

## Nutrition in Cancer Care

There is a lot you can do to give yourself the best chance to win the fight against cancer. Staying nutritionally fortified is one positive way to take control of your life and your well-being. Optimal nutrition allows your body to function at its best. Maintaining optimal nutrition can provide several benefits for people living with cancer, including:

- *Support immune function*
- *Preserve lean body cell mass*
- *Rebuild body tissue*
- *Decrease your risk of infection*
- *Improve strength and increase energy*
- *Improve your tolerance to treatment*
- *Help you recuperate faster after treatment*
- *Improve quality of life*

Good nutrition is essential to keep you strong—to increase the chance that your cancer treatment goes uninterrupted. Your body needs more ‘fuel’ than normal during this time, because it needs to repair from the effects of cancer treatments, such as surgery, radiation therapy and/or chemotherapy. If you are unable to consume the fuel you need, your body will soon draw upon what it has stored—fat and protein. When your body uses stored protein, malnutrition and impaired functioning of your immune system may result.

According to the National Cancer Institute, about one-third of all cancer deaths are related to *malnutrition*. Therefore, it is important to give your body a constant supply of nutrients to use as fuel during the healing process. This supply of nutrients includes calories from all macronutrients, including carbohydrates, protein and fat.

The goal for you is to prevent malnutrition, reduce side effects, promote positive healthy eating habits, and enhance your overall

well-being and quality of life—with an emphasis on proactive nutrition intervention.

*The assessment may include:*

- *Laboratory analysis of the blood* – this determines the status of your immune system (immuno-competence) and protein stores
- *Medical and nutrition history* – this provides the insight into your appetite, food preferences, the status of your digestive system, and any existing or potential complications
- *Nutrition anthropometrics* – take body measurements to determine your percent of body fat and loss of lean tissue

*The following additional areas are:*

- *Calorimetry* – to assess your calorie requirements.
- *Creating a diet profile* – a ten day nutrient intake analysis is prepared for you to follow.
- *Nitrogen balance* – a measurement of protein loss to determine if your body is using protein properly.

Use your personalized nutrition plan, focusing on managing side effects of cancer treatment, recommend supplements to improve your use of calories, and help find foods your body can tolerate. Adequate protein, calories and high-nutrient foods are essential during this time. As part of your care plan, include immune-boosting foods designed to complement your cancer treatments with the fortifying effects of nutritional support.

Selections include fish, poultry, legumes, yogurt, fruits and vegetables, whole grains and cereals, and other healthy food choices. Ensure a variety in the diet. Include supplements to make sure you are getting the necessary nutrients if you are not able to keep whole foods down. Make certain that you receive a well-balanced diet rich in phytochemicals, vitamins and minerals.

*Vitamin and Mineral Supplementation*

Vitamin and mineral supplements provide nutrients that your diet may not, and offer a boost where illness may have depleted your body's stores. The supplementation plan includes nutrients that may help support your immune system and reduce toxic side effects. A daily dosages of various nutrients, is recommend, including:

- *Beta carotene*
- *Selenium*
- *Vitamin C*
- *Eicosapentaenoic acid (EPA)*
- *Vitamin E*
- *Others as appropriate*

It is advisable to reduce as far as possible the amount of simple carbohydrates consumed (high glyesmic index foods). This will help keep the sugar levels down and starve the cancer cells of their primary nutrition. Weak cancerous cells can be more easily overwhelmed and destroyed by the treatment.

Have more proteins and natural fats and complex carbohydrates (low glyesmic index foods).