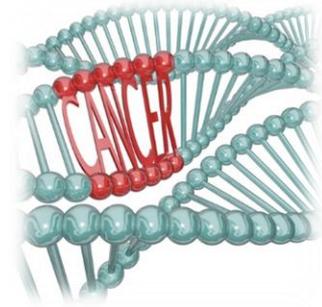


WHAT IS CANCER?

The human body is made of about 32 trillion cells. The cell is the smallest unit; carrying out all the functions necessary to keep us alive. What functions a cell carries out is determined by what part of its genes is activated. The genetic material has information, which determines what kind of chemical process a cell carries out, what proteins it manufactures, how many times it divides and multiplies and even what it looks like. If the genetic material becomes damaged for any reason, it undergoes a mutation, which is basically an error in the DNA.

Being the control house of the cell, any problems in DNA can cause the cell to go rogue. This means that the cell may not only stop carrying out its necessary functions, it will start growing indefinitely in numbers, until the organ it is part of, can no longer do what it needs to do. Not only that, cancerous cells do not have the kind of affinity for their surrounding tissue, that normal cells do, and therefore can detach and spread throughout the body. This process is called metastasis. Cancerous cells replicate so rapidly and in so many numbers that normal cells have difficulty competing for nutrition and the rest of the body slowly starves.



WHAT CAN PUT ME AT RISK?

There are certain conditions that can increase the likelihood of developing cancer. These are known as risk factors. Modifiable risk factors are those that are under our control, at least to an extent, and non-modifiable are those that are out of our control. Modifiable risk factors include **diet, smoking, obesity, alcohol consumption and exposure to sunlight**. Non-modifiable risk factors include **ageing, certain chronic disease and infections, and family history of cancer**.

MYTHS AND MISCONCEPTIONS ABOUT CANCER

There are many theories and ideas about cancer, and some circulating the internet and social media. It is important to understand that with a disease this grave, wrong information can cause hindrance for patients seeking treatments as well as give rise to unnecessary paranoia. Some of the common myths surrounding cancer are discussed below:

1) A healthy diet will cure cancer.

It will not. Although it is advisable to follow a diet rich in nutrients, and it may help, according to some research, in preventing certain types of cancers, it will not cure a cancer.

2) Cancer cells feed on sugar, therefore quitting sugar will stop the cancer.

All cells feed on sugar, not just cancer cells. Also, anything we eat, has to be converted into sugars in our body to be used as energy. Quitting sugar will not stop cancer.

3) Artificial sweeteners cause cancer.

Researchers have not found any evidence that artificial sweeteners cause cancer in humans. The artificial sweeteners available in the market today have all been deemed safe, including aspartame and saccharine.



4) Deodorants and antiperspirants cause cancer.

There is no scientific evidence that any of the ingredients being used in either of these hygiene products cause cancer. They have been extensively studied.

5) Cancer is a vitamin deficiency.

Cancer is mutation that can occur due to radiation, viral infection, chronic wear and tear or inflammation of a tissue, certain carcinogenic chemicals and family history. It is not the deficiency of a vitamin, and no scientific studies have so far been able to link the consumption of vitamins to a lower risk of cancer.

6) Cancer is contagious.

Cancer itself is not contagious. Certain infectious agents, H. Pylori (known to cause gastritis and stomach ulcers) and Human Papilloma Virus (may lead to cervical cancers), for instance, have been known to cause cancer in humans; these bacteria and viruses can be transmitted from person to person, but the cancer cannot. Transplant organs containing cancer cells may cause spread of cancer to the person they are transplanted to.

7) There are home remedies that can cure cancer.

No, lemon juice, herbs, detoxes, vegan diets: none of these is proven cures for cancer. It is extremely important if you are patient of cancer, that you seek proper medical treatment. Always talk to your oncologist before experimenting with alternate forms of medicine.



8) Cell phone radiations can cause brain tumours.

The rays emitted by cell phones are low frequency and are not strong enough to lead to genetic mutations that would lead to cancer.

9) Cancer surgeries or biopsies can cause the cancer to spread.

The chance of spread during surgery is extremely low because maximum precautions are taken during such a surgery, and the surgery itself, can be lifesaving.

Finally, it is important that to not believe information that does not come from credible sources, and is not evidence or science based.

If you believe that you have family history or any of the above-mentioned risk factors, it is advisable that you see your primary health care provider to be screened regularly.