Medical Nutrition Therapy for Cancer

During or after chemotherapy or radiation treatment, you may experience gastrointestinal discomfort or other side effects. While everyone’s situation is unique, the following suggestions may help minimize your treatment symptoms.

- **Nausea** - Try clear liquids such as ginger ale, Sprite®, Gatorade®, broth, apple juice or tea. When ready to eat, try bland or dry foods such as crackers, pretzels, dry bread/toast, cereal, rice and potatoes. Keep soda crackers at the bedside to alleviate morning nausea. Hot foods may bring aromas that induce nausea—instead try cold sandwiches/deli plates, fruit plates, boiled eggs over scrambled (cold foods from your menu). Other options include popsicles, jello, fruit ice, and custard. Have someone remove the lid of your tray before entering your room so food odors can escape. Spicy, greasy, rich foods are to be avoided—harder on stomach. Ginger lozenges, ginger snaps or ginger root tea may help. 6-8 small meals/day is recommended. Avoid favorite foods during this time! You may develop an aversion to foods you enjoy if you are unable to tolerate them during treatment.

- **Vomiting** - Sip on fluids. When nausea/vomiting improves, replenish your potassium stores by eating a banana, baked potato, or an orange. Spicy food, high fat/fried foods, coffee and other caffeinated drinks, and foods with strong odors (ex. fish, cabbage, broccoli) may not be tolerated. After eating, relax in an upright or tilted position to ease digestion. Avoid lying flat for at least 2 hours after eating if possible. Wash your mouth out before eating to help clear your taste buds—salted water, water with baking soda, tea or ginger ale work well.

- **Diarrhea** - Eat white bread, bananas, rice, applesauce, toast, noodles, creamy peanut butter, cheese and yogurt. You may want to avoid lactose (the natural sugar in milk and some milk products). All of our supplements at St. Luke’s such as Boost® and Glucerna® are lactose-free. Remember to drink plenty of fluids, especially between meals—limit fluids at meal times. Examples include Gatorade®, PowerAid®, and flat carbonated beverages. Avoid food and beverages that are very hot or cold. Eating foods at room temperature will slow down the muscle contractions of the digestive tract. Avoid milk and ice cream, caffeine, alcohol, prune and orange juice, and hot liquids (coffee, tea). Avoid spicy, high fat/fried foods, high fiber foods (raw fruits and vegetables, whole grains), and sugar alcohols (sugar-free foods), which can make the diarrhea worse.

- **Constipation** - Manage your bowel function. Include sufficient fluid and fiber. Water, Gatorade®, and popsicles can increase your fluid intake. Eating to a schedule will help with your bowel program. Continue with exercise/walking as per your doctor.

- **Dry Mouth** - Try milkshakes, eggnog, yogurt, cottage cheese, pudding, custard, warm cereals, and cream soups. Adding canola oil, olive oil, butter, gravies or sauces will help moisten meats, biscuits and vegetables. Pickles, lemons, grapefruit or peppermint candies stimulate the secretion of saliva. Biotene® mouthwash may provide relief.

- **Sore mouth** - Choose soft or pureed foods (baby food consistency). Avoid spicy, salty, acidic foods and drinks. Avoid tart foods, crunchy foods, as well as alcohol, tobacco and carbonated drinks. Try using a baby spoon—gentler on the mouth. Grab the bananas, applesauce, yogurt, mashed potatoes, macaroni and cheese, pudding, and grits/oatmeal.
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- **Taste Alterations** - Bite a pickle, suck on a lemon wedge, or drink ginger ale prior to eating (use caution if your mouth is sore!). Ask your Dietitian to add these items to your tray. Marinate meats in wine, lemon juice or soy sauce to counteract metallic tastes. Sweets as honey or fruit can be added to meals to overcome bitter tastes. Cook and serve foods with plastic.

- **Sensitive to Smell** - Drink beverages and nutritional supplements cold, in a covered cup, through a straw. Choose refrigerated or room temperature foods, such as sandwiches, pudding, or cereal. Avoid hot odorous foods.

**Appetite Loss** - “Eat by the Clock!” Plan to eat at regular hours, even if only small meals. Think of food as medicine, taking on a schedule. Make your food visually appealing and plan meals in advance by freezing homemade soups or casseroles in individualized containers. Avoid an empty stomach.

- **Decreased Intake** - Eat 6-8 small meals each day. Add protein (cheese, milk, yogurt, cottage cheese, nuts, peanut butter or a small piece of meat) to each meal. Never press yourself to eat to the point of discomfort!

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**Nutrition Resources at your Fingertips**

- **American Cancer Society**
  - [www.cancer.org](http://www.cancer.org)
  - 1-800-ACS-2345

- **American Dietetic Association**
  - [www.eatright.org](http://www.eatright.org)
  - 1-800-877-1600

- **CancerLinks**
  - [www.cancerlinks.com/nutrition.html](http://www.cancerlinks.com/nutrition.html)

- **Cancer Nutrition Info, LLC**
  - [www.cancernutritioninfo.com](http://www.cancernutritioninfo.com)

- **Cancer Supportive Care Programs**
  - [www.cancersupportivecare.com/nutrition.html](http://www.cancersupportivecare.com/nutrition.html)

- **National Cancer Institute**
  - [www.cancer.gov](http://www.cancer.gov)
  - 1-800-4-CANCER

- **National Center for Complementary and Alternative Medicine**
  - [www.nccam.nih.gov](http://www.nccam.nih.gov)
  - 1-888-644-6226

- **Oncolink**
  - [www.oncolink.com](http://www.oncolink.com)

- **Nutritional Supplements**
  - Ross Products (Ensure®, Prosure®)
    - [www.ross.com](http://www.ross.com)
    - 1-800-258-7677
  - Novartis Nutrition (Boost®, Choice DM®,)
    - [www.novartisnutrition.com](http://www.novartisnutrition.com)
    - 1-800-333-3785
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Ideas for Small Meals

Oatmeal or Cream of Wheat
½ Banana
Whole or Reduced Fat Milk or a Supplement

Baked Chicken Breast
Boiled Potatoes with Margarine
Apple Juice

Carnation Instant Breakfast® or Fruited Yogurt
Melba Toast or Crackers with Cheese

Baked Potato with Cottage Cheese or Sour Cream & Cheese
Canned Fruit in Syrup

Egg Custard or Boost®, Resource®, or Ensure®
Toast or Graham Crackers with Peanut Butter

Chicken Noodle Casserole
Baked Sweet Potato
Angel Food Cake with Fruit

Chicken Noodle Soup or Chicken and Dumplings
Crackers
Applesauce

Cottage Cheese and Fruit
Milk or Juice

Ways to Increase Protein & Calories

- add cheese, milk, and whole milk powder to meat, vegetables, casseroles and other dishes like au gratin potatoes, cheeseburgers, and cream soups

- make cooked cereals with milk instead of water

- add Carnation Instant Breakfast® or ice cream to shakes

- nibble on nuts between meals, grind and add to foods

- take pudding packs and granola bars when on the go!

- add mayonnaise to salads and sandwiches (one tbsp. has about 100 calories)

- spread avocado, cream cheese or peanut butter on favorite foods

- use butter/margarine on vegetables, potatoes, noodles, etc.

Fluids! Fluids! Fluids! Fluids! Fluids! Fluids! Fluids! Fluids! Fluids! Fluids!
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Recipes for High Calorie, High Protein Drinks

**Vanilla or Coffee Milkshake**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Quantity</th>
<th>Calories</th>
<th>Protein</th>
<th>Fat</th>
<th>Carbohydrate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole Milk</td>
<td>½ cup</td>
<td>289</td>
<td>12 g</td>
<td>13 g</td>
<td>31 g</td>
</tr>
<tr>
<td>Skim Milk Powder</td>
<td>1 tbsp</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Vanilla Extract or Instant Coffee (to taste)</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Vanilla Ice Cream</td>
<td>½ cup</td>
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**Chocolate Milkshake**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Quantity</th>
<th>Calories</th>
<th>Protein</th>
<th>Fat</th>
<th>Carbohydrate</th>
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<tbody>
<tr>
<td>Chocolate Ice Cream</td>
<td>½ cup</td>
<td>321</td>
<td>12 g</td>
<td>13 g</td>
<td>40 g</td>
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<tr>
<td>Whole Milk</td>
<td>½ cup</td>
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<td></td>
</tr>
<tr>
<td>Skim Milk Powder</td>
<td>1 tbsp</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chocolate Syrup</td>
<td>1 tbsp</td>
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**Swiss Miss or Eggnog Drink**

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<thead>
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<th>Ingredient</th>
<th>Quantity</th>
<th>Calories</th>
<th>Protein</th>
<th>Fat</th>
<th>Carbohydrate</th>
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<tbody>
<tr>
<td>Vanilla Ice Cream</td>
<td>1 cup</td>
<td>478</td>
<td>14 g</td>
<td>18 g</td>
<td>65 g</td>
</tr>
<tr>
<td>Whole Milk</td>
<td>½ cup</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Swiss Miss or Eggnog Mix</td>
<td>1pkg or 1/3 cup</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eggnog Mix</td>
<td>3 tbsp</td>
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</table>

**Peanut Butter Drink**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Quantity</th>
<th>Calories</th>
<th>Protein</th>
<th>Fat</th>
<th>Carbohydrate</th>
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</thead>
<tbody>
<tr>
<td>Heavy Whipping Cream</td>
<td>½ cup</td>
<td>829</td>
<td>15 g</td>
<td>65 g</td>
<td>46 g</td>
</tr>
<tr>
<td>Smooth Peanut Butter</td>
<td>3 tbsp</td>
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<td></td>
<td></td>
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<tr>
<td>Chocolate Syrup</td>
<td>3 tbsp</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vanilla Ice Cream</td>
<td>½ cup</td>
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**Berry-Good Banana Tart Shake**

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<thead>
<tr>
<th>Ingredient</th>
<th>Quantity</th>
<th>Calories</th>
<th>Protein</th>
<th>Fat</th>
<th>Carbohydrate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Berry Flavored Yogurt</td>
<td>6 oz</td>
<td>488</td>
<td>12 g</td>
<td>12 g</td>
<td>83 g</td>
</tr>
<tr>
<td>1 Ripe Banana</td>
<td>1</td>
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<td></td>
<td></td>
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<tr>
<td>Whole Milk</td>
<td>½ cup</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Milled Flaxseed</td>
<td>1 tbsp</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ice Cubes</td>
<td>2-3</td>
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Blenderize at Medium to High Speed. All make about 1 cup.
Nutritional Supplement Flavoring Ideas

Tired of the same taste day after day?
Use your imagination! Add the following as desired to a can of Boost®, Ensure®, or an 8 oz. serving of Carnation Instant Breakfast®.

**Chocolate**
Add one serving of chocolate drink mix and stir well.

**Coffee**
Add 1 level teaspoon of instant coffee to a small amount of beverage and stir. Add left over beverage and stir. Strong brewed coffee can be used instead.

**Mocha**
Add 1 teaspoon instant coffee and 2 tablespoons chocolate flavoring. Sprinkle lightly with cinnamon or nutmeg if desire.

**Peanut Butter**
Add 1 tablespoon and mix in blender.

**Extracts**
Vanilla, almond, lemon, orange, mint, peppermint, black walnut. These can be found in the spice section of the grocery store. Add a few drops to taste.

**Cookies**
Vanilla wafers, Oreos®, graham crackers. Crumble into blender, blend with beverage until smooth.

**Eggnog**
Add one tablespoon powdered egg custard mix to beverage and mix in blender. Add vanilla extract or sprinkle with nutmeg. Drink may thicken if chilled.

**Yogurt**
Add 1 cup and blend until smooth.

**Ice Cream/Sherbet**
Add 1-2 scoops of your preferred flavor to beverage, mix in blender until smooth.

**Fruit**
Add ½ cup of fresh, frozen, or canned fruit such as bananas, blueberries, strawberries, pineapples, sliced peaches, and cherries. Blend with beverage until smooth.

**Syrup**
Butterscotch, chocolate, strawberry. Add 1 teaspoon and stir well.

**Other Ideas**
Malt flavoring, cinnamon, nutmeg, honey, brown sugar, powdered sugar, fruit juices, sweetened condensed milk, powdered creamer, whipped cream, candy canes.