WORLD CANCER DAY

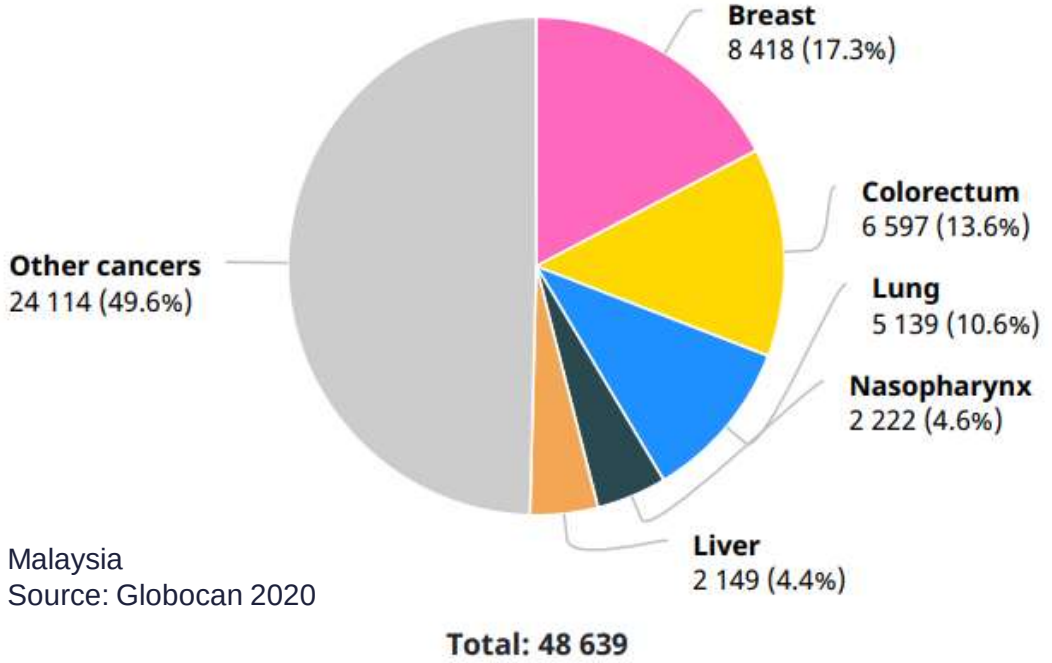
4TH FEBRUARY

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

What is cancer ?

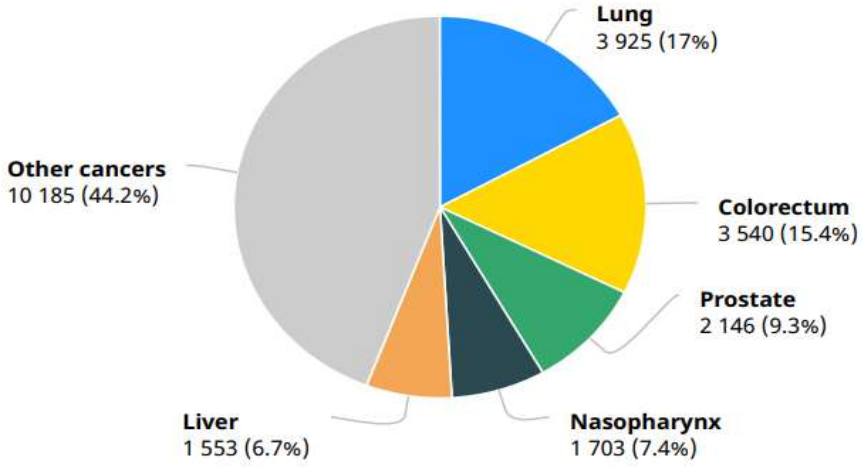
Cancer is a disease which occurs when changes in a group of normal cells within the body lead to uncontrolled, abnormal growth forming a lump called a tumour; this is true of all cancers except leukaemia (cancer of the blood). If left untreated, tumours can grow and spread into the surrounding normal tissue, or to other parts of the body via the bloodstream and lymphatic systems, and can affect the digestive, nervous and circulatory systems or release hormones that may affect body function.

Number of new cases in 2020, both sexes, all ages



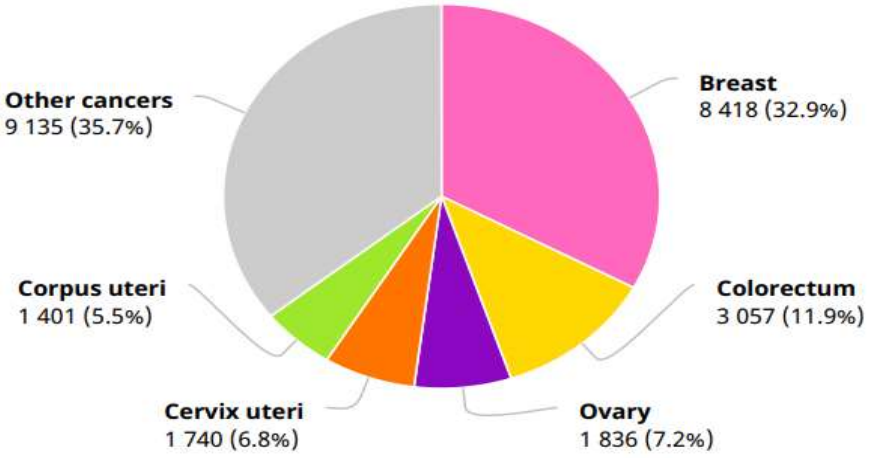
Malaysia
Source: Globocan 2020

Number of new cases in 2020, males, all ages



Total: 23 052

Number of new cases in 2020, females, all ages



Total: 25 587

Risk factors for Cancers

- Tobacco use
- Alcohol use
- Dietary factors, including insufficient fruit and vegetable intake
- Overweight and obesity
- Physical inactivity
- Chronic infections from helicobacter pylori, hepatitis B virus (HBV), hepatitis C virus (HCV) and some types of human papilloma virus (HPV)
- Environmental and occupational risks including ionizing and non-ionizing radiation

Types of cancers

Carcinoma

A cancer that arises from the epithelial cells (the lining of cells that helps protect or enclose organs). Carcinomas may invade the surrounding tissues and organs and metastasise to the lymph nodes and other areas of the body. The most common forms of cancer in this group are ***breast, prostate, lung and colon cancer***

Sarcoma

A type of malignant tumour of the bone or soft tissue ***(fat, muscle, blood vessels, nerves and other connective tissues that support and surround organs)***. The most common forms of sarcoma are leiomyosarcoma, liposarcoma and osteosarcoma

Lymphoma and Myeloma

Lymphoma is a cancer of the lymphatic system, which runs all through the body, and can therefore occur anywhere. *Myeloma* (or multiple myeloma) starts in the plasma cells, a type of white blood cell that produces antibodies to help fight infection. This cancer can affect the cell's ability to produce antibodies effectively

Leukaemia

Leukaemia is a cancer of the white blood cells and bone marrow, the tissue that forms blood cells. There are several subtypes; ***common are lymphocytic leukaemia and chronic lymphocytic leukaemia***

Brain and spinal cord cancers

These are known as central nervous system cancers. Some are benign while others can grow and spread.

Signs and symptoms of cancer

- Unexpected bleeding
- Unusual lumps or swelling
- New mole or changes to a mole
- Pain or ache
- A sore or ulcer that won't heal

- Coughing, breathlessness or difficulty swallowing
- Fatigue
- Complications with urinating
- Heartburn or indigestion

- Unexplained weight loss
- Changes in bowel habit
- Appetite loss
- Unusual breast changes
- Heavy night sweats

Cancer Staging

Stage 0

Carcinoma in situ – Early form

Stage I

Localized

Stage II

Early locally advanced

Stage III

Late locally advanced

Stage IV

Metastasized

Managing and treating cancer

Surgery

If a cancer has not metastasised (spread), surgery can remove the entire cancer which may completely cure the disease. Often, this is effective in removing the prostate or a breast or testicle.

Chemotherapy

Chemotherapy is generally used to treat cancer that has spread or metastasised because the medicines travel throughout the entire body. It is a necessary treatment for some forms of leukaemia and lymphoma.

Hormone therapy

Several cancers have been linked to some types of hormones, including breast and prostate cancer. Hormone therapy works to change hormone production in the body so that cancer cells stop growing or are killed completely.

Radiotherapy

Radiation treatment or radiotherapy uses high-energy rays to reduce a tumour or destroy cancer cells as a stand-alone treatment and in some cases in combination with other cancer treatments.

Immunotherapy

Immunotherapy uses the body's own immune system to fight the cancer tumour. Immunotherapy may treat the whole body by giving an agent that can shrink tumours.

Gene Therapy

The goal of gene therapy is to replace damaged genes with ones that work to address a root cause of cancer: damage to DNA. Other gene-based therapies focus on further damaging cancer cell DNA to the point where the cell destroys themselves.

Foods that Fight Cancer

No single food can protect you against cancer by itself.

But research shows that a diet filled with a variety of vegetables, fruits, whole grains, beans and other plant foods helps lower risk for many cancers. In laboratory studies, many individual minerals, vitamins and phytochemicals demonstrate anti-cancer effects

Apple

Asparagus

Blue berries

Carrots

Garlic

Grapess

Oranges

Soya

Spinach

Tea

Tomatoes

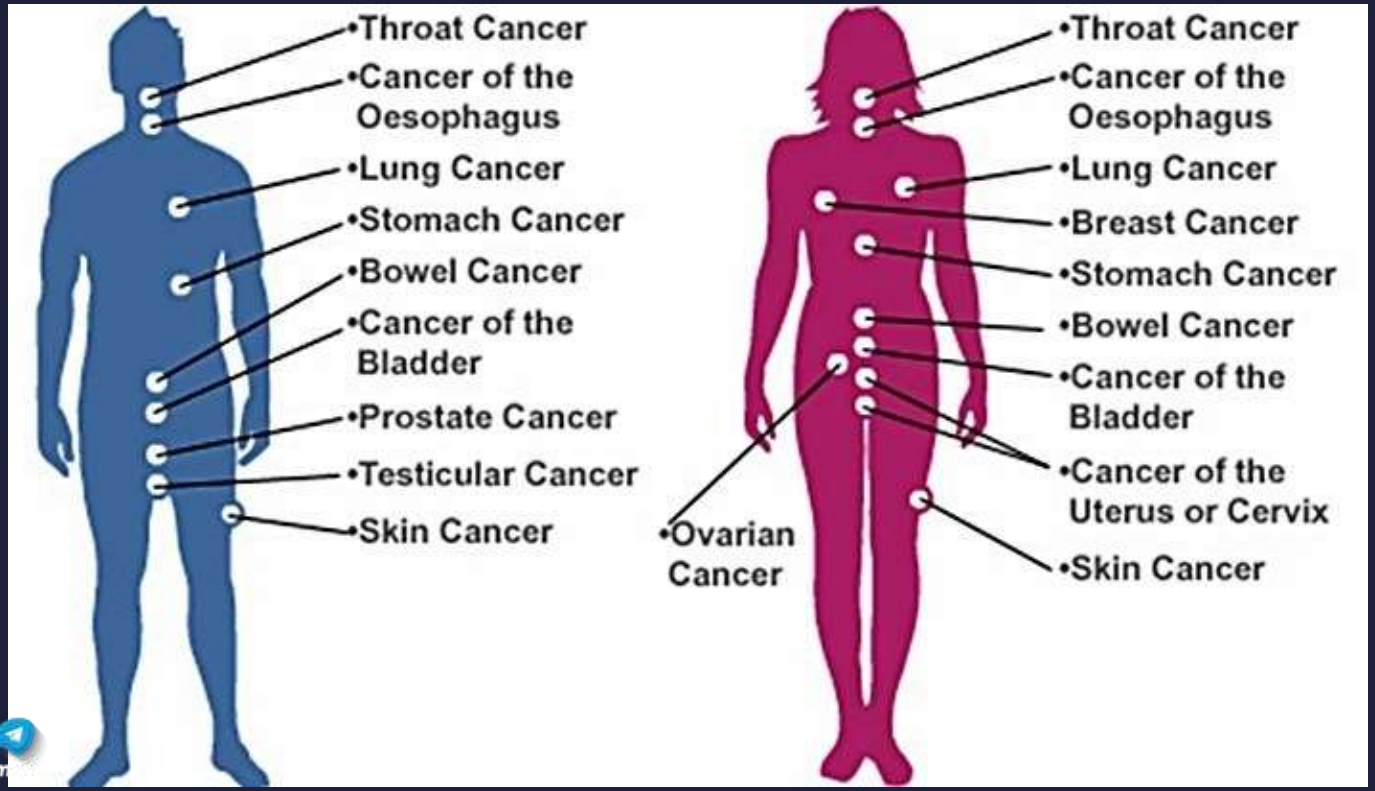
Walnuts

Whole Grains

Coffee

Which part of the body are affected by cancer?

Almost all the major parts of our body may be affected by cancer



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