

Overview of Nutrition in Cancer Care

Cancer and cancer treatments may cause nutrition-related side effects.

The diet is an important part of cancer treatment. Eating the right kinds of foods before, during, and after treatment can help the patient feel better and stay stronger. To ensure proper nutrition, a person has to eat and drink enough of the foods that contain key nutrients (vitamins, minerals, protein, carbohydrates, fat, and water). For many patients, however, some side effects of cancer and cancer treatments make it difficult to eat well. Symptoms that interfere with eating include anorexia, nausea, vomiting, diarrhea, constipation, mouth sores, trouble with swallowing, pain, depression, and anxiety. Appetite, taste, smell, and the ability to eat enough food or absorb the nutrients from food may be affected. Malnutrition (lack of key nutrients) can result, causing the patient to be weak, tired, and unable to resist infections or withstand cancer therapies. Eating too little protein and calories is the most common nutrition problem facing many cancer patients. Protein and calories are important for healing, fighting infection, and providing energy.

Anorexia and cachexia are common causes of malnutrition in cancer patients.

Anorexia (the loss of appetite or desire to eat) is a common symptom in people with cancer. Anorexia may occur early in the disease or later, when the tumor grows and spreads. Some patients may have anorexia when they are diagnosed with cancer. Almost all patients who have widespread cancer will develop anorexia. Anorexia is the most common cause of malnutrition in cancer patients.

Cachexia is a wasting syndrome that causes weakness and a loss of weight, fat, and muscle. It commonly occurs in patients with tumors of the lung, pancreas, and upper gastrointestinal tract and less often in patients with breast cancer or lower gastrointestinal cancer. Anorexia and cachexia often occur together. Weight loss can be caused by eating fewer calories, using more calories, or a combination of the two. Cancer cachexia is not the same as starvation. A healthy person's body can adjust to starvation by slowing down its use of nutrients, but in cancer patients, the body does not make this adjustment.

Good eating habits during cancer care help the patient cope with the effects of the cancer and its treatment.

Nutrition therapy can help cancer patients get the nutrients needed to maintain body weight and strength, prevent body tissue from breaking

down, rebuild tissue, and fight infection. Eating guidelines for cancer patients can be very different from the usual suggestions for healthful eating. Nutrition recommendations for cancer patients are designed to help the patient cope with the effects of the cancer and its treatment. Some cancer treatments are more effective if the patient is well nourished and getting enough calories and protein in the diet. People who eat well during cancer treatment may even be able to handle higher doses of certain treatments. Being well-nourished has been linked to a better prognosis (chance of recovery).

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Effect of Cancer on Nutrition

Cancer can change the way the body uses food.

Tumors may produce chemicals that change the way the body uses certain nutrients. The body's use of protein, carbohydrates, and fat may be affected, especially by tumors of the stomach or intestines. A patient may appear to be eating enough, but the body may not be able to absorb all the nutrients from the food. Diets higher in protein and calories can help correct this and prevent the onset of cachexia. Drugs may also be helpful. It is important to monitor nutrition early, as cachexia is difficult to completely reverse.

Drugs may help relieve cancer symptoms and side effects that cause weight loss.

Early treatment of cancer symptoms and side effects that affect eating and cause weight loss is important. Both nutrition therapy and drugs can help the patient maintain a healthy weight. The types of drugs commonly used to relieve these symptoms and side effects include the following:

- Medicines to prevent nausea and vomiting.
- Medicines to prevent diarrhea.
- Pancreatic enzymes.
- Laxatives (to promote bowel movements).

- Medicines for mouth problems (to clean the mouth, stimulate saliva, prevent infections, relieve pain, and heal sores).
- Pain medications.