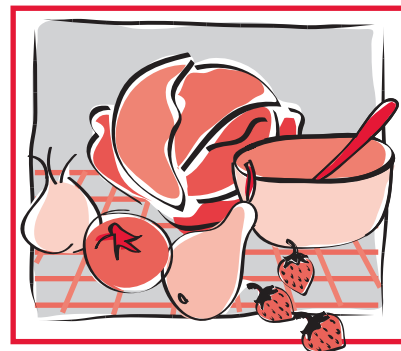


Cancer's Effect on the Diet

Fact Sheet No. 9.332

Food and Nutrition Series | Health



by J.E. Anderson and L. Young*

Weight loss is a common problem of patients undergoing cancer therapy. But weight loss as a result of cancer need not be accepted as inevitable.

In fact, patients should avoid weight loss. Research shows that cancer patients who retain weight and maintain a good nutritional state have fewer complications from treatment, be it chemotherapy, radiotherapy or surgery, than those who don't. The results are shorter hospital stays, reduced illness, fewer infections, full benefit of treatment, and better maintenance of strength and sense of well-being.

Cancer's effect on diet falls into two categories: side effects of the disease and side effects of treatment.

Side Effects of the Disease

Reduced Appetite

Sometimes decreased appetite is a problem. If appetite decreases as the day progresses, make breakfast the big meal of the day. Don't feel restricted to typical breakfast foods either. If you feel like eating a steak, baked potato and salad for breakfast, do it!

On the other hand, some people find eating five or six smaller meals a day works better than eating two or three larger meals.

Changes in Food's Flavor

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.

Use extra sugar with many desserts to improve the taste or to provide its accustomed taste. A teaspoon of sugar added to cooking water or glazing vegetables such as carrots may help improve vegetable flavors.

Some people experience an unusual dislike for certain foods, flavors or odors. This

develops when unpleasant symptoms are tied to a food recently eaten.

Save your favorite foods for times when you feel well. Try not to eat one to two hours before treatment or therapy. If you no longer enjoy beef or pork, you may find chicken, fish, eggs, milk products or legumes more appealing. Marinate meats or cook them with sauces or tomatoes to help improve the flavor. Meats that are cold or at room temperature may be more palatable.

A third potential taste change is an increased liking for tart flavors. Adding lemon juice to foods may make them taste better. A cancer patient may enjoy grapefruit, cranberry or other tart juices.

Side Effects of Treatment

Surgery

The effects of surgery on 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 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 swallowing pain, dry mouth and altered taste. Swallowing pain may be

Quick Facts

- Weight loss is a common problem of patients undergoing cancer therapy.
- Cancer patients who retain weight and maintain good nutritional state have fewer complications from treatment.
- Side effects of cancer or its treatment that may result in weight loss include reduced appetite, food taste changes, diarrhea, constipation and swallowing difficulty.
- Diet changes can overcome or reduce many of these side effects.

© Colorado State University Extension. 3/02. Revised 8/08.

www.ext.colostate.edu



*Colorado State University Extension food and nutrition specialist and professor, food science and human nutrition; and L. Young, M.S., former graduate student. 8/2008

Table 1. Coping with cancer's effect on the diet.

Troubled with:	Try:
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 rich or highly sweetened foods. Avoid smells that cause nausea. Avoid high-fat foods.
Constipation	Drink plenty of fluids (8 cups per day), especially hot beverages and fruit juices. Light exercise such as short walks or light housework may help. Include foods high in fiber or bulk: raw fruits and vegetables, whole grains, bran.
Diarrhea	Eat cheese and yogurt. Avoid foods high in bulk or fiber: raw vegetables, whole grains, bran. Avoid foods that cause gas or cramping: beans, cabbage, broccoli, spicy foods, carbonated beverages.
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.
Taste changes: Reduced ability to taste sweetness	Add a teaspoon of sugar to vegetable cooking water. Glaze vegetables such as carrots. Increase the sugar in desserts and try new recipes.
Unusual 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.
Increased likeness for tart flavors	Add lemon juice to foods. Drink tart beverages: lemonade, grapefruit, cranberry juice.
Appetite	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.
Swallowing or chewing	Use softer foods. Drink with a straw. Refer to <i>Non-chew Cookbook</i> , Wilson. 1985. Wilson Publishing.

reduced by eating soft-textured foods such as casseroles, egg products, puddings and liquids. Dry mouth can be helped by adding sauces and gravies to foods. Sucking on hard candies or using artificial saliva will help moisten the mouth.

Alteration of taste, also called "mouth blindness," seems to have a greater effect on diet than other side effects of 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.

Radiation therapy for an abdominal or pelvic tumor often encourages nausea, vomiting and diarrhea.

Other Resources

A doctor is the best ally in cancer treatment. 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 can 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-ACS-2345, visit their website at: <http://www.cancer.org>, or write the national office at: 777 Third Ave., New York, NY 10017.

Diet and Nutrition – A Resource for Parents of Children with Cancer can be ordered from the Public Document Center, P.O. Box 4007, Pueblo, CO 81003. Identify the booklet by code number 017-042-00148-0 when ordering.

Another helpful booklet is *Eating Hints for Cancer Patients: Before, During and After Treatment*. Free copies can be obtained from the Office of Cancer Communications, National Cancer Institute, Bethesda, MD 20205, by calling their toll-free telephone number 1-800-638-6694, or visiting their Web site at www.cancer.gov. For additional help and information, call the Cancer Hotline at 1-800-4-Cancer.

References

- Understanding Clinical Nutrition*, Whitney and Cavaldo, 1983. West Pub/1 Eating Hints, USDA-HHS. No. 83-2079.
- Krause's Food, Nutrition and Diet Therapy*. 9th Edition. W.B. Saunders Co. 1996.
- Nutrition Management of the Patient With Cancer. *Manual of Clinical Dietetics*. 5th Edition, pp. 369-380. American Dietetic Assoc.