

CANCER AWARENESS

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A hand is holding a rectangular green sign with the words "MYTHS AND FACTS" written in white, uppercase, sans-serif font. In the background, a green awareness ribbon is visible, slightly out of focus. The entire scene is set against a plain white background.

MYTHS AND FACTS

Are you scared about cancer?

MYTH #1: CANCER IS ALWAYS FATAL

- Modern medicine has made huge strides in cancer treatment.
- Cancer is no longer the death sentence it once was.
- It is estimated that 40% of people diagnosed with cancer are disease-free in 5 years.

MYTH #2: CANCER IS CONTAGIOUS

NO

- Cancer can spread within the body, BUT it cannot be transmitted from one person to another.

MYTH #3: RADIATION THERAPY WILL KILL YOU

- **Radiation therapy** can be physically and mentally exhausting but it is a life-saving treatment.

MYTH #4: I HAVE NO FAMILY HISTORY OF CANCER, SO I WON'T GET CANCER

- Cancer is caused by changes in cell DNA.
- A family history of cancer does increase your chance of developing the disease.
- However, this does not mean that if you have no family history of cancer you won't get the disease.
- Genetic mutations can be random, caused by environmental factors such as radiation exposure and pollution, and lifestyle factors such as smoking, obesity, excessive drinking, and poor dietary habits.

MYTH #5: CANCER SURGERY/BIOPSY FOR CANCER WILL CAUSE CANCER TO SPREAD

NO

- No evidence to support that cancer surgery causes the disease to spread.

MYTH #6: ALL LUMPS ARE CANCEROUS

- Majority of lumps that are detected during screenings and medical examination are benign.(80%)

MYTH: CANCER THRIVES ON SUGAR.

- No conclusive evidence that proves eating sugar will make cancer grow and spread more quickly.
- All cells in the body, both healthy cells and cancer cells, depend on sugar to grow and function.
- However, eating sugar won't speed up the growth of cancer, just as cutting out sugar completely won't slow down its growth.

MYTH: CANCER IS VERY PAINFUL

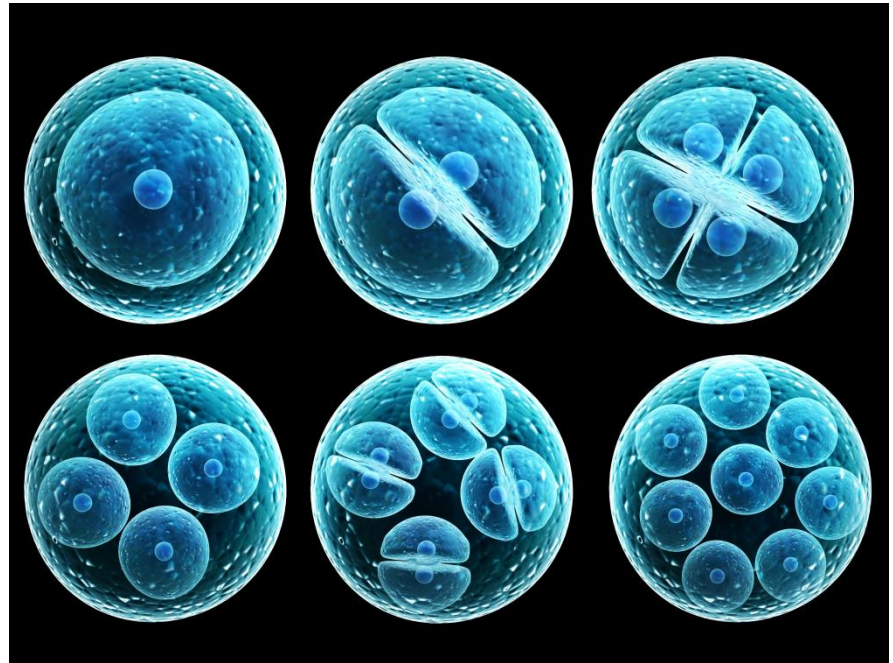
- It is actually quite rare for cancer to be painful.
- One of the biggest problems is that many types of cancer may have little to no symptoms, and diagnosis may only come at a later, advanced stage

MYTH: ONLY SMOKERS GET LUNG CANCER

- Everyone has a chance to get lung cancer.
- Over 20% of lung cancer patients are people who have never smoked.
- Smoking is a major risk for lung cancer but there are other risk factors for lung cancer such as air pollution, secondhand smoke, and gene mutation.

WHAT IS CANCER?

- We are made up of around 30 trillion cells, although we start from a single cell.
- This cell replicates itself, and each of the copies replicate themselves, and this happens over and over again.
- Eventually these cells form a complete human being.



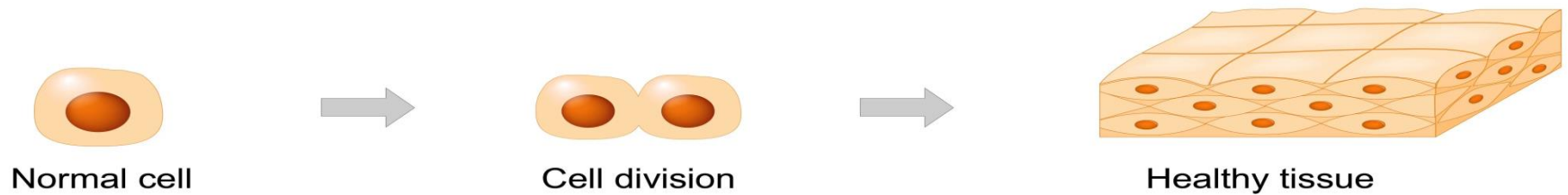
Cancer

Cancer

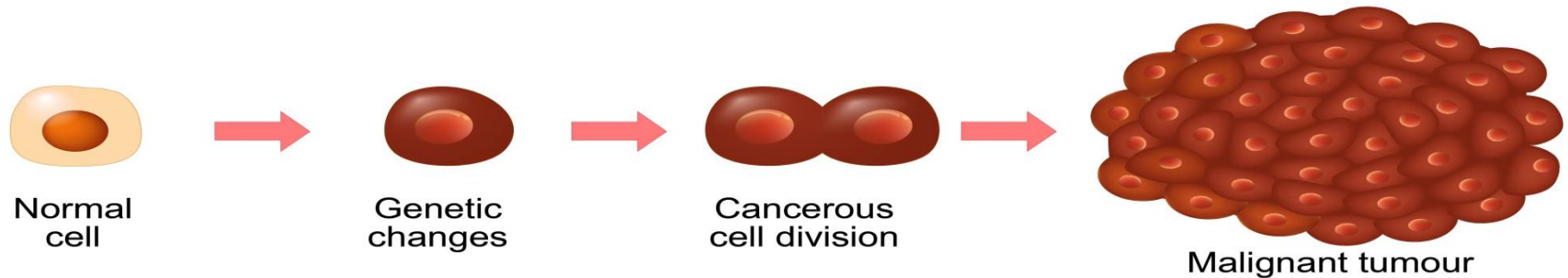
abnormal growth of cells
in an uncontrolled way.
progressive disease, and
risk factors for certain

NORMAL VS ABNORMAL CELL

NORMAL CELL DEVELOPMENT



ABNORMAL CELL GROWTH



INDIAN STATISTICS

- 26.7 million Indian having cancer at present
- cases of cancer in India for the year 2022 was found to be 14,61,427 (crude rate:100.4 per 100,000).
- In India, 1:9 people are likely to develop cancer in his/her lifetime
- The incidence of cancer cases is estimated to increase by 12.8 per cent in 2025 as compared to 2020.
- Mortality due to tobacco used in india- 3500 death/Day
- Every 8 minute 1 women die due to cervical cancer
- Every 2:1 newly diagnosed breast cancer died in india.

What Increases Risk of Cancer?

You can't help it !

- ✗ Age
- ✗ Sex
- ✗ Race
- ✗ Family History

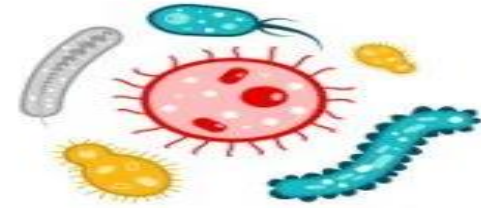
You can !!

- ✓ Tobacco/ Smoking
- ✓ Alcohol
- ✓ Sedentary Lifestyle
- ✓ Unhealthy diet
- ✓ Obesity
- ✓ Infections
- ✓ Sun Exposure

Causes of Cancer



Dietary



Infections from viruses



Physical inactivity



Overweight & obesity



Genetics



Alcohol use



Tobacco use



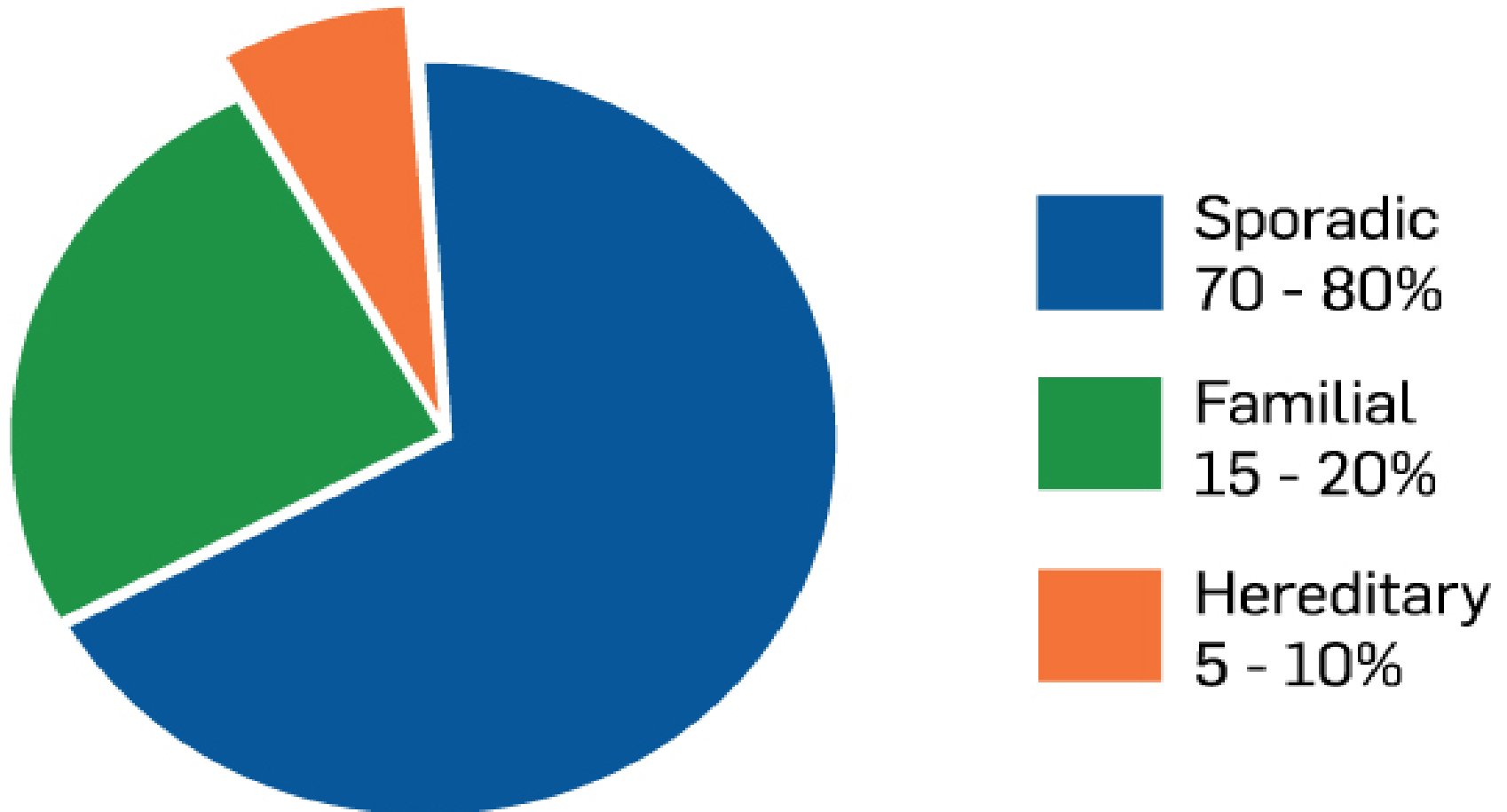
Occupational risk including radiation



Drug intake

HEREDITY

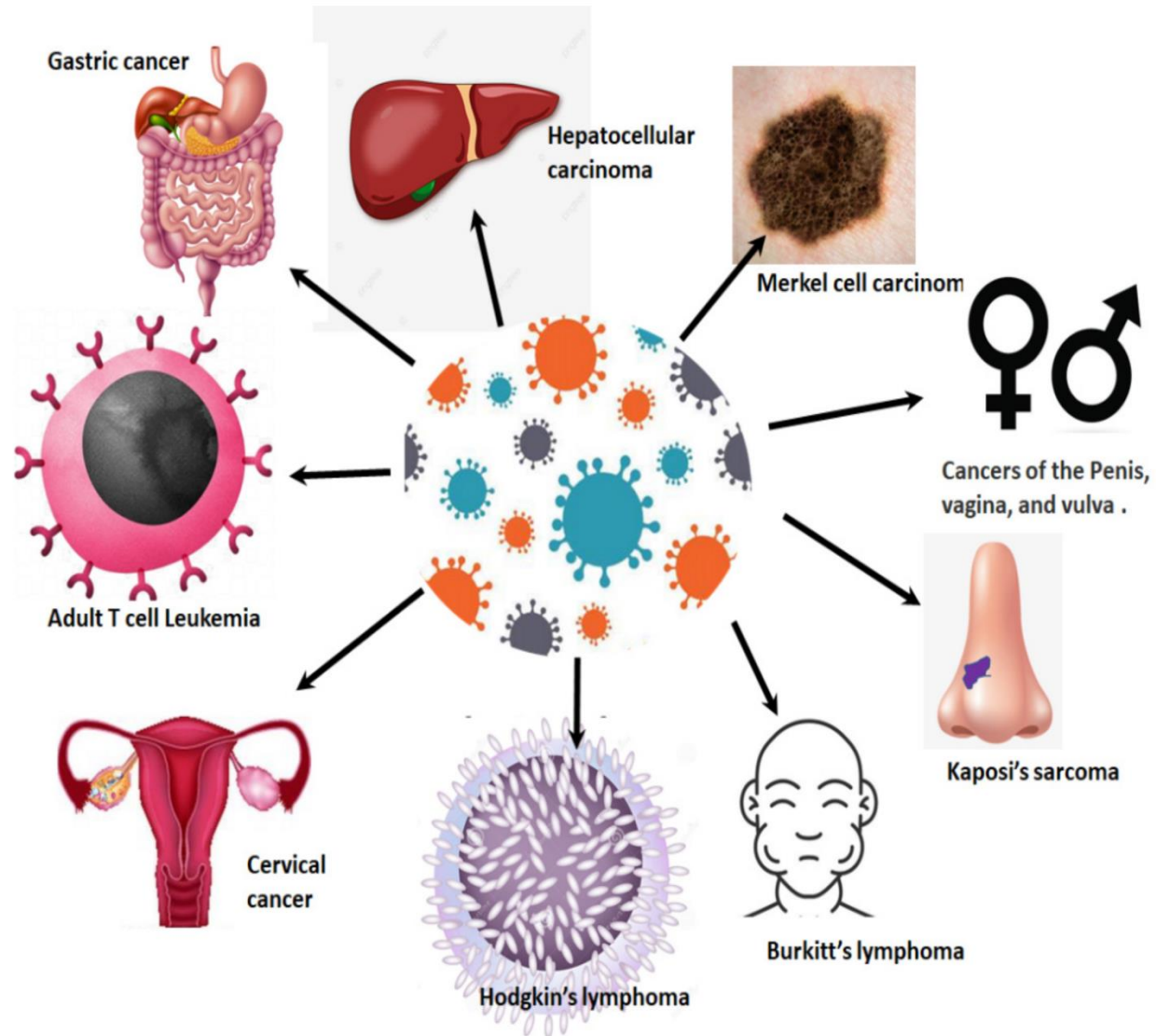
Types Of Cancer



IMMUNITY

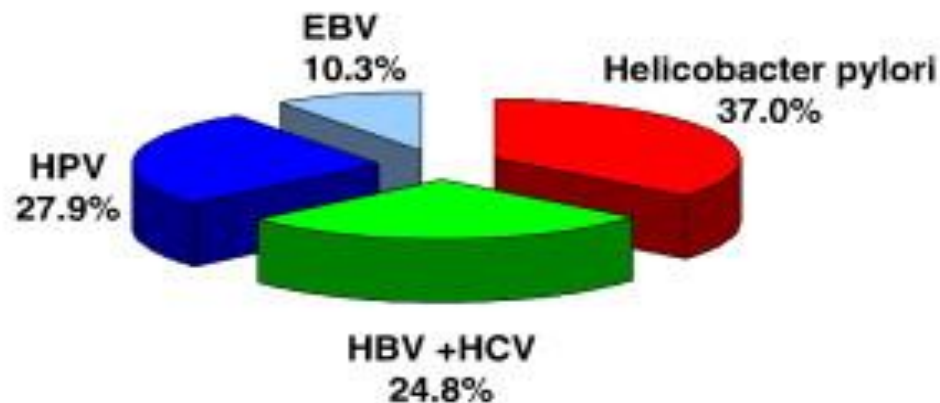
HIV

Immunosuppression



VIRUSES AND BACTERIA

Cancers due to 5 infections correspond to 18.6% of total cancer incidence



25% of cancers of the oral cavity
68 600 (HPV)
Cancer of the cervix
493 000 (HPV)

Hepatocellular carcinoma 80%
500 900 (HBV, HCV)

Gastric cancer 80%
747 000 (Helicobacter pylori)

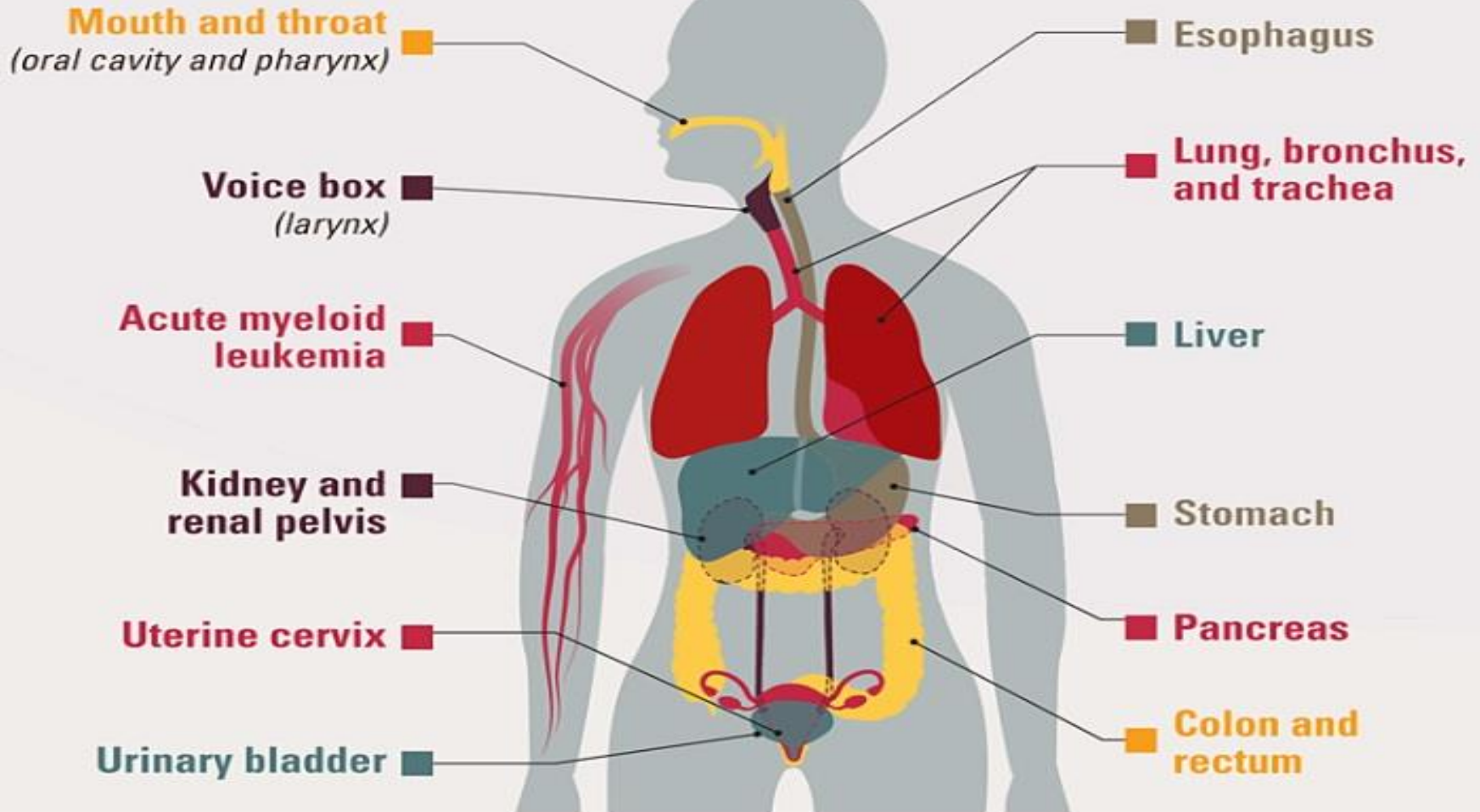
Gastric cancer 10%
93 400 (EBV)
Nasopharyngeal carcinoma
80 000 (EBV)
Non-Hodgkin's lymphoma 10%
30 000 (EBV)
Hodgkin's lymphoma 30%
18 700 (EBV)

This graph ignores

- anal and perianal cancers (HPV)
- vulvar, vaginal and penile cancers (HPV)
- adult T cell leukemia
- Kaposi's sarcomas and pleural. effusion lymphomas
- Merkel cell carcinomas
- cancers linked to parasitic infections

SMOKING

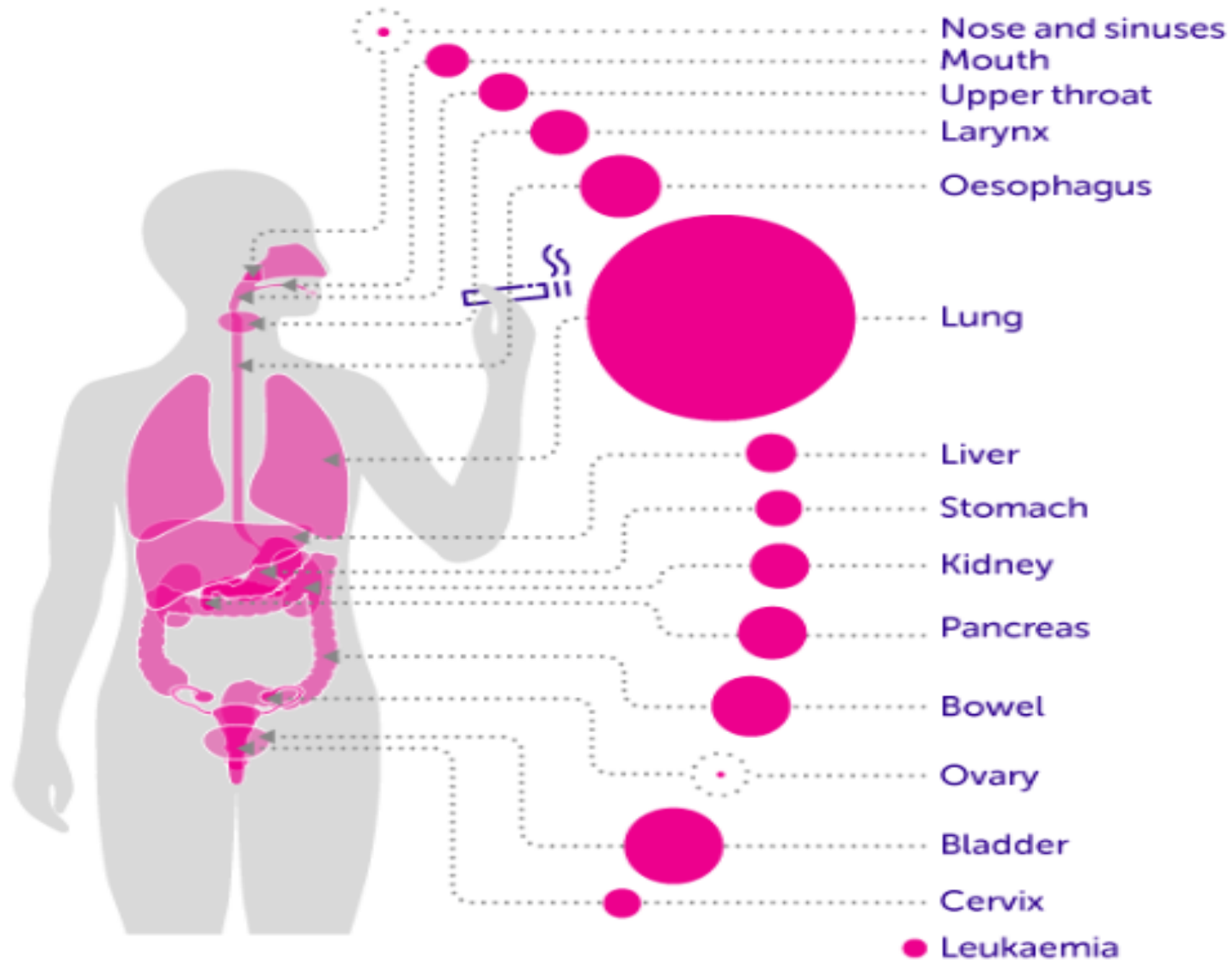
Tobacco use* causes cancer throughout the body.



* Tobacco use includes smoked (cigarettes and cigars) and smokeless (snuff and chewing tobacco) tobacco products that, to date, have been shown to cause cancer.

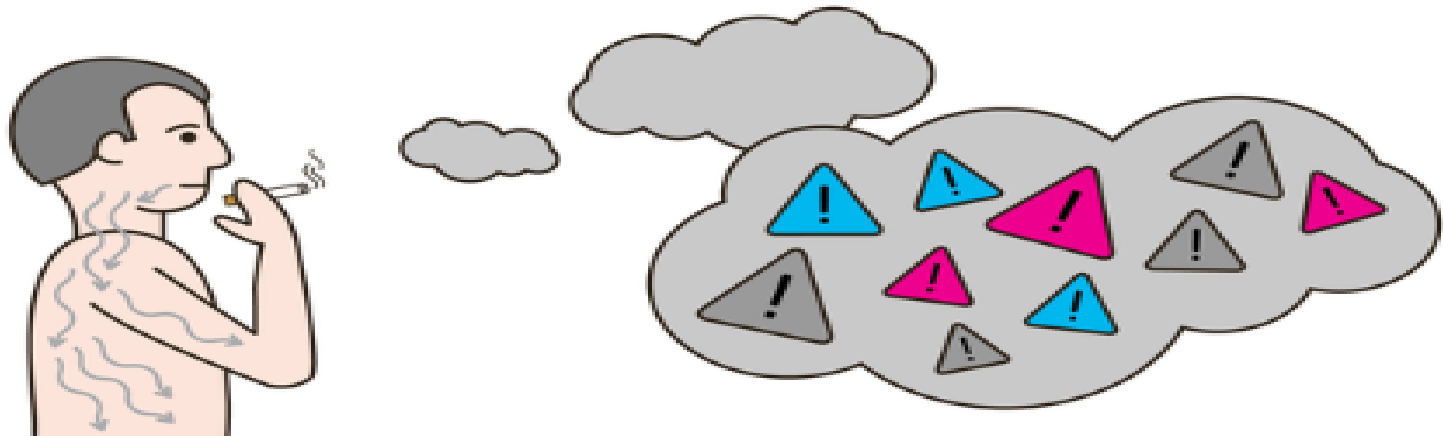
SMOKING...

Being smoke free
can prevent 15 types of cancer



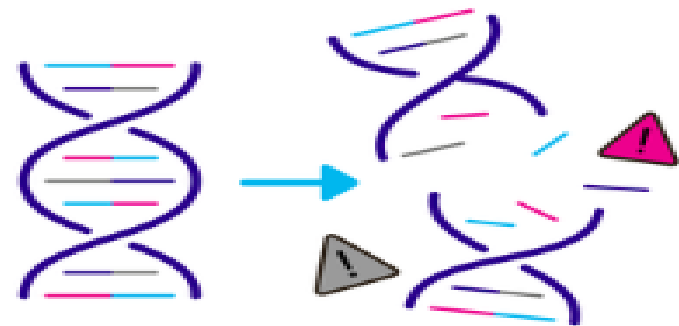
How can smoking cause cancer?

- 1 Cigarette smoke releases over **5,000** different chemicals.



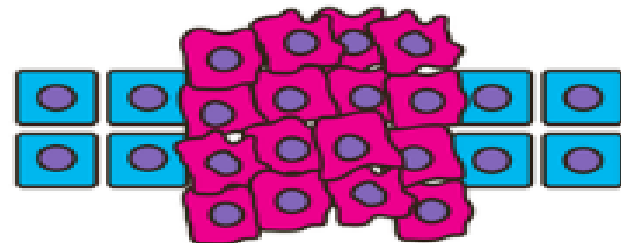
- 2 Harmful chemicals **enter our lungs** and can then affect the entire body.

- 3 Chemicals **damage our DNA**, including parts that protect against cancer.



- 4 Other chemicals make it **harder for cells to repair DNA damage**.

- 5 This DNA damage can **cause cancer** in cells.





1 in 8 cancer cases are caused by smoking



1 in 5 cancer deaths are caused by smoking

Smoking can cause 16 types of cancer



Monday

Tue

31

1

Quit!



Smoke everyday



and get 30% flat disscount on your life

  @CRAZZYDAZZYOFFICIAL

SMOKING EPIDEMIC

- 1 billion smokers
- 5 million people die every year
- This figure will have doubled by 2030



75% of smokers want to quit
<2% of smokers quit each year

Primary care can help increase quit rate

ALCOHOL

ALCOHOL CAN CAUSE SEVEN TYPES OF CANCER

Mouth &
Upper throat



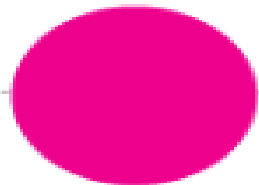
Larynx



Oesophagus



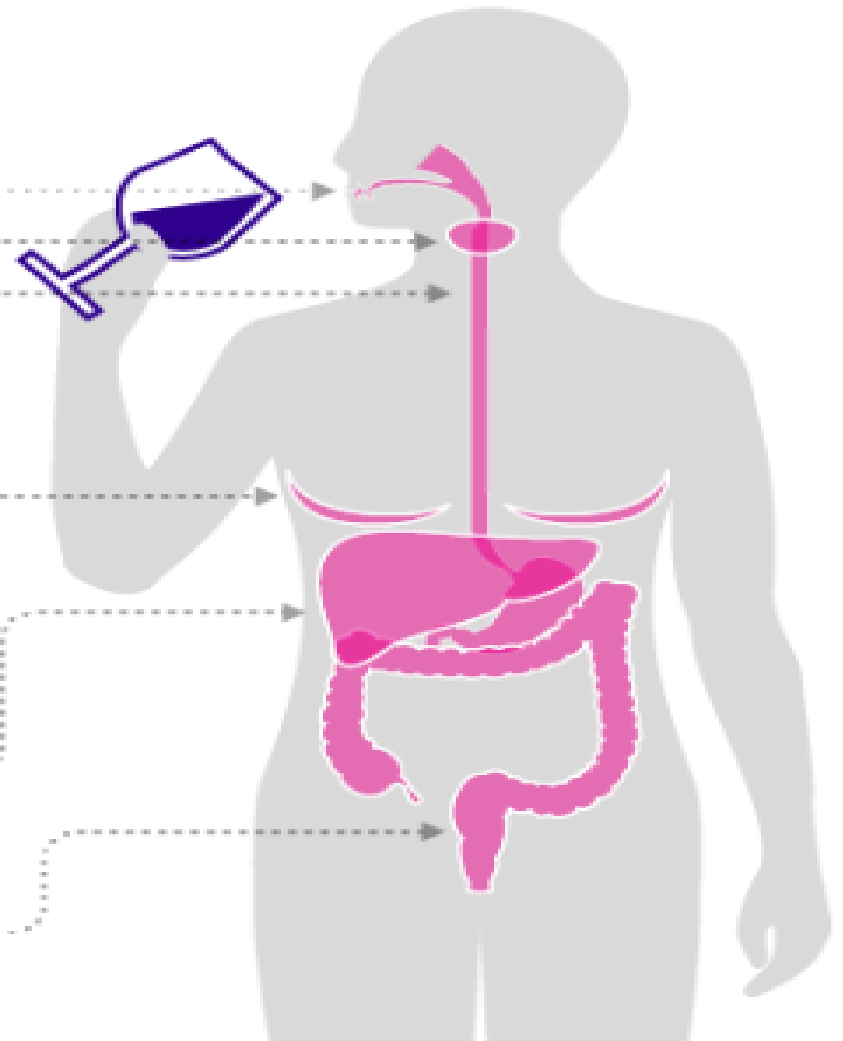
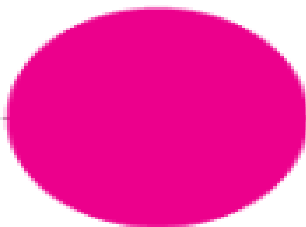
Breast
in women



Liver



Bowel



ONE WAY ALCOHOL CAUSES CANCER

ETHANOL (ALCOHOL)

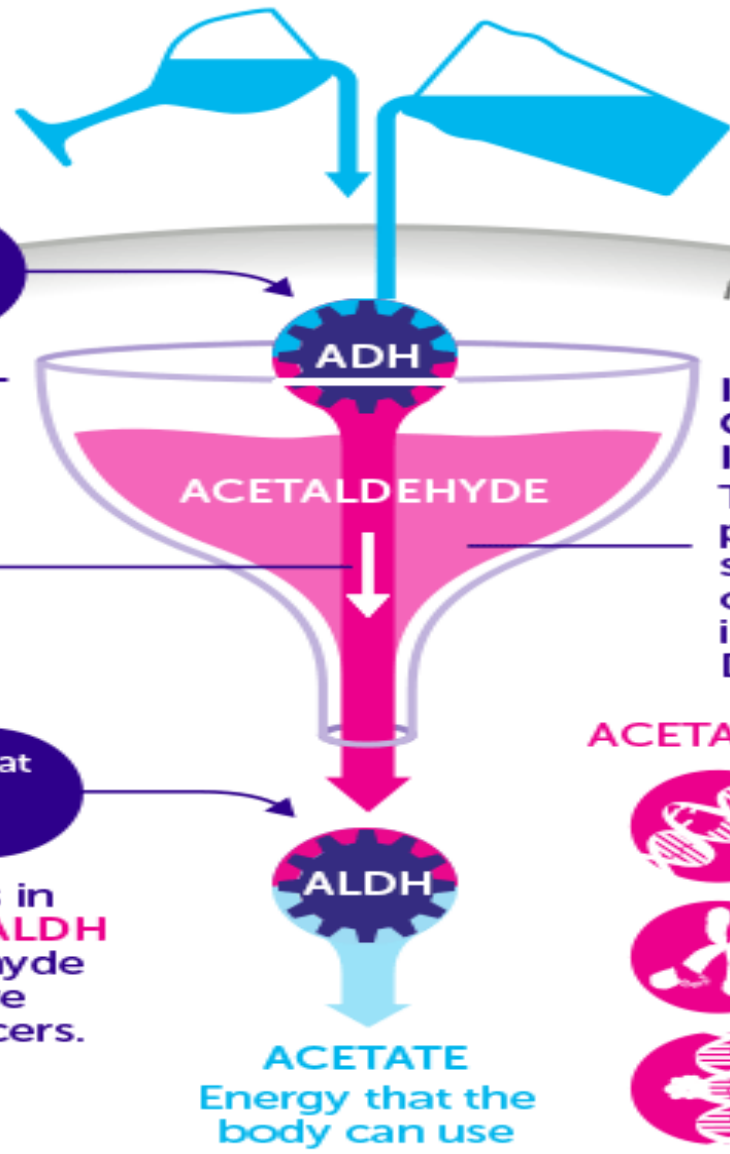
ADH is an enzyme that converts ethanol into acetaldehyde

IF A **SMALL** AMOUNT OF ALCOHOL IS DRUNK...

The body can process it, so that it passes through without doing much damage

ALDH is an enzyme that converts acetaldehyde into acetate

People with mistakes in the genetic code of **ALDH** can't break acetaldehyde down – they are more prone to certain cancers. Mistakes in **ALDH** are common among Asian populations



OUTSIDE CELL
INSIDE CELL

IF A **LARGE** AMOUNT OF ALCOHOL IS DRUNK...

The body can't process it fast enough, so there's a build-up of acetaldehyde. This is toxic and causes DNA damage

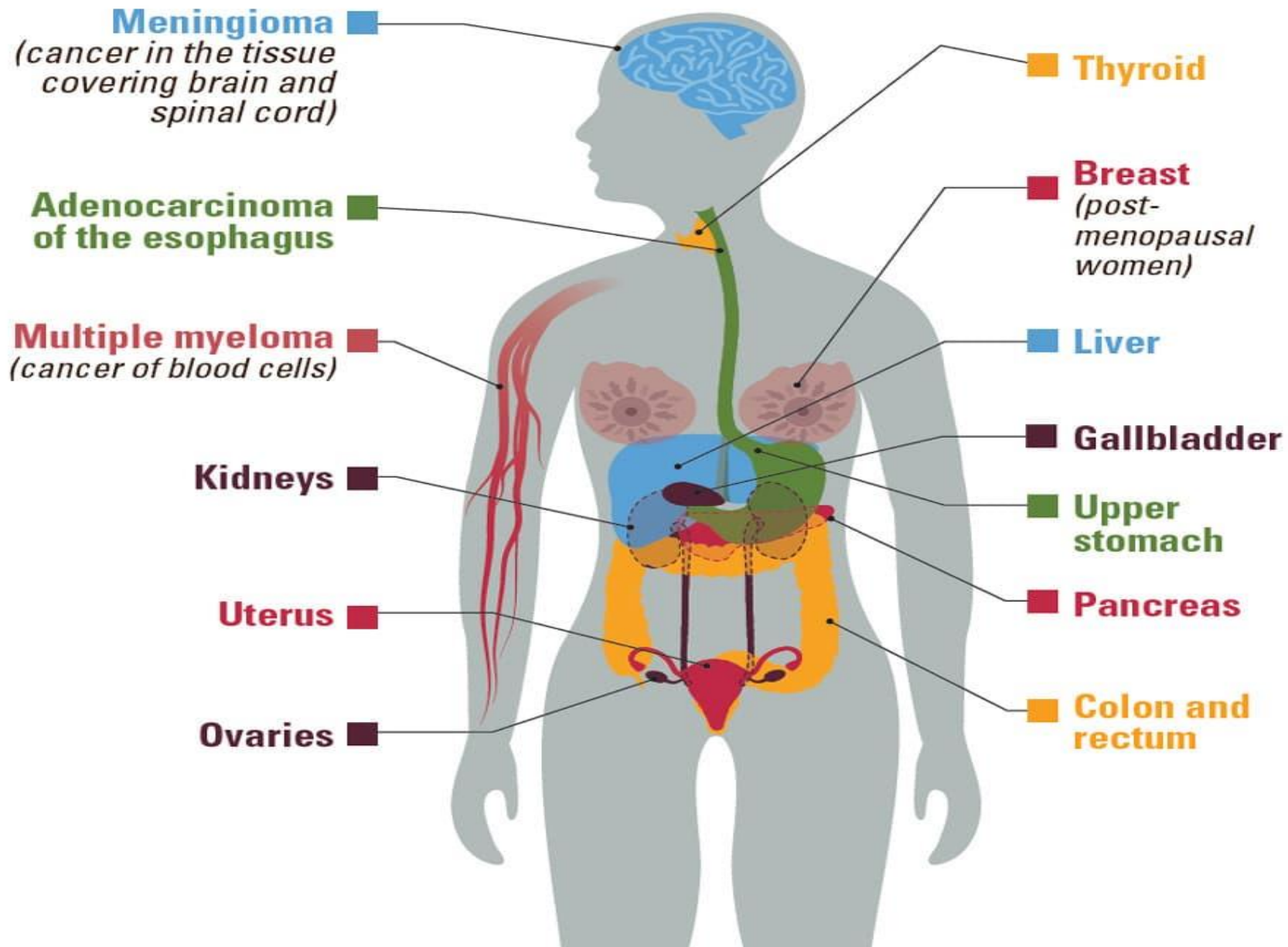
ACETALDEHYDE can cause:

-  Mistakes in DNA
-  Chromosome rearrangements
-  DNA to bind and form clumps

OBESITY



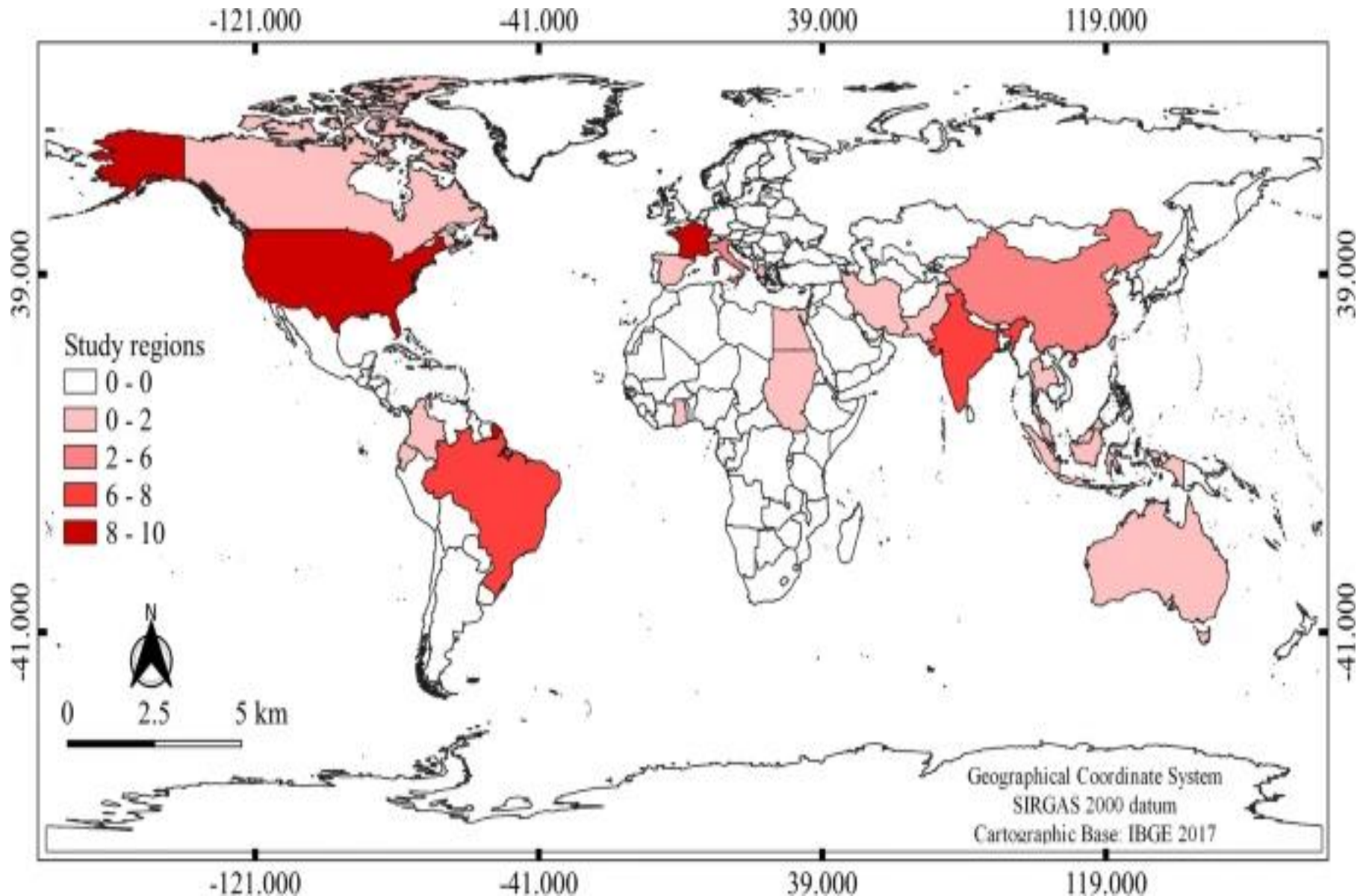
13 cancers are associated with overweight and obesity



POLLUTION



CANCER ASSOCIATED WITH OCCUPATIONAL EXPOSURE TO PESTICIDES







SOLAR RADIATION

..... HOW TO

SPOT SKIN CANCER™

.....

USE THIS INFORMATION TO CHECK YOUR SKIN REGULARLY

1 in **5**

Americans will develop
skin cancer in their lifetime.



ANYONE

CAN GET SKIN CANCER,
REGARDLESS OF SKIN COLOR.

A close-up photograph of a doctor's hands holding a white rectangular sign. The doctor is wearing a white lab coat and a stethoscope. The sign has the word "SYMPTOMS" written in large, bold, teal capital letters. The background is a soft, out-of-focus light blue.

SYMPTOMS

C.A.U.T.I.O.N

- **C**hange in bowel or bladder habits.
- **A** sore that does not heal.
- **U**nusual bleeding or discharge.
- **T**hickening or lump in the breast, testicles, or elsewhere.
- **I**ndigestion or difficulty swallowing.
- **O**bvious change in the size, color, shape, or thickness of a wart, mole, or mouth sore.
- **N**agging cough or hoarseness.

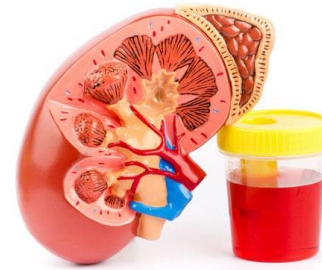
CHANGE IN BOWEL BLADDER HABIT



SORE THAT DOES NOT HEAL



UNUSUAL BLEEDING OR DISCHARGE



All bleeding is abnormal.
Rectal bleeding should
be evaluated by a doctor.

**THICKENING OR LUMP IN
THE BREAST, TESTICLES, OR ELSEWHERE**



INDIGESTION OR DIFFICULTY SWALLOWING



alamy



OBVIOUS CHANGE IN THE SIZE, COLOR, SHAPE, OR THICKNESS OF A WART, MOLE, OR MOUTH SORE



NAGGING COUGH OR HOARSENESS.



PREVENTION





SAY

NO

ALCOHOL
& KEEP SMILING



Help **REDUCE**
Your **CANCER**
RISK WITH
Regular
EXERCISE





Losing Weight can
reverse increased
Cancer risk





Reduce Fat/Junk Food

**NO FRENCH FRIES OR
CANCER FRIES?**



Cancer- Causing Acryl Amides

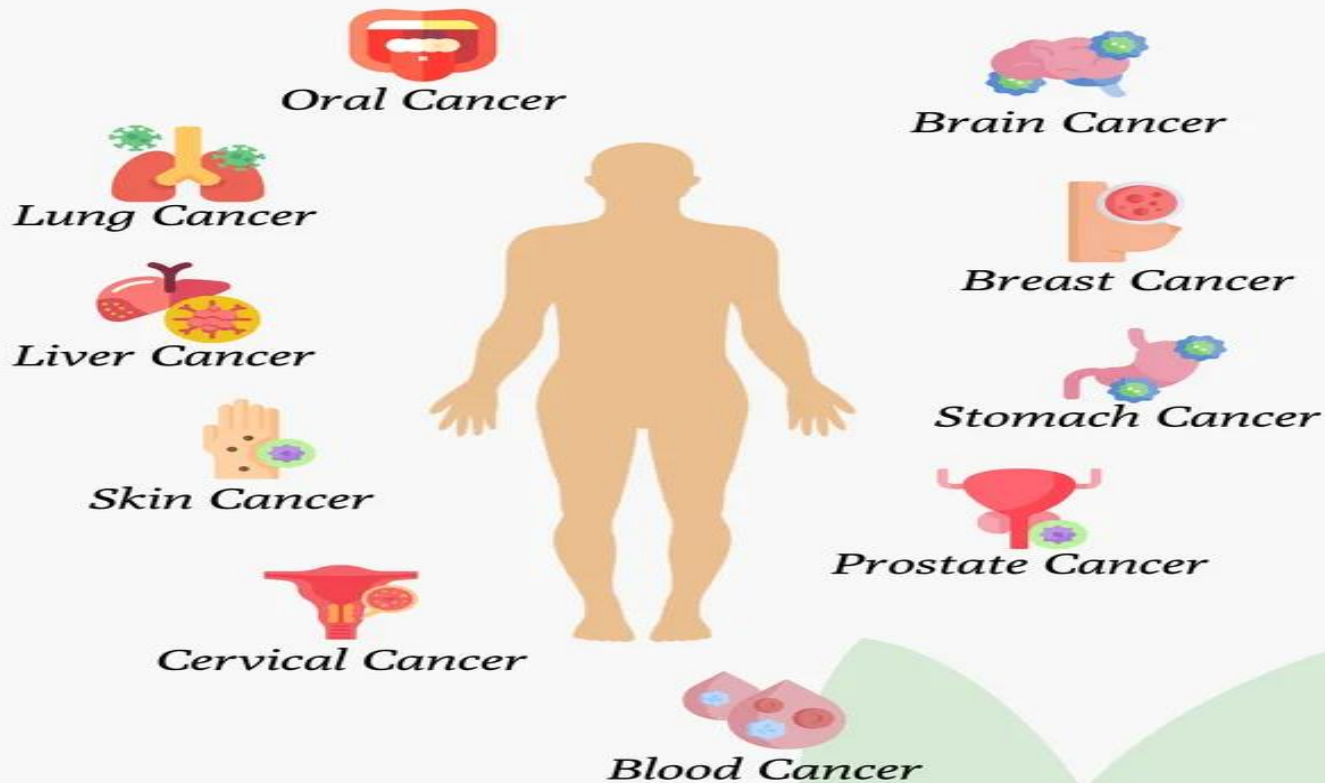


Cancer Fighting Foods



TYPES OF CANCER

Most Common Types Of Cancer In India



PREVENTION

NATIONAL CANCER INSTITUTE

Cancer Prevention Interventions

AVAILABLE TODAY BECAUSE OF RESEARCH

MEDICATIONS

proven to reduce risk of breast and colon cancers in those at increased risk.



LIFESTYLE CHOICES

such as avoid or quit tobacco, limit alcohol, avoid known carcinogens, keep active & avoid obesity.



TREATMENTS FOR INFECTIONS

known to increase cancer risk, including hepatitis C, HIV, and H. pylori.



SCREENING TESTS

that allow removal of precancerous lesions, such as colon polyps.



VACCINES TO PROTECT

against infection with human papillomavirus (HPV) and hepatitis B.



SURGERY

to remove tissues at risk, such as for women with increased risk of breast and ovarian cancer.



prevention.cancer.gov
NCI Division of Cancer Prevention

Cancer screening timeline

F For individuals assigned female at birth

M For individuals assigned male at birth

21 years old

Have a discussion about when to start cervical cancer screening F

50 years old

Start breast cancer screening if you haven't started yet F

65 years old

Have a discussion about when to stop cancer screening

40 years old

Have a discussion on when to start breast cancer screening F

45 years old

Have a discussion about colon cancer screening and consider starting

55 years old

Have a discussion about prostate cancer screening M

EARLY DETECTION.....

Why all the fuss about...

Early Detection of Cancer

... Does it really make a difference?



EARLY DETECTION → Of Critical Importance

- ✓ **EARLY DETECTION → CURABLE DISEASE**
 - ✓ **LESS INVASIVE TREATMENT**
 - ✓ **LESS TRAUMA**
 - ✓ **LESS PAIN**
 - ✓ **LESS COST**
- ✓ **EARLY STAGE → 80 – 90 % CURE**
- ✓ **LATE STAGE → 20 – 30 % CURE**
- ✓ **SO IT PAYS TO BE VIGILANT!**



EARLY DETECTION STRATEGIES

- Common cancers in India
 - Breast cancer
 - Cervical cancer
 - Oral cancer
 - Lung Cancer
 - Prostate cancer
- These are also the cancers with
Early Warning Signs

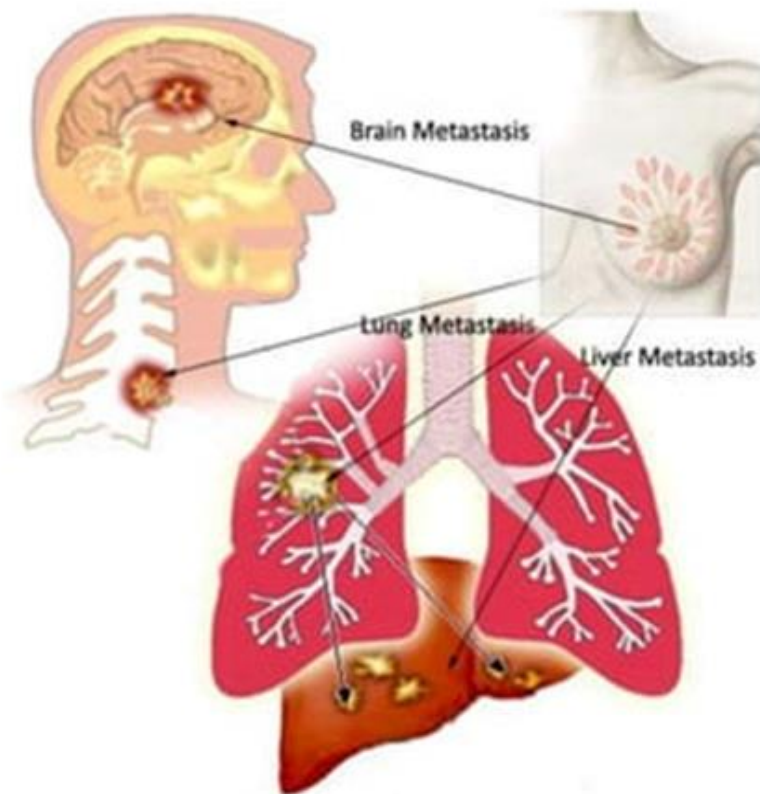


ORAL CANCER

Early warning signs:

- Red, White or Black patches
- Difficulty in opening the mouth or swallowing
- Persistent sore throat
- Change in voice

Early Detection : A Saviour !!!



Breast Cancer Metastasis

Time
is of
essence

Breast Cancer
Not a Preventable Cancer
Early Detection
80-90% cure rate

Cervical Cancer
Preventable Cancer!!



Breast Cancer: Detection in Early stages

BREAST EXAMINATION

SELF

- ⌘ Personal alertness for changes in breast
- ⌘ Monthly breast self examination → Women over 20 years

CLINICIAN

- ⌘ Annual routine examination → Physician for women over 35 yrs

MAMMOGRAPHY

- ⌘ Women 40-50 years of age
- ⌘ As advised for higher risk groups



CERVICAL CANCER

🎗 Most common cancer in Indian women

🎗 Caused →

Human Papilloma virus (**HPV**) infection

🎗 Preventable by simple means

Earlier PAP test →

Cervical Cancer Risk Screening

🎗 HPV DNA PCR Testing

🎗 Preventable Cancer

🎗 High Cure Rates with Early Detection

HPV vaccines: Beginning of the end

2 VACCINES AVAILABLE IN INDIA

Gardasil (MSD)

Cervarix (GSK)

Quadrivalent Vaccine

Bivalent Vaccine

HPV 16/18 – Oncogenic

HPV 16/18 – Oncogenic

HPV 6/11 – Non-Oncogenic (warts)

AGE

9 -12 years

13 - 26 years

> 26 years

(before sexually
active)

(after checking for
HPV)

(after checking for
HPV)

Validated

Validated

To be validated

DOSAGE

- Month 0; Month 2; Month 6
- Rs. 10,000/-
- Contraindicated: Pregnant women



PROSTATE CANCER:

Screening / Early detection

Prostate Specific Antigen (PSA) Testing

- Higher than average PSA levels in the bloodstream is a sign of abnormal cell multiplication in the prostate?
- Is an Indication – Hyperplastic Prostate?

WHAT TO DO.....



Immediate Consult With Doctor For Proper Management



Doctor
Consultation

YOU DON'T HAVE TO BE
AFRAID OF

cancer
Anymore



- Cancer is **Preventable** improve your lifestyle and dietstyle
- Cancer is **Curable** if detected early and treated promptly.
- Cancer can be **Treatable** at any stage.



Any questions?

