

NUTRITION DURING CANCER TREATMENT

Good nutrition is important for everyone, especially people who have cancer. Eating well during cancer treatment will help you build your strength, recover as quickly as possible and avoid infections. According to the American Cancer Society, good nutrition can even boost the effectiveness of some cancer treatments.

Nutrition guidelines for people with cancer are different than those for the general population. People with cancer need more protein and calories, especially if they are losing weight. Here are some tips to help you get the nutrition you need during your treatment:

- Plan ahead. Stock up on nutritious foods you enjoy. Cook and freeze meals in advance, or ask family and friends to help.
- Make mealtime easy. Buy deli foods and use take-out and delivery services.
- Include plenty of high-protein foods in your diet, such as milk, eggs, cheese, lean meats, poultry, fish, beans and peanut butter. (See the sidebar for an easy-to-make shake with lots of protein.)
- Enjoy nutritious snacks. Choose foods that are easy to prepare and keep them handy. Good examples are cheese and crackers; peanut butter and slices of apple or celery; cereal and milk; a sandwich or soup; granola or a muffin.
- If you are underweight, include more sauces, gravies and butter or margarine in your diet to boost your calorie intake.

You may experience a lack of appetite during treatment. If this happens, eat small, frequent meals; drink high-calorie liquids such as fruit juices and sodas; and add high-calorie foods to your diet, including butter, cream, cheese and whole milk. Some patients who undergo radiation therapy for cancers of the head and neck experience dry mouth or mouth soreness as side effects of treatment. Here are some tips to keep you eating well if you have these symptoms.

For dry mouth:

- Drink plenty of water.
- Choose soft, moist foods or moisten food with broth, sauce, cream, butter, or margarine. Casseroles, soups and stews are good choices. Avoid dry foods (dry toast, chips, hard rolls) and foods that stick to the top of your mouth.
- Take small bites of food and chew each bite thoroughly.
- To keep your mouth moist between meals, suck on hard candies, ice chips or popsicles.

For a sore mouth: Avoid irritating spices, such as chili powder, hot sauce, curry and pepper. Instead, season your food with herbs like basil and oregano.

- Avoid tart, acidic foods, such as orange juice and other citrus juices. Also avoid alcohol.
- Choose soft, creamy foods and foods that are cool or lukewarm. Very hot and very cold foods can irritate a sore mouth. Talk to your physician or radiation therapist if you have other symptoms that interfere with your ability to eat.

This patient education page provides general information concerning radiation therapy. The ASRT suggests that you consult your physician for specific information concerning your treatment and medical condition. Health care professionals may reproduce these pages for noncommercial educational purposes. Reproduction for other reasons is subject to ASRT approval.

High-protein Frosty

Place the following ingredients in a blender container and blend thoroughly at high speed:

- 1 packet vanilla instant breakfast mix
- 1 cup whole milk
- 1/2 cup yogurt, any flavor
- 6 to 10 crushed ice cubes
- 1/2 cup fresh or frozen fruit (thawed)
- **optional:** 1 to 2 Tablespoons powdered milk (to increase protein content)
- Chill well before serving. Serves one.
- (approx. 400 calories, 19 grams protein)

Adapted with permission from the American Cancer Society Web site, www.cancer.org

NUTRITION DURING CANCER TREATMENT – DIETARY SUPPLEMENTS

Below is a list of products Christie Clinic recommends that our patients take in addition to their normal diets. It's important to get additional protein and carbohydrates during and following radiation therapy to aid in cellular regrowth and combat fatigue.

If you're interested in these products, please let us know and we will provide you with a sample packet as outlined by the manufacturers.

Ensure® Products*

Original Shake
High Protein Shake
Plus Shake
Pudding
Snack Bar

Mead Johnson® Products*

ChoiceDM® products for diabetics
Boost® Drink
Sustacal®
Sustacal High Protein
Sustacal Plus

Nestlé® Products*

Carnation® Instant Breakfast®

Carnation Instant Breakfast with NutraSweet® is suitable for diabetic consumption.

Resource® Medication Nutrition Products*

ThickenUp® Instant Food and Beverage Thickener
Dairy Thick® Beverages
Thickened Water
Thickened Juice

For home delivery of Resource products, call 800.828.9194

Nutra/Balance Products*

Nutritional Beverages
Egg/Pro Powder
High Protein Cookies

For home delivery of Nutra/Balance products, call 800.432.3134

*Available in a variety of flavors

NUTRITION DURING CANCER TREATMENT – LOW-RESIDUE DIET FOR PATIENTS RECEIVING PELVIC IRRADIATION

Use only in case of diarrhea.

When cancer patients receive radiation therapy to the abdomen or pelvic areas, diarrhea problems may occur. This is caused by the radiation's interaction with the bowel, but it is only a temporary condition. A few weeks after the radiation therapy treatments are finished, the bowel will heal itself, and regularity will return.

However, during the treatment course, it's important to prevent and control the onset of diarrhea. Not only is it a nuisance, but it can also present future health risks due to the loss of fluids, minerals, and vitamins necessary for the body to function properly.

Prevention and Control

Diarrhea can be avoided or lessened by following a simple yet strict dietary plan.

	DOs	DON'Ts
Breads	White bread White toast Plain crackers Melba toast	Hot breads Whole grain breads Bran Nuts and seeds
Cereals	Farina Cream of Wheat Cream of Rice Oatmeal Cold cereals with corn, rice and oats	Whole grain cereals Bran flakes Shredded wheat Total cereal Wheaties
Fruits	Bananas and applesauce Cooked or canned peaches, pears, bing cherries or plums Apple or grape juice Apricot, peach or pear nectar	Raw fruits Grapefruit Pineapple Cranberries Lime Prune juice Citrus juices: tomato, grapefruit, orange or pineapple
Vegetables	Cooked beets and carrots Mashed squash or pumpkin Pureed diet: asparagus, green and waxed beans, peas or spinach	Any raw vegetables Cooked cabbage, onions, cauliflower brussel sprouts, broccoli, turnips, green peppers, corn, lettuce or V-8 juice
Potatoes and potato substitutes	White potatoes Baked potatoes (no skin) Mashed sweet potatoes Noodles White rice	Potato chips Potato salad Fried potatoes Whole grain rice

1. Consume less fiber (roughage). Use only cooked or canned fruits and vegetables. Omit foods with seeds and tough skins, dried beans, corn, onions, and garlic. For additional help, use the following list of DOs and DON'Ts.
2. Drink liquids in between meals rather than with meals.
3. Eat small, frequent meals instead of a few large meals.
4. Consume approved fatty foods only in moderation.
5. Eat foods high in potassium, such as canned apricots, bananas, and potatoes.
6. Avoid gas-forming foods such as beer, beans, cabbage, broccoli, cauliflower, and spicy cuisine.

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	DOs	DONTs
Meat, fish, poultry and cheese	Tender beef and veal Chicken and turkey Lamb Liver Fresh or frozen fish Tuna, salmon or lobster Cottage cheese Smooth peanut butter Onions and garlic	Cold cuts Hot dogs or sausage Corned beef Canned meats Oysters or clams Shrimp Chunky peanut butter Food containing peppers
Soups	Broth: chicken, beef Cream soups with allowed ingredients—strain if necessary Example: beef noodle, chicken or beef broth, cream of potato, strained split pea or tomato, chicken or turkey noodle, cream of chicken	All others
Beverages	Milk and milk beverages—2 cup per day limit (report to physician if not tolerated)	All alcoholic beverages
Miscellaneous	Salt Cinnamon Mace Thyme Sage Paprika Popcorn Pickles	All other spices Catsup Vinegar Meat sauce Olives Relish
Fats	Butter and margarine Cream Sour cream Oil Mayonnaise Crisp bacon	Bacon grease Gravy Salad dressings Nuts
Eggs	Any way but fried (Report if you cannot tolerate)	Fried eggs
Desserts	Custard Plain puddings Angel food cake Sherbet JELL-O Plain sugar cookies Vanilla wafers	Pies and pastries Doughnuts Gingerbread Desserts with coconut, raisins or nuts

7. Drink plenty of water. Seven 8-ounce glasses of water are required for a 100-pound person per day, and an additional glass is necessary for every 10 pounds of body weight. You can also replace water with liquids in the form of juice, JELL-O, and popsicles.

8. If, after following the above guidelines, diarrhea persists, consult your physician.