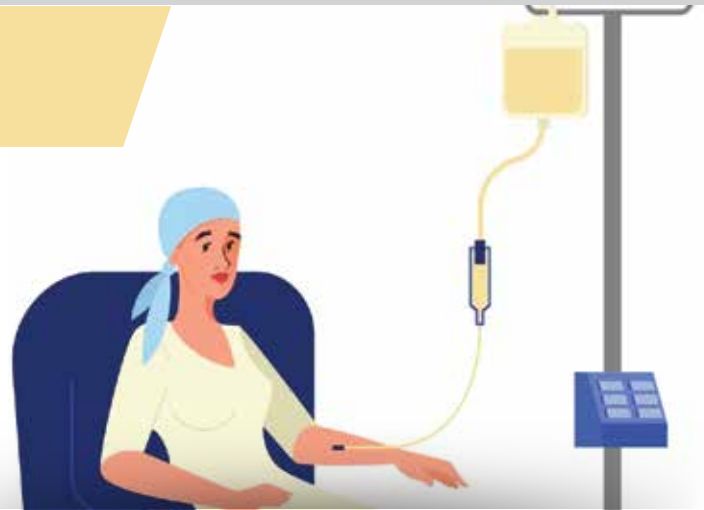


Understanding Cancer

Cancer is a condition where certain cells in the body grow uncontrollably and spread to other parts. It can occur in almost any part of the human body, which consists of trillions of cells.¹



Normally,

Human cells grow and multiply

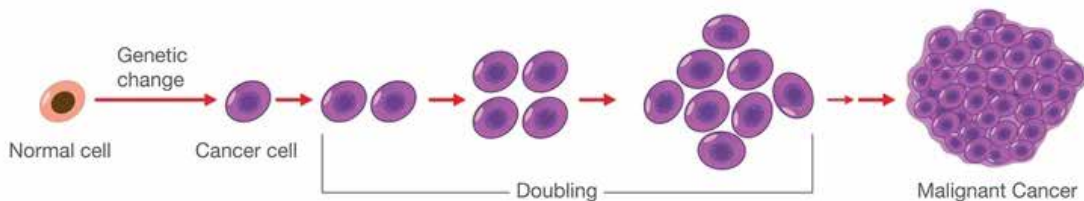
Form new cells as the body needs them

Then die, When cells grow old or become damaged

New cells take their place¹

But, sometimes this orderly process breaks down, and abnormal or damaged cells grow and multiply when they should not.

These cells may form tumors (lumps of tissue).¹



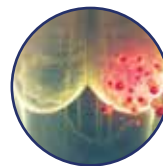
The most common cancers are:

Tumors can be benign or cancerous.

There are over 100 types of cancer, named after the organs or tissues in which they originate, such as lung cancer starts in the lung.¹



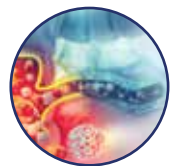
Lung cancer



Breast cancer



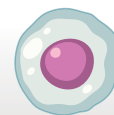
Stomach cancer



Colorectal cancer



Globally, Cancer is a leading cause of death, accounting for ~10 million deaths in 2020.²



What are the Risk Factors?

Doctors can identify some risk factors, but many people develop cancer without any known risk factors.

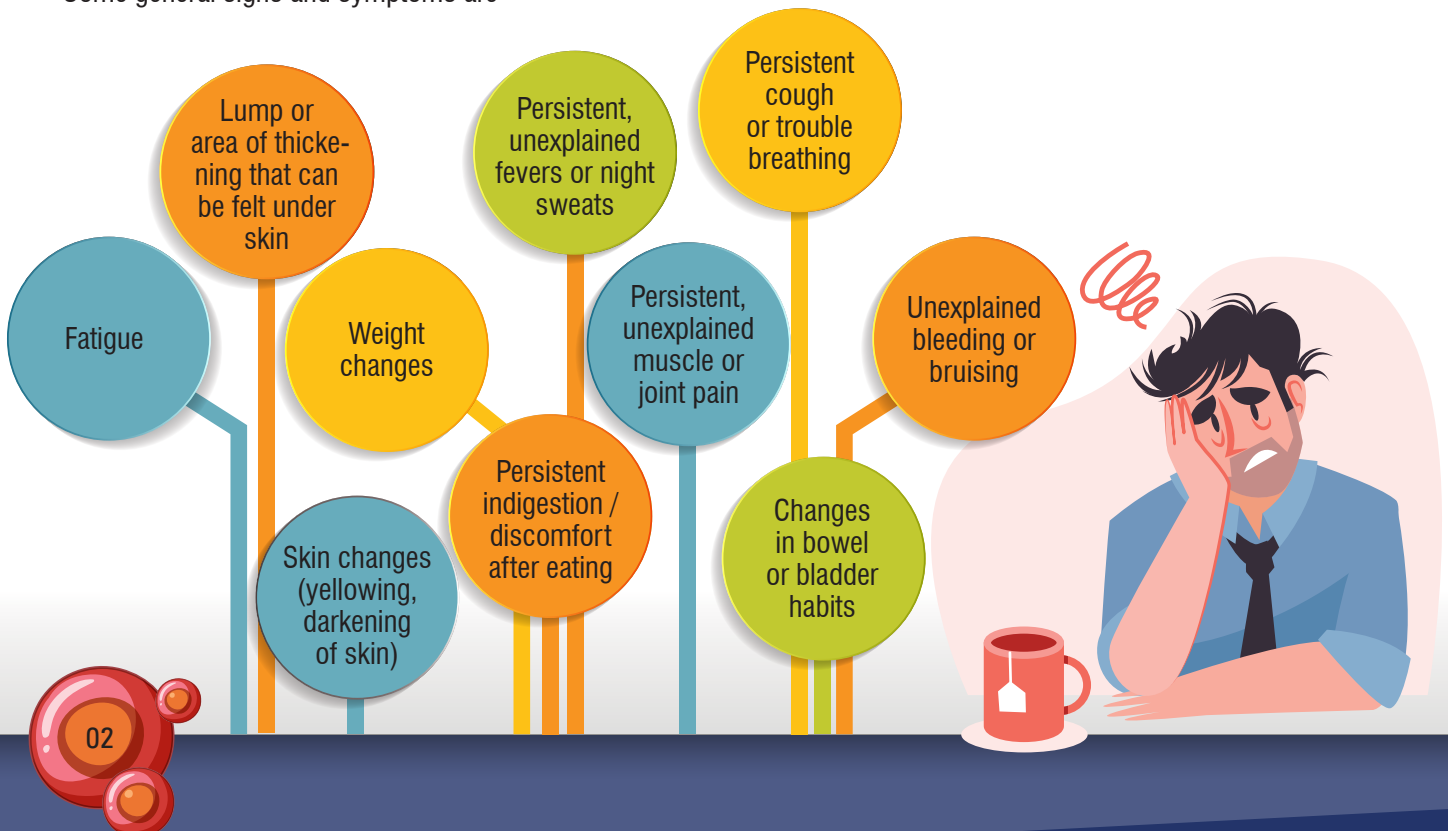


Risk factors that are known to increase cancer risk include:^{2,3}

- Your age – Although it can occur at any age but common as we age
- Alcohol, Smoking or Tobacco
- Excessive exposure to sun
- Obesity
- Unhealthy diet
- Air pollution
- Some chronic health conditions, such as ulcerative colitis
- Your family history
- Physical inactivity

What are the Symptoms?

Signs and symptoms caused by cancer will vary depending on what part of the body is affected. Some general signs and symptoms are—³



What are the Treatment Options?

Several treatments for cancer are available and will vary depending on factors such as cancer type and stage, general health, and patient preferences. These include:⁴

1

Surgery

Remove cancer or as much of the cancer as possible



2

Chemo-therapy

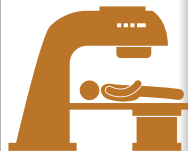
Uses drugs to kill cancer cells



3

Radiation therapy

Uses high-powered energy beams, such as X-rays and protons, to kill cancer cells



4

Immuno-therapy

Also known as biological therapy, uses your body's immune system to fight cancer.⁴



5

Hormone therapy

Some types of cancer are fueled by body's hormones. Removing those hormones or blocking their effects may cause cancer cells to stop growing



6

Targeted therapy

Focuses on specific abnormalities within cancer cells that allow them to survive



7

Bone marrow transplant

Bone marrow is the material inside bones that makes blood cells, from our own cells or cells from a donor⁴



Healthy Living and Prevention

Cancer is avoidable to a large extent and many of them can be prevented. Others can be detected early in their development, treated, and cured.⁵

Research highlights the—

01

Correlation between dietary choices, lifestyle patterns, and health risks

02

Integrated diet and lifestyle pattern
[Healthy, balanced diet + adequate physical activity + maintenance of healthy weight]
= Significantly reduces cancer risk⁶

As per 
World Health Organization
about 30–50% of cancers can be prevented by⁶

- Avoiding risk factors
- Implementing evidence-based prevention strategies



Excess body weight, poor nutrition, physical inactivity, and excess alcohol consumption



about 1 in 5 cancer cases⁷

Lifestyle Habits to Reduce Cancer Risk

Some of the lifestyle interventions that can reduce the risk of cancer are—^{6,8,9}



Lifestyle tips to reduce cancer risk

Regular Exercise

Keep a healthy weight

Have a healthy balanced diet

Not smoking or avoiding tobacco

Protect your skin from sun

Have regular check-ups



Nutrition

Maintaining a healthy diet and obtaining proper nutrition can be challenging for cancer patients. Cancer treatments may cause changes in appetite and weight, with some leading to weight loss and others to weight gain. While minor weight fluctuations are generally acceptable, excessive changes can affect health during cancer and treatment.

Optimal nutrition plays a vital role in maintaining overall well-being. It is crucial to prioritize healthy weight management, consume nutritious foods, and ensure adequate hydration.¹⁰

Importance of Right Nutrition



Eating a healthy and balanced diet can reduce the risk of cancer¹¹

Tackle treatment side effects with ease	Build our nutrition after every chemo or radiation cycle	Maintain nutritional status and prevent health regression	Improve the efficacy of conventional treatment	Psycho-logical benefits	Improve immunity and strength	Reduces rate of compli-cations and risk of prolonged hospital stay and healthcare cost	Preventing weight gain & weight loss ¹²
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Strong association between increased adherence to diet recommendations and decreased cancer mortality⁶

Nutrition...contd

Dietary Recommendations¹²

Choose a variety of healthy foods every day

- ▶ **Go organic:** Limited exposure to herbicides, pesticides, fertilizers and synthetic additives
- ▶ Eat at least 3–4 cups of fresh, seasonal, low glycemic index fruits and vegetables every day
- ▶ Choose healthy fats (omega-3 fatty acids, found in fish, avocado, walnuts, other nuts & seeds, as they are anti-inflammatory)
- ▶ Select proteins such as fish, grass fed lean meats, eggs, nuts, seeds, lentils and legumes
- ▶ Opt for healthy carbohydrates (organic whole grains, legumes, and fruits and vegetables)
- ▶ Keep yourself well hydrated
- ▶ Use different herbs and spices in diet (ginger, garlic, turmeric, oregano, thyme, etc.)
- ▶ Eat something small every 2–3 hours if losing weight & unable to eat a good portion at time



Foods to Eat

Proteins:

Beans, legumes, nuts, seeds, chicken or fish.

Healthy Carbs

High fibre foods:

Beans or peas

Healthy fats:

Avocados, olive oil, grapeseed oil and walnuts

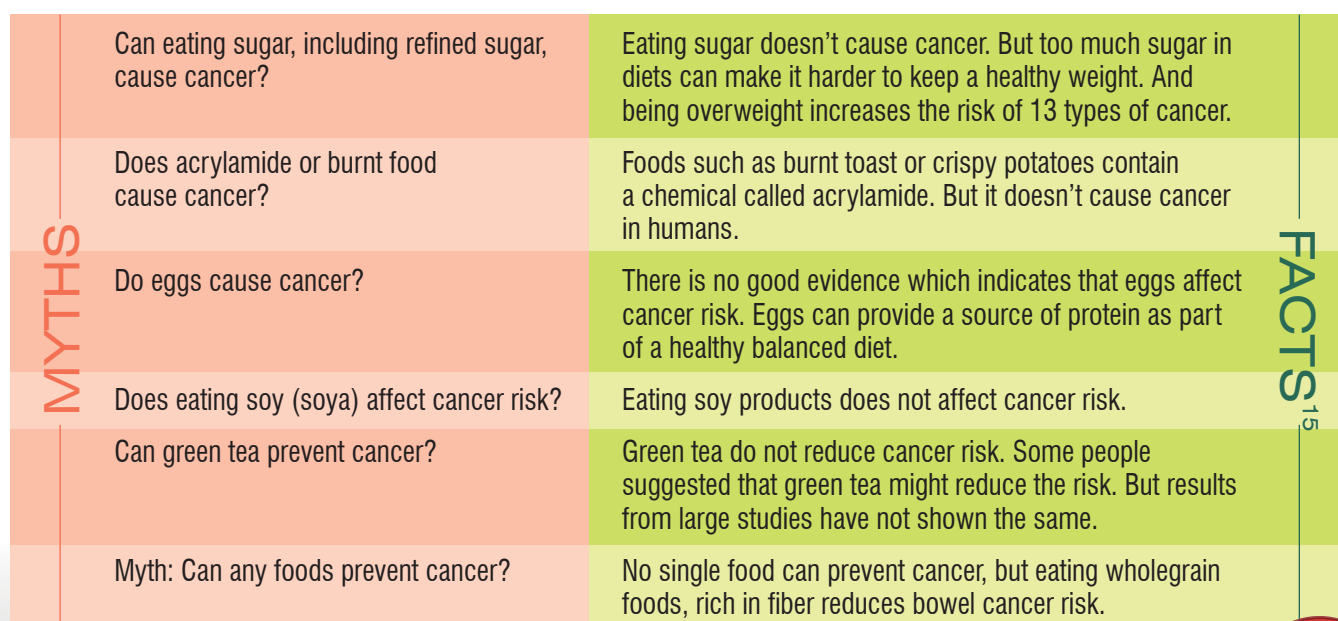
Dairy¹¹

Vitamins and Minerals

milk, orange juice, yogurt and some cereals¹³



It is important to avoid foods that can cause harm to the body. The following foods should be avoided not only during cancer but also for its prevention, as they can trigger inflammation in our body and cause havoc.¹⁴



Movement and Meditation

Exercise is an important part of a cancer treatment plan. Being active can help reduce the risk of cancer.

Importance of Physical Activity

Being active matters as it keeps your body and mind healthy, prevents disease, and has many other benefits such as—^{16,17}

- Improve physical and mental health during every phase of treatment
- Manage side effects of cancer diagnosis and treatment
- Help prevent weight gain and obesity, which reduces risk of 13 different types of cancer
- Improve cardiovascular fitness, muscle strength, fatigue, anxiety, depression, and several quality-of-life factors in cancer patients and survivors
- Reduces risk of depression and anxiety
- Help prevent breast and bowel cancer

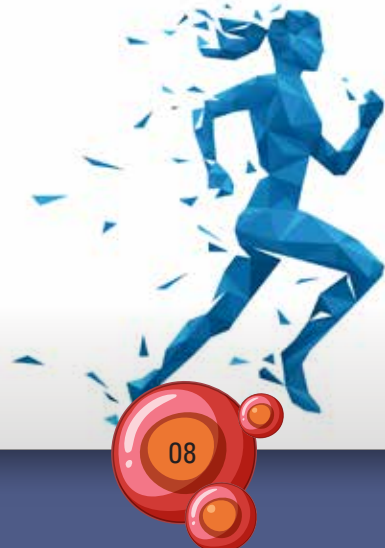


Exercise During and After Cancer Treatment

ASCO[®] AMERICAN SOCIETY OF CLINICAL ONCOLOGY

recommends that people with cancer should take part in aerobic and strength-training exercises during cancer treatment.¹⁸

- Stretching exercise
- Balance exercises
- **Aerobic exercise:** Walking 40–50 minutes, 3 to 4 times/week, at a moderate pace
- Strength training, or resistance training
- Breathing exercises^{18,19}



Tips to be

Make small swaps that build activity into your normal routine

01

Use a fitness trackers or step counter

03

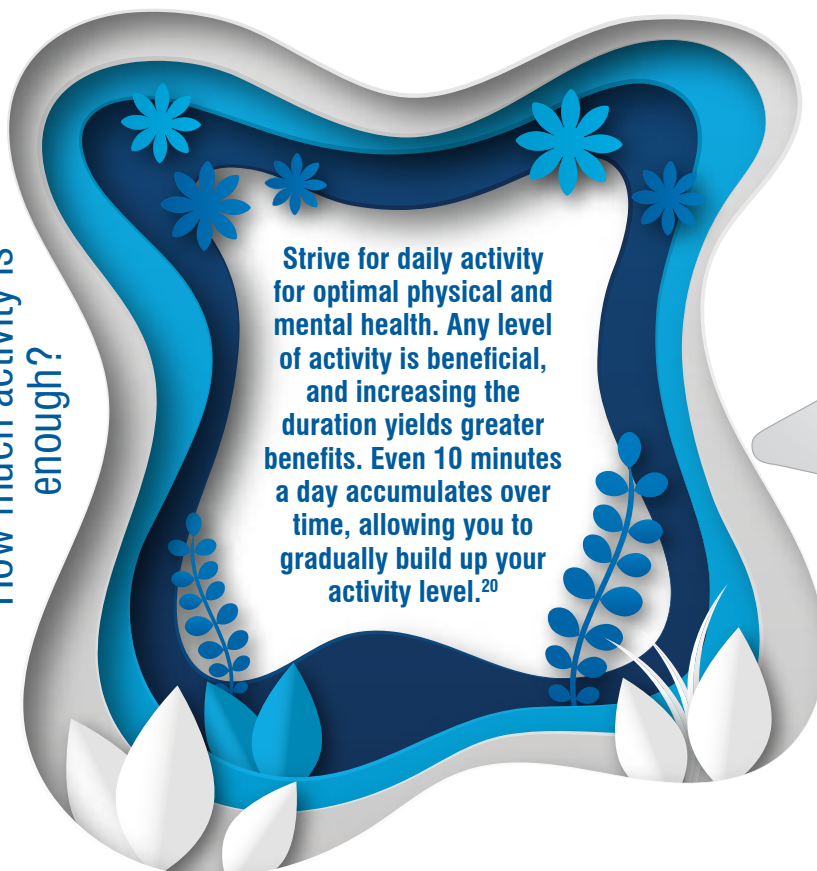
Remind yourself why you wanted to be more active

05





How much activity is enough?



Strive for daily activity for optimal physical and mental health. Any level of activity is beneficial, and increasing the duration yields greater benefits. Even 10 minutes a day accumulates over time, allowing you to gradually build up your activity level.²⁰

More Active

- Pick times in week to add more activity (walking or cycling to work or shops)
- More likely to become a habit if you do it in same place at same time.

01

Set a goal and track your progress

- Keeping track of how you're getting on can help make healthy changes stick.

02

- Quick way to see if you are reaching your goals and stay motivated.
- Some devices can even remind you to get up and move more if you've been still for a while.

03

Buddy up with friends or family

- Discover new ways to spend time with friends and family, and you can keep each other motivated and on track.

04

- Write it down or set a weekly reminder on your phone about why being active is important to you.
- Read more about the benefits of keeping active.²⁰

05



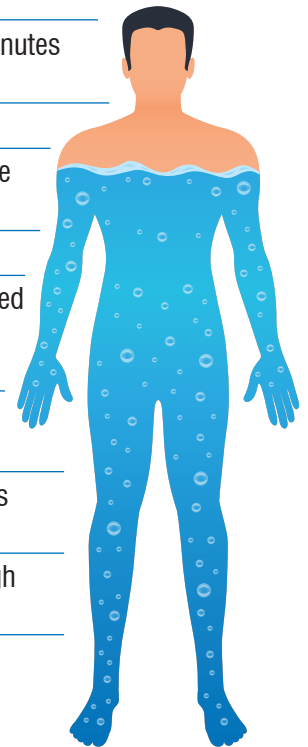
Movement and Meditation...*contd*

Tips and Precautions while Exercising During Cancer

Exercise is generally safe during cancer treatment, but your ability to exercise and the types of exercises you can do varies as per your cancer type and treatment used. It is important to take precautions while exercising if you are experiencing effects from your cancer or its treatment.^{21,22}



- Avoid inactivity
- **Be regularly active:** Each week, try to get at least 150 minutes of moderate activity or 75 minutes of vigorous activity.
- Start slow
- **Progress slowly:** Even if you were physically active before your treatment, build up your level of activity slowly.
- Consider short sessions
- **Exercise in a safe environment:** If treatment has weakened your immune system, avoid large gyms where germs spread easily.
- **Listen to your body:** If your energy level is low, adjust how long or how hard you exercise until you feel better.
- **Stay hydrated:** Drink plenty of water during your workouts to avoid dehydration.
- **Eat a nutritious diet:** The right foods, especially those high in protein, help your body recover after exercise.
- **See doctor regularly:** Your health can change throughout treatment, make sure your doctor checks for important health indicators, so you know if it is safe to exercise.^{21,22}



Yoga and Meditation

Cancer patients often find that yoga has a calming effect on their minds, aiding in better coping with their illness. Additionally, some individuals report that these activities help alleviate symptoms and side effects like pain, fatigue, sleep issues, and depression.

Yoga, in particular, can facilitate post-surgery mobility and offer natural relaxation methods for managing stress, anxiety, and depression. It is recommended to begin with gentle practice, gradually building strength and flexibility for more advanced sequences.

Here are some recommended poses to begin with—^{23,24}



Mountain Pose
(Tadasana)



Tree Pose
(Vrikshasana)



Triangle
(Trikonasana)



Child Pose
(Balasana)



Savasana
(Corpse Pose)

Mental Well-being

Cancer has a profound impact on individuals and their loved ones, affecting both physical and emotional aspects of life.²⁵ Upon diagnosis, it is common to feel overwhelmed and lose a sense of control. Some people become more emotional, particularly when cancer is mentioned.

Common thoughts and reactions are—²⁶

Shock

Numbness

Anger

Disbelief

Why me?



After completing cancer treatment, a new phase of life begins—a chapter filled with hope and happiness, but also worries and fear.

Common concerns and feelings after cancer treatment—²⁷

Physical changes to your body due to cancer treatment

May not have previous ability to remember things which can be frightening, side effect of chemotherapy

Difficult to jump back into your pre-cancer social life

Feel stressed about financial situation

Worried about relapse²⁷

That's OK and entirely normal and common for survivors to experience negative feelings and emotions after cancer.²⁷

Tips to Nurture Your Mental Health

Have a consistent support system (Family, friends, pets)

Be organized with your time and medical information

Spend time with loved ones

Embrace your passion

Remember to breathe and practise meditation

Listen to and read inspiring stories

Connect with people who have through what you have

Write about your experience and record it if you can, as this might help others²⁸



Mental Well-being...contd

Tips to Manage Stress

Receiving a cancer diagnosis and undergoing treatment involves a range of emotions that can be overwhelming. The process is not only emotional and exhausting but also stressful. Coordinating appointments and treatments, along with the mental and emotional strain on both the patient and family members, can quickly accumulate and become overwhelming.

Here are some of the tips to help manage stress—²⁸

Spend time outdoors	Limit alcohol, caffeine and nicotine
Ask for or accept help	Exercise and meditation
Join a support group ²⁸	



Fear of Relapse and Tips to Overcome It

After completing treatment, there is a sense of happiness and relief shared by both the individual and their loved ones. However, there is another realm of emotions that arises post-treatment. Many individuals face the fear of relapse in solitude, which can be more debilitating at times.

Here are two ways that you can start to work on overcoming the fear of relapse—²⁹

Focus on the present moment

- Every time you go back to past or anticipate future, bring yourself back to the moment.
- Make this a habit.
- Utilize your senses, see and concentrate on what's in front of you.
- Listen to the sounds around, smell, taste, touch and bring yourself back to where you are right now.
- To bring sense of relief and understanding that thoughts of past and future is actually creating fear and the present moment has none of it.

Don't presume anything

- If we feel a little bit of discomfort or a symptom, we start fearing the worst. Presuming it could be something related to the cancer.
- But these presumptions will only create panic and at most times than not, are false.
- Be aware and mindful of any symptom and get expert opinion before making any assumption.

While these practices may appear challenging at first, they work wonders once they become natural. However, they only become a natural part of your response when practiced diligently.²⁹

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