common cancer in Singapore affecting both males and females.

How can I get more information?

Review your family history of cancer with your doctor.

Referral information
Cancer Genetics Service in
National Cancer Centre Singapore
Level B2, 11 Hospital Drive Singapore 169610
Call **6436 8088** for a referral or an appointment.

Mondays - Fridays: 8.30am to 5.30pm
Closed on Saturdays, Sundays and Public Holidays

For general information about cancer:
Call the Cancer Helpline at **6225 5655**
or email **cancerhelpline@nccs.com.sg**

Visit the Cancer Genetics Service webpage at
http://www.nccs.com.sg/PatientCare/CancerGeneticsService

This is a public education initiative by:
Cancer Education &
Information Service

Cancer Genetics

National Cancer Centre Singapore
SingHealth

Lynch Syndrome

Hereditary Nonpolyposis Colorectal Cancer (HNPCC)

Has anyone in your family had colon cancer?

What is Lynch syndrome?

Lynch syndrome is the most common form of hereditary colorectal cancer. People who have Lynch syndrome have an increased risk of developing colon cancer as well as cancers of the digestive tract, gynecologic tract, and other organs. If one person in a family has Lynch syndrome, their close relatives may also have it.

But please remember that hereditary cancer is rare.

What causes Lynch syndrome?

Lynch syndrome is a hereditary colorectal cancer syndrome. This means that the cancer risk can be passed from generation to generation in a family. Several genes have been identified that are linked to Lynch syndrome. They include MLH1, MSH2, MSH6, PMS2, and EPCAM. A genetic mutation (change) in any of these genes gives a person an increased lifetime risk of developing colorectal cancer and other related cancers. Women also have an increased risk of developing endometrial and ovarian cancers. Persons born with a gene mutation of Lynch syndrome may or may not develop cancer, but their risk of cancer is greater.

Most families do not have Lynch syndrome.

Is my family at risk for Lynch syndrome?

Colorectal cancer is a common cancer. In Singapore, it is the most frequent cancer in Singaporean males and the second most frequent cancer among women.

But, most colorectal cancer is not hereditary.

The history of cancer in your close relatives gives clues your family's chance of Lynch Syndrome. Close relatives include: children, brothers and sisters, parents, aunts, uncles, grandchildren and grandparents on one side of the family. A history of cancer in cousins and more distant relatives may also be important.

Lynch syndrome cancers include colorectal, endometrial, ovarian, stomach, small bowel, pancreatic, kidney, hepatobiliary, ureter, or brain cancer as well as certain skin tumors.

Lynch syndrome is more likely if one or more of the following features can be confirmed in your family:

- A person with colorectal cancer at age 50 or younger.
- A person with colorectal cancer and another Lynch syndrome cancer with one diagnosed at age 50 or younger.
- Two close family members with a Lynch syndrome cancer at age 50 or younger.
- Three close family members (over more than one generation) with a Lynch syndrome cancer, including at least one case of colorectal cancer AND at least one cancer diagnosed at age 50 or younger.
- Abnormal IHC or MSI result on tumor tissues.

How is Lynch Syndrome diagnosed?

Screening tests for Lynch syndrome – MSI and IHC testing

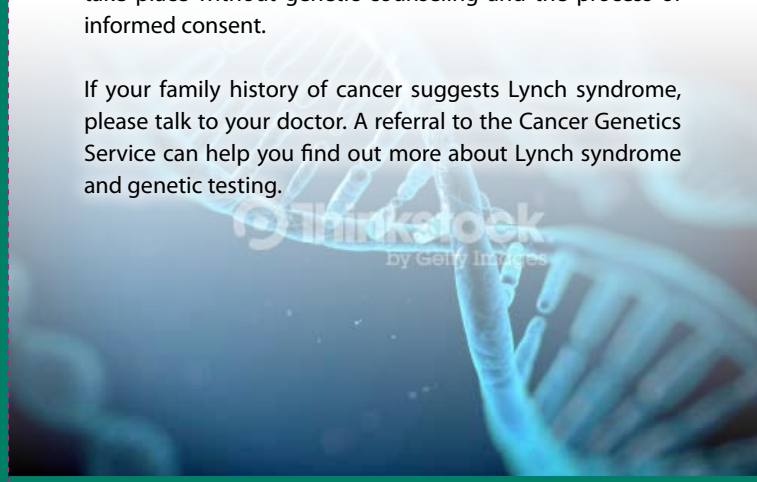
MSI = Microsatellite Instability
IHC = Immunohistochemistry

MSI and IHC are screening tests that are performed on tumor (cancer) tissue to help determine if Lynch syndrome is likely.

Definitive test for Lynch syndrome – Genetic Testing

Lynch syndrome genetic testing is a blood test that is available through the Cancer Genetics Service when specific criteria are met. Genetic testing is complex, thus, it does not take place without genetic counseling and the process of informed consent.

If your family history of cancer suggests Lynch syndrome, please talk to your doctor. A referral to the Cancer Genetics Service can help you find out more about Lynch syndrome and genetic testing.



Finding a Lynch syndrome gene mutation may help to

- Inform family members about their own cancer risk
- Direct appropriate cancer screening and risk reduction
- Explain the history of cancer in a family