BOOSTING NUTRITION
There are many commercially available formulas to boost nutrition. Some commonly used for cancer patients are Resource, Nutrocal, Glucerna, Nutren, Ensure and Impact.

A special feed can be made at home which will boost nutrition. Add 50g wheat flour to 60ml oil or ghee and cook, add 60g soya flour and cook further. Remove from the heat and add 25g moong dal, 100g carrot and 100g jaggery. Pressure cook this mixture and blend with a little water. This feed can be stored in the fridge and used whenever needed by diluting with water or mixing with dal or khichadi. For diabetics, leave out the jaggery.

To increase nutritional value of any meal,
- Add skim milk powder to curd, custard, desserts, soup, milk and gravies.
- Add roasted and powdered nuts, chana dal or peanuts to porridge, shira, halwa.
- Add vegetables, paneer or moong dal to parathas.
- Mix moong dal and soya flour in the normal wheat flour.
- Boil milk down and reduce to one fourth or half and use to make basundi, rabri and kheer.
- Chicken stock and boiled chicken can be prepared ahead of time and kept in the freezer so that they are readily available when the patient feels hungry.
- Whenever the patient has juices, add glucose.
- Instead of plain rice, serve khichadi with dals and vegetables, cooked with excess water (3-4 times instead of 2).
- Flour of equal amounts of nachani, moong dal and lapsi (broken wheat) can be made by roasting each individually and grinding and a tasty porridge can be made of this flour. Pressure cook this flour mix; add milk, cardamom and dry fruits.

Cancer Patients Aid Association provides a nutritional powder specially formulated for cancer patients. To receive the powder free of charge, contact our Patient Care department on 24924000.
DIET & CANCER
Recent research has proven the link between diet and risk of certain types of cancer. A faulty diet contains carcinogens (cancer-causing substances) and can increase our cancer risks. On the other hand, a good diet contains anti-oxidants and other chemicals that can protect us and reduce our chances of contracting cancer.

HEALTHY DIET SUGGESTIONS:

Fiber
Certain parts of fruits, cereals and vegetables are indigestible and pass unchanged through the digestive system. The resulting fiber contributes to the formation of bulky stools, helping to ease out waste and also dilutes and flushes cancer causing toxins from the intestinal tract before they can do damage. An average of 27gms/day of fiber intake pushes cancer causing byproducts out of the body and results in a 20% lower risk of colon cancer. Foods rich in fiber include cereals, coarse breads, beans, fruits and green leafy vegetables. The traditional Indian diet provides an adequate quantity of fiber. Junk food, polished and processed food and a non-vegetarian diet tend to be lower in fiber content.

Fats and Oils
Studies have shown that a high intake of saturated animal fats is associated with an increased risk of cancers of the pancreas, colon and breast. It is advisable to replace animal fats with vegetable oils such as corn oil, olive oil and soya oil. Studies show that this leads to a higher risk of breast cancer. Olive oil and olive oil products have a protective effect and should be used instead of saturated fats where possible.

Alcohol
Alcohol in small amounts, say a glass of red wine a day, has been shown to have a protective effect on the heart. However, excessive amounts of alcohol are involved in increased risk of cancers of mouth, throat and voice box, stomach, esophagus, bowel, liver and breast. The risk of digestive system cancers increases in proportion to the quantity of alcohol consumed above 25g/day. One 100 grams a day of alcohol has a 4 to 6 fold increase in risk of these cancers compared to non-drinkers. While tobacco and alcohol are individually known carcinogens for oral cancers, people who are both heavy smokers and drinkers have a disproportionately high risk of acquiring these malignancies.

Vitamins
Vitamins play an important role in protecting us from cancer. Beta carotene, a source of Vitamin A plays a role in reducing the risk of cervical and oral cancers. Regular consumption of yellow and orange vegetables reduces the risk of lung cancer in the case of ex-smokers.

Vitamin B protects against and repairs chromosomal damage, strengthening immunity, protecting us against pancreatic, esophageal and cervical cancers. Vitamins A, C and E act as anti-oxidants, trapping free radicals which weaken cells rendering them susceptible to cancerous changes.

Vitamins and Vegetables
Certain plant derived foods contain phytochemicals, nutrients that have a powerful ability to prevent healthy cells from turning cancerous. They detoxify cells and stimulate the immune system, and possess antibacterial and anti-viral properties. All of these are helpful in maintaining a healthy environment that reduces the risk of cancer. Studies indicate that each daily portion (80-100gms) of fruit or vegetables reduces the risk of mouth cancer by approximately 20% and stomach cancer by about 30%.

Additives and pesticides are items which are added to the products which we consume. Many of these are toxic and can cause cancer. Always wash fruits and vegetables well before eating or purchasing organic products which are grown without harmful chemicals pesticides and fertilizers.

TYPICAL DIET RELATED PROBLEMS
Typical eating problems that are encountered are sore mouth, dry mouth, and change in taste, constipation, diarrhea, flatulence, nausea and reduced appetite.

Patients often experience a sore mouth due to chemotherapy or improper flow of saliva. For a sore mouth, avoid citrus juices. Have khichadi, banana, soft banana, soft boiled rice and curd (not sour). Avoid hard foods, or break them into small pieces. Use a straw when possible. Suck on sweets to keep the mouth moist. Soften bread or chapattis by dipping in dal or milk. Try pureeing food in a blender. Cold milk with Rose syrup helps relieve a sore mouth.

In case of diarrhea drink plenty of fluids. Rice kanji, noodles, boiled egg whites, bread, whey, arrow root and soups are good. Avoid food with high amounts of fiber like cauliflower and cabbage. To restore the sodium/potassium balance, the patient should be given oral rehydration salts ex: Electrolytes, bananas, apples and potatoes. Avoid milk, but have buttermilk, curds which have the lactose in a broken down form, which is easier to digest.

For constipation, increase the fiber content in your diet. Drink plenty of fluids through the day and a glass of hot water and honey just before bowel movement. Eat a lot of vegetables, liquidized if desired, but do not strain.

Dried ginger or ginger soaked in lemon juice or ajwain water can be taken to relieve flatulence. To prevent gas, avoid sprouted pulses, though they are a healthy source of proteins.

To support the patient during chemotherapy, take one beetroot, carrot, tomato and a bunch of spinach. Peel the beetroot and carrot, chop and add with a little water to a pressure cooker. Cook to one whistle, remove and grind in a mixer. The mixture can be had in the form of soup with a little salt and pepper or as a juice with added sugar. It can be stored in a fridge, but should be finished within a day.

FRUITS AND VEGETABLES
Physical inactivity has been shown to be responsible for approximately 25% of breast and colon cancer cases globally. For adults at least 30 minutes of moderate-intensity physical activity on most days of the week reduces the risk of these cancers. School going children should exercise at least 60 minutes each day for optimum health benefits.

Women, especially after menopause, tend to gain stubborn weight which accumulates in adipose tissue. Estrogen in young women is largely produced by ovaries, but after menopause, adipose tissue is the main source of estrogen which may fuel certain kinds of breast cancer. Maintaining a uniform body weight through appropriate physical activity and a healthy diet reduces the risk of this kind of cancer.

THE IMPACT OF PHYSICAL ACTIVITY AND MAINTAINING HEALTHY WEIGHT

DIET FOR CANCER PATIENTS
A balanced diet is necessary for all of us, but for a cancer patient, a balanced diet becomes an important part of their recuperation needs. The cancer patient’s diet must contain carbohydrates (chapati, rice, proteines, dal, meat, poultry, and fish), fats (oil and butter), vitamins and fiber (fruits and vegetables). A typical daily diet should include 4 servings of cereals (each serving consists of 1 bowl of rice/2 chapattis), 1 slice of bread, 3 servings of proteins (each serving consists of 1 bowl whole dal/60 grams meat), 2 servings of oil, 2 cups of milk and 4 servings of fruits and vegetables (1 bowl of vegetables, half a banana, 1 orange). In general, there is no restriction to how much a patient can eat, but you should aim for a diet high in proteins and caloric value. It is important for those who are having difficulty eating, to have small and frequent meals so that the total intake is not reduced.

GENERAL TIPS
During treatment, patients experience a loss of appetite and a change in taste. Diet plays an important part in improving the ability of the patient to cope with treatment.

Try to coax the patient’s palate by changes in diet and by including different items.