Colorado State University

Extension

Diet and Cancer Treatment -Tips for Healthy Eating

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Cancer and Nutrition: The Importance of Healthy Weight Maintenance

Weight fluctuations are a common problem for patients undergoing cancer therapy. Weight loss is the most frequent problem; however some cancer treatments may result in weight gain. Those undergoing treatment for cancer should try to maintain a healthy weight and avoid any losses or gains in weight. Research shows that cancer patients who retain weight and maintain a good nutritional state have fewer complications, regardless of the form of treatment (chemotherapy, radiationtherapy or surgery). Fewer complications result in shorter hospital stays, reduced illness, fewer infections, full benefit of treatment, and better maintenance of strength and sense of well-being. A healthy weight is important for increased energy levels, strength, and coping with the side-effects of cancer treatment.

Dietary Tips for Healthy Weight Maintenance

The following tips are useful for all cancer patients. However, for those experiencing weight loss, maintaining a healthy weight by consuming protein and calorie rich foods should be a primary goal.

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Eat a variety of foods — A low fat diet with fruits, vegetables, whole-grains, nonfat dairy, and lean protein, is important for a nutritionally complete diet.

Limit caffeine, sugar, sodium (salt), and alcohol — Exceptions for this guideline include those experiencing weight loss, as sugar and fat are good sources of calories that will aid in weight gain.

Hydration — Drink as many fluids as possible throughout the day, as dehydration may be a problem with nausea or diarrhea. If weight loss is a problem, try high calorie fruit smoothies or natural juices.

Refer to a medical professional for advice on specific dietary recommendations.

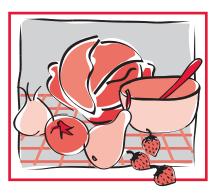
Coping with Cancer's Effect on the Diet

Cancer's effect on the diet falls into two categories:

- 1. Dietary side effects of the disease itself
- 2. Dietary side effects of cancer treatment

1. Diet and Cancer — Side Effects of the Disease

Loss of Appetite and Unexplained Weight Loss — Early signs and symptoms of cancer include a decreased ability to eat, digest, or absorb food and nutrients. Cancer cells may use the body's energy reserves, or release chemicals that



Quick Facts

- Weight loss is a common problem for individuals undergoing cancer treatment.
- Cancer patients who retain weight and maintain a good nutritional state have fewer complications from treatment.
- Side effects of cancer or its treatment, which may result in weight loss include: reduced appetite, food taste changes, diarrhea, constipation, and swallowing difficulty.
- Dietary changes can overcome or reduce many of these side effects.
- Always consult a medical professional when seeking alternative treatment for the side effects of cancer therapy.
 Some herbal, vitamin, and mineral supplements can interfere with recovery and cause unwanted side effects.
- During treatment, immune system function may be compromised. Always practice safe food handling techniques.

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alter the way that the body makes energy from food. With a cancer diagnosis, a lack of appetite may also be a result of emotional distress or depression.

Change in bowel habits or bladder function — Constipation, diarrhea, or pain when urinating may result from colon, bladder and prostate cancer. This may interfere with proper nutrient absorption, and result in loss of fluids and electrolytes.

Trouble swallowing — Cancer patients with difficulty in chewing or swallowing may result from head and neck cancer, or esophageal cancer. These symptoms may cause vomiting, early satiety, and fluid and electrolyte imbalances.



2. Diet and Cancer — Side Effects of Treatment

Surgery — The effects of surgery on the diet vary greatly depending on the location of the tumor and the surgical procedure used. If surgery is scheduled, talk to the doctor about what side effects might develop. When a side effect does develop, the doctor or registered dietitian can assist with the diet.

Chemotherapy — Chemotherapy works by destroying rapidly dividing cells such as cancer cells. It also destroys normal body cells that divide rapidly, such as those in bone marrow and those that line the small intestine. Side effects can include taste alterations, nausea, vomiting, diarrhea or constipation, all of which may adversely affect dietary intake. These effects will end within a few days after the chemotherapy treatment ends.

Radiation Therapy — The dietary side effects of radiation therapy depend on the location of the tumor. Therapy for a head or neck tumor often causes nausea, fatigue, loss of appetite, swallowing pain, dry mouth and altered taste. Therapy for abdomen and pelvis often cause nausea, diarrhea, increased urination, fatigue, and loss of appetite.

Changes in Food's Flavor and Odor

Cancer often affects the taste buds. Most commonly, it reduces the ability to taste sweetness. This changes the flavor of sweets, desserts, fruits and vegetables. Some individuals may experience an unusual dislike for certain foods, flavors or odors. This side effect may develop when unpleasant symptoms are tied to a food recently eaten. A third potential taste change is an increased liking for tart flavors, such as grapefruit and cranberry juice.

Alteration of taste, also called "mouth blindness," seems to have a greater effect on diet than other side effects, specifically from head and neck radiation therapy. Spicy foods, strongly flavored foods, or coarsely textured fruits and vegetables are most likely to be acceptable to people with mouth blindness.



Unfortunately, mouth blindness may continue for up to a year after radiation therapy is discontinued.

Cancer and Nutrition: Guidance Before, During, and After Treatment

Before Cancer Treatment

- Make sure your body is well nourished before treatment begins.
- Plan ahead and stock your kitchen with foods you can easily prepare.
- Stock nutritious snacks in case you do not feel like preparing a meal.
- Have a support group to help with preparing meals and grocery shopping.
- Look into a grocery delivery service for your home.

During Cancer Treatment

- Eat before treatment, but greater than 1-2 hours prior.
- Between treatments, nourish your body well when an appetite is present.
- Be patient when coping with side effect such as changes in taste preference, loss of taste and smell. For chemotherapy, these side effects usually last throughout the treatment. For radiation therapy, these symptoms may be present up to 3 weeks post treatment.

After Cancer Treatment

• Cancer survivors are at an increased risk for developing other cancers; therefore it is important to minimize ones risk through a nutrient dense diet, healthy weight maintenance, and living a physically active lifestyle. For more information, see fact sheet <u>9.313 Diet and Cancer Prevention</u>.

Troubled with:	Try:
Neight Loss	Eat smaller, more frequent meals throughout the day. Use protein and calorie containing supplements (whey, soy powder). Keep nutrient dense foods in the home, and snack frequently.
Nausea or vomiting	Eat five or six smaller meals instead of three larger meals. Drink beverages one-half to one hour before meals instead of with meals. Eat dry or salty foods: toast, crackers, corn chips or pretzels. Avoid high fat, greasy, spicy, or highly sweetened foods. Avoid foods with strong odors. Eat bland and soft foods on treatment days.
Constipation	Drink plenty of fluids (8 cups per day), especially hot beverages and fruit juices. Incorporate more light physical activity into your day. Include foods high in fiber or bulk: raw fruits and vegetables, whole grains, bran.
Diarrhea	Drink plenty of clear liquids. Eat applesauce, bananas, yogurt, canned peaches, rice or pasta, which are easy to digest. Avoid foods high in bulk or fiber: raw vegetables, whole grains, bran. Avoid foods that cause gas or cramping: beans, cabbage, broccoli, spicy foods, and carbonated beverages.
Sore Throat or Sore Mouth	Eat foods that are soft and moist, and avoid dry, rough foods. Avoid alcohol and highly acidic foods (citrus, vinegar). Consume food at a soothing temperature.
Fatigue	Snack frequently; keep nutrient dense foods on hand. Drink fluids throughout the day. Increase physical activity.
Dry mouth	Eat sauces and gravies with food. Suck on hard, sugarless candies or chew gum. Dunk foods in beverages, such as coffee, tea or milk. Take a swallow of beverage with each bite of food. Use artificial saliva.
Mouth blindness"	Try highly spiced foods: pizza, spaghetti, chili. Eat strongly flavored foods: sauerkraut, cabbage, Limburger cheese. Emphasize texture in meals: crisp lettuce and fruits, creamy mashed potatoes, soft bread, crunchy toast.
aste changes	Add a teaspoon of sugar to vegetable cooking water.
Reduced ability to taste sweetness	Glaze vegetables such as carrots with brown sugar. Increase the sugar in desserts and try new recipes.
Jnusual dislike for meat	Replace beef or pork with poultry, fish, eggs, milk products, legumes. Marinate meats. Cook meats in sauces or with tomatoes. Eat meats cold or at room temperature.
ncreased likeness for tart lavors	Add lemon juice to foods. Drink tart beverages: lemonade, grapefruit, cranberry juice.
Appetite loss	Eat during best times. Use foods easy to prepare and eat. Eat smaller meals. Use liquid meals. Don't drink with meals. Eat foods that are nutrient dense. Be physically active, which may serve as an appetite stimulant.
Swallowing or chewing	Use softer foods.

Swallowing or chewing

Use softer foods. Drink with a straw. • Following the USDA Dietary Guidelines is recommended for proper nourishment, which can help rebuild strength after treatment.

Additional Resources

Keep the doctor informed of diet problems, treatment difficulties, and changes in condition. Hospital registered dietitians and those in private practice can help with dietary problems. They help patients better understand the effects cancer and its treatment may have on diet.

The American Cancer Society can provide names of support groups or other services, such as Meals on Wheels, available to cancer patients in the community. Contact the American Cancer Society at: 1-800-227-2345, or visit their website at: www.cancer.org.

The National Cancer Institute offers a helpful booklet called Eating Hints for Cancer Patients: Before, During, and After Treatment. This document can be accessed online at: www.cancer.gov/cancertopics/ coping/eatinghints. Free copies can be obtained by calling 1-800-638-6694.

For additional help and information, call the Cancer Hotline at 1-800-4-Cancer.

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