Helping Your Child Eat During Treatment

This information will help you encourage your child to eat during cancer treatment. If your child has an eating problem that isn’t discussed in this resource, talk with their healthcare team.

How Cancer Treatment Can Affect Your Child’s Eating

The side effects of cancer treatment can change your child’s food choices and appetite. Some treatments can cause:

- Appetite loss
- Sore throat and mouth
- Dental problems
- Changed sense of taste
- Nausea (feeling like you’re going to throw up)
- Vomiting (throwing up)
- Diarrhea (loose or watery bowel movements (poop))
- Constipation (having fewer bowel movements than usual)
- Weight loss
- Weight gain
- Food aversions (dislike of certain foods)

The effects of treatment are different for everyone. Your child might not have any major eating problems during treatment. If they do have eating problems, the problems usually get better after treatment ends.
Ask your child’s doctor how their treatment might affect their eating. A pediatric clinical dietitian nutritionist can help you plan your child’s diet both at home and while you’re in the hospital. You can also read the resource *Eating Well During and After Your Cancer Treatment* (www.mskcc.org/pe/eating_cancer_treatment) for more information.

**How to Manage Symptoms**

**Appetite loss**

- Make mealtimes fun.
  - Invite a friend to join your child for meals or snacks.
  - Play music during meals.
  - Try changing the time, place, and surroundings of meals.
  - Have a picnic, even if it’s in the house.
  - Watch a favorite TV show at mealtimes.
- Don’t force your child to eat. Don’t threaten, nag, or punish them if they can’t eat enough food.
- Let your child eat whenever they’re hungry.
- Your child doesn’t need to eat just 3 meals a day. Several smaller meals throughout the day may work best. For example, offer a small snack or meal every 2 to 3 hours. Even taking a few bites or handfuls of high-calorie and high-protein foods every 30 or 60 minutes is helpful. Try offering meals at different times to see what works best for your child.
- Limit the amount your child drinks at mealtimes. Liquids are filling and may make your child too full to eat solid foods. Offer plenty of liquids at other times throughout the day.

**Sore mouth or throat**

- Try soft foods and drinks that are easy to chew and swallow, such as:
  - Yogurt (drinkable and regular)
  - Ice cream
- Milk and milkshakes
- Peach, pear, and apricot nectars (most nectars have more calories than regular juices)
- Bananas, applesauce, and other soft fruits
- Watermelon or cantaloupe
- Cottage cheese, mashed potatoes, or macaroni and cheese
- Custards
- Puddings
- Gelatin (such as Jell-O®)
- Scrambled eggs
- Oatmeal
- Cream of wheat or other cooked cereals
- Puréed or mashed vegetables (such as peas and carrots)
- Puréed meats

- Use a straw for drinking liquids.
- Try serving foods cold or at room temperature. Hot and warm foods might irritate your child’s mouth and throat. Ask your child which temperature they prefer. It might also be helpful to set up a taste test of foods and drinks at different temperatures for your child. This can help you decide how to prepare meals.
- If your child’s teeth and gums are sore, tell their dentist. They can suggest special teeth-cleaning products.
- Ask your child’s doctor about anesthetic (numbing) lozenges and sprays. These can help your child’s mouth and throat become less sensitive.
- Have your child rinse their mouth often with water. This helps to remove food and bacteria and helps their mouth heal.

**Taste changes**

- Red meat (such as beef) may taste unpleasant. If it does, give your child chicken, turkey, eggs, dairy products, or fish without a strong odor instead.
Increase the flavor of meat or fish by seasoning it with sweet juices, fruits, or citrus dressings. For example:

- Sweet and sour pork with pineapple
- Chicken with honey glaze
- London broil in Italian dressing

If your child doesn’t have a sore mouth or throat, season foods with tart flavors, such as:

- Lemon wedges
- Lemonade
- Citrus fruits
- Vinegar
- Pickled foods

Try lemon drops, mints, or chewing gum. These can help get rid of bad tastes that stay in your child’s mouth after eating.

Use plastic forks and spoons. Metal utensils may taste metallic.

Try seasonings or marinades you don’t usually use (such as garlic, onion, or other herbs and spices).

Add a small amount of sugar to foods. This can help make the food taste better and will decrease salty, bitter, or acidic tastes.

Blend fresh fruits into milkshakes, ice cream, or yogurt.

Have your child rinse their mouth before eating to help clear their taste buds. Rinse with tea, ginger ale, salted water, or water with baking soda.

Offer frozen fruits (such as cantaloupe, grapes, oranges, and watermelon).

Offer fresh vegetables. They may be more appealing than canned or frozen ones.

- If your child is neutropenic, ask their dietitian which fresh fruits and vegetables are safe to eat.

If liquids taste bad, offer drinks with a straw or use a covered drinking cup to reduce smells.
Dry mouth

- Try tart foods and drinks (such as lemonade). These foods can help your child make more saliva. Don’t try this if your child also has a tender mouth or sore throat.
- Offer sugar-free hard chewing gum, candy, or popsicles. These can help your child make more saliva.
  - Since some treatments can increase the risk of tooth decay, sugar-free versions may be better than versions with sugar. This is especially true if your child has dry mouth because they may be eating more candy and popsicles than usual.
- Offer soft and puréed foods.
- Serve food with broth, sauces, gravies, butter, or salad dressings to make them moist and easier to chew and swallow.
- Offer your child a sip of water every few minutes during meals to help make it easier to swallow and talk.
- Ask your child’s doctor or dentist about products that can help coat and protect their mouth.
- Keep your child’s lips moist with lip balms (such as Aquaphor® or A&D® ointment).

For more information, read the resource *Mouth Care During Your Cancer Treatment* ([www.mskcc.org/pe/mouth_care](http://www.mskcc.org/pe/mouth_care)).

Nausea

- Try foods such as:
  - Plain toast and crackers
  - Plain or fruit-flavored yogurt
  - Sherbet
  - Pretzels
  - Angel food cake
  - Oatmeal
- Skinless chicken (baked or broiled, not fried)
- Fruits and vegetables that are soft or bland (such as canned peaches or pears)
  - If your child is neutropenic, ask their dietitian which fruits and vegetables are safe to eat.
- Sips of clear liquids (such as water, broth, milk-free ices, Jell-O, and fruit juices)
- Sugar-free hard candies, popsicles, or ice chips

- Avoid:
  - Fatty, greasy, or fried foods (such as French fries)
  - Very sweet foods (such as rich desserts)
  - Hot and spicy foods
  - Foods with strong odors

- Offer your child small amounts of food often and slowly. For example, offer them 6 to 8 small snacks or meals instead of 3 large meals.

- Try to avoid serving meals in a room that’s too warm or has cooking smells. These may make your child feel nauseous.

- Serve foods at room temperature or cooler. Serve drinks cool or chilled. Try freezing favorite drinks in ice cube trays.

- Don’t force your child to eat their favorite foods while they’re nauseous. Doing this can make them dislike those foods later on.

- Let your child rest after meals. Being overly active after eating may slow digestion and cause nausea.

- If early-morning nausea is a problem, try offering dry toast or crackers while your child is still in bed.

- If your child has nausea during treatment, avoid giving them food for 1 or 2 hours before treatment.

For more information, read the resource *Nausea and Vomiting Due to Chemotherapy* ([www.mskcc.org/pe/nausea_vomiting_chemotherapy](http://www.mskcc.org/pe/nausea_vomiting_chemotherapy)).
Vomiting

Vomiting can happen after nausea. It can be caused by treatment, food smells, indigestion (pain or discomfort in your child’s stomach), or motion. For some children, certain settings, such as the hospital, may cause vomiting. If the vomiting is severe or lasts for more than 24 hours, contact your child’s doctor. Uncontrolled vomiting can lead to dehydration. In some cases, if you can control your child’s nausea, you can keep them from vomiting.

If your child vomits:

- Don’t give them anything to eat or drink until the vomiting is under control.
- Once you have controlled the vomiting, offer small amounts of clear liquids. When they’re able to keep down clear liquids, try a full liquid diet (such as strained cereal, pudding, yogurt, milkshakes, and cream soups). Keep offering small amounts as often as your child can keep them down. If your child feels okay on a full liquid diet, gradually work up to a regular diet.
- Ask your child’s doctor about medication to control nausea.

For more information, read the resource *Nausea and Vomiting Due to Chemotherapy* (www.mskcc.org/pe/nausea_vomiting_chemotherapy).

Diarrhea or loose bowel movements

If your child is having diarrhea that doesn’t stop, loose bowel movements more than 3 times in a 24-hour period, or both, contact their doctor. Uncontrolled diarrhea can lead to dehydration.

If your child is having diarrhea or loose bowel movements:

- Try giving them foods that are low fat and low in fiber, such as:
  - Low fat yogurt without fruit
  - Rice with broth
  - Noodles
  - Farina or cream of wheat
  - Hard-boiled eggs
  - Ripe bananas
- Canned or cooked fruit without skins
- Low fat cottage cheese
- Chicken or turkey without skin, tender or ground beef, or baked or broiled fish (not fried)

- Until the diarrhea is under control, avoid:
  - Greasy, fatty, or fried foods
  - Raw fruits and vegetables
  - High-fiber vegetables (such as broccoli, corn, beans, cabbage, and cauliflower)
  - Strong spices (such as hot pepper, curry, and Cajun spice mix)
  - High-sugar foods (such as fruit-flavored gelatin desserts)
  - Drinks with caffeine (such as soda or cocoa)
  - Carbonated (fizzy) drinks

- Offer small amounts of foods and liquids throughout the day instead of 3 large meals.

- Offer liquids at room temperature. Avoid serving very hot or cold foods.

- Serve solid foods and liquids that contain sodium (salt) and potassium. These minerals are often lost when someone is having diarrhea.
  - Foods high in salt include bouillon and fat-free broths.
  - Foods high in potassium include bananas, boiled or mashed potatoes, peaches, and apricots.

For more information, read the resource Diarrhea (www.mskcc.org/pe/diarrhea).

**Constipation**

- To control constipation, offer your child a hot drink about 30 minutes before they usually have a bowel movement. It may be best to do this in the morning and 1 hour after meals.

- Offer high-fiber foods along with plenty of liquids. Eating more fiber without drinking enough liquids can make constipation worse. High-fiber foods
include:
- Whole-grain breads and cereals
- Brown rice
- Dried fruits, such as raisins and prunes
- Raw fruits and vegetables (such as cauliflower, peas, apples, pears, oranges, and berries).
  - If your child is neutropenic, ask your child’s dietitian which fruits and vegetables are safe to eat.
- Give plenty of liquids.
- Keep the skins on raw and cooked fruits and vegetables to increase the amount of fiber.
- Add wheat bran to foods such as casseroles and homemade breads.
- When possible, encourage your child to exercise. Talk to their doctor or a physical therapist about the amount and type of exercise that’s right for your child.

For more information, read the resource Constipation (www.mskcc.org/pe/constipation) or watch the video How to Manage Constipation During Chemotherapy (www.mskcc.org/pe/chemo_constipation).

Weight loss
When your child is eating less than usual, make every bite count. Your healthcare team may recommend that you offer high-calorie and high-protein foods. Protein helps to keep your child’s body strong and helps it rebuild itself. High-calorie foods help your child keep a healthy weight.

Weight gain
If your child is taking certain medications, such as prednisone (Deltasone®) or dexamethasone (Ozurdex®, Maxidex®), the side effects may include an increase in appetite and weight gain.
  - Talk to your doctor about the weight gain. They can explain why it’s happening.
  - Don’t put your child on a weight-loss diet unless your doctor recommends it.
If your child has a big appetite, your dietitian can help you plan healthy meals and snacks.

**Dental problems**

Certain cancer treatments, including radiation to the head or neck and high-dose chemotherapy before a stem cell transplant, can cause tooth decay. Snacking often and eating sugary foods can also affect your child’s teeth.

- Encourage your child to brush their teeth after snacks and meals.
- Visit your child’s dentist regularly.
- Use soft toothbrushes, especially when your child’s gums or teeth are sensitive.
- Make sure your child rinses their mouth with warm water.
- Limit how much chewy candy your child eats.

**How to Increase Calories and Protein**

Use the foods listed below to increase the amount of calories in your child’s foods. All of the calorie counts below are estimated. Different brands may have different calorie counts.

To keep them from choking, infants and children under 4 years old should always be watched during mealtimes. This is most important when offering small food items (such as nuts, popcorn, fruit chunks, grapes, a spoonful of peanut butter, hard cheese cubes, cubed meat, and hot dogs).

**Avocado (50 calories in 2 tablespoons)**

- Spread on crackers or toast.
- Toss diced avocado into salads or egg omelets.
- Purée avocado with lemon juice and a pinch of salt to make a salad dressing.
- Add sliced avocado to a sandwich.
Butter and margarine (100 calories in 1 tablespoon)

- Add to soups, mashed and baked potatoes, hot cereals, grits, rice, noodles, and cooked vegetables.
- Stir into creamy soups, sauces, and gravies.
- Combine with herbs and seasonings and spread on cooked meats, hamburgers, and fish and egg dishes.
- Use melted butter or margarine as a dip for seafood (such as shrimp, scallops, crab, and lobster).

Whole milk (150 calories in 8 ounces)
Heavy cream (50 calories in 1 tablespoon)

- Fold into mashed potatoes or vegetable purées.
- Use in creamy soups, sauces, egg dishes, batters, puddings, and custards.
- Put on hot or cold cereal.
- Mix with noodles, pasta, rice, and mashed potatoes.
- Pour on chicken and fish while baking.
- Use as a binder in hamburgers, meatloaf, and croquettes.
- Use whole milk instead of low-fat milk.
- Use cream instead of milk in recipes.
- Make hot chocolate with cream and add marshmallows.

Cheese (100 calories in 1 ounce)

- Melt on top of casseroles, potatoes, and vegetables.
- Add to omelets, sandwiches, and vegetables.
- Add extra to pizza.
- Try cheese sticks.
Cream cheese (50 calories in 1 tablespoon)
- Spread on breads, muffins, fruit slices, and crackers.
- Roll into balls and coat with chopped nuts, wheat germ, or granola.

Sour cream (26 calories in 1 tablespoon)
- Add to creamy soups, baked potatoes, macaroni and cheese, vegetables, sauces, salad dressings, stews, baked meat, and fish.
- Use as a topping for cakes, fruit, gelatin desserts, breads, and muffins.
- Use as a dip for fresh fruits and vegetables.
- Scoop onto fresh fruit, add brown sugar, and chill.

Salad dressings and mayonnaise (100 calories in 1 tablespoon)
- Use as a spread on sandwiches.
- Combine with meat, fish, and egg or vegetable salads.
- Use as a binder in croquettes.

Honey or jam (60 calories in 1 tablespoon)
Sugar (48 calories in 1 tablespoon)
- Add to bread, cereal, milk drinks, and fruit and yogurt desserts.
- Use as a glaze for meats, such as chicken.

Granola (200 to 300 calories in ½ cup)
- Use in cookie, muffin, and bread batters and parfaits.
- Sprinkle on yogurt, ice cream, pudding, custard, and fruit.
- Layer with fruits and bake.
- Mix with dry fruits and nuts for a snack.
- Substitute for bread or rice in pudding recipes.
Dried fruits such as raisins, prunes, apricots, dates, and figs *(100 calories in 1 to 2 ounces)*

- Try cooking dried fruits. Serve them for breakfast in warm cereals or as a dessert or snack.
- Add to muffins, cookies, breads, cakes, rice and grain dishes, cereals, puddings, and stuffing.
- Bake in pies and turnovers.
- Combine with cooked vegetables (such as carrots, sweet potatoes, yams, and acorn and butternut squash).
- Combine with nuts or granola for snacks.

**Premium ice cream (150 to 270 calories in 4 ounces)**  
**Yogurt (150 calories in 8 ounces)**  
**Frozen yogurt (117 calories in 4 ounces)**

- Add to carbonated beverages (such as ginger ale, root beer, or cola).
- Add to milk drinks, such as milkshakes.
- Add to cereal, fruit, gelatin desserts, and pies. Blend or whip with soft or cooked fruits.
- Sandwich ice cream or frozen yogurt between cake slices, cookies, or graham crackers.
- Make breakfast drinks with fruit.

**Eggs (80 calories in 1 egg)**

- Add chopped, hard-boiled eggs to salads and dressings, vegetables, casseroles, and creamed meats.
- Add extra eggs or egg whites to quiches and pancake and French toast batter.
- Add extra egg whites to scrambled eggs and omelets.
- Make custard with eggs, milk, and sugar.
- Add extra hard-boiled yolks to deviled-egg filling and sandwich spreads.
- Don’t use raw or undercooked eggs. They can carry harmful bacteria.
Undercooked foods can make your child sick, especially when their immune system is weakened during treatment.

**Nuts, seeds, and wheat germ (25 calories in 1 tablespoon)**

- Add to casseroles, breads, muffins, pancakes, cookies, and waffles.
- Sprinkle onto fruit, cereal, ice cream, yogurt, vegetables, salads, and toast as a crunchy topping.
- Use in place of bread crumbs.
- Blend with parsley or spinach, herbs, and cream for a noodle, pasta, or vegetable sauce.
- Roll a banana in chopped nuts.

**Peanut butter (95 calories in 1 tablespoon)**

- Spread on sandwiches, toast, muffins, crackers, waffles, pancakes, and fruit slices.
- Use as a dip for raw vegetables, such as carrots and celery. Make sure the vegetables are well washed if your child is neutropenic.
- Blend with milk drinks and beverages.
- Swirl in soft ice cream and yogurt.

**Meat (about 120 to 200 calories in 3 ounces)**

**Fish (about 100 to 175 calories in 3 ounces)**

- Add chopped, cooked meat or fish to vegetables, salads, casseroles, soups, and sauces.
- For added protein and a tasty snack, wrap cooked meat or fish into homemade or store-bought biscuit dough or pie crust and bake.
- Use in omelets, quiches, sandwich fillings, and chicken and turkey stuffing.
- Add to stuffed baked potatoes.
Legumes such as peas, beans, and lentils (about 100 to 200 calories in 8 ounces)

- Cook and use in soups.
- Add to casseroles, pastas, and grain dishes that contain cheese or meat.
- Mash cooked beans with cheese and milk.
- Nachos with melted cheese.

Quick and Easy Snack Ideas

- Popcorn (plain or buttered)
- Fresh fruit chunks (canned or dried fruit can also be used)
- Cereal
- Cheese cubes with crackers or fruit
- Chicken or fish spreads on crackers or breads
- Dips made with cheese, beans, or sour cream
- Granola on yogurt, ice cream, pudding, hot cereal, pancakes, or canned or fresh fruit
- Guacamole on breads, crackers, or chips
- Milkshakes or “instant breakfast” drinks
- Nuts
- Peanut butter (spread on fruit, cracker, or eaten with jam or jelly on bread)
- Pita bread and hummus
- Pizza bagel or English muffin
- Puddings and custards
- Raw vegetables and dip
- Whole or 2% milk (chocolate or plain)
- Non-dairy milk (soy, almond, oat, pea protein)
- Yogurt with fruit
- Yogurt and fruit shakes
# Smoothie Recipes

For the following recipes, put the ingredients into a blender and blend until smooth.

## Breakfast Smoothie

<table>
<thead>
<tr>
<th>Ingredients:</th>
<th>Nutritional content:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- ½ cup of milk</td>
<td>- 560 calories</td>
</tr>
<tr>
<td>- ¼ of an apple (peeled)</td>
<td>- 27 grams of protein</td>
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<tr>
<td>- ½ cup of granola</td>
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<tr>
<td>- ¼ cup of plain, whole-milk Greek yogurt</td>
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<tr>
<td>- ½ of a medium banana</td>
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<tr>
<td>- 1 tablespoon of honey</td>
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<tr>
<td>- 3 drops of vanilla extract</td>
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<tr>
<td>- 4 cubes of ice</td>
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## Banana Smoothie (2 servings)

<table>
<thead>
<tr>
<th>Ingredients:</th>
<th>Nutritional content:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- ½ cup of milk</td>
<td>- 405 calories</td>
</tr>
<tr>
<td>- 1 ½ medium bananas</td>
<td>- 10 grams of protein</td>
</tr>
<tr>
<td>- ½ cup of plain, whole-milk Greek yogurt</td>
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<tr>
<td>- 2 teaspoons of honey</td>
<td></td>
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<tr>
<td>- 3 drops of vanilla extract</td>
<td></td>
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<tr>
<td>- 4 cubes of ice</td>
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</tbody>
</table>

## Caribbean Craze Smoothie (2 servings)

<table>
<thead>
<tr>
<th>Ingredients:</th>
<th>Nutritional content:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- ½ cup of coconut milk</td>
<td>- 435 calories</td>
</tr>
<tr>
<td>- ¼ cup of pineapple (canned)</td>
<td>- 8 grams of protein</td>
</tr>
<tr>
<td>- ¼ cup of orange juice</td>
<td></td>
</tr>
<tr>
<td>- ½ cup of plain, whole-milk Greek yogurt</td>
<td></td>
</tr>
<tr>
<td>- 1 teaspoon of honey</td>
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</tr>
<tr>
<td>- 3 drops of vanilla extract</td>
<td></td>
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<tr>
<td>- 4 cubes of ice</td>
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</tbody>
</table>
## S’mores Smoothie (2 servings)

**Ingredients:**
- ½ cup of coconut milk
- 1 medium banana
- 4 graham crackers
- ½ cup of plain, whole-milk Greek Yogurt
- 2 teaspoons of chocolate sauce
- 3 drops of vanilla extract
- 2 teaspoons of honey
- 4 cups of ice

**Nutritional content:**
- 720 calories
- 16 grams of protein

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### Oral Nutritional Supplements

If your child isn’t getting enough calories and protein from their diet alone, your healthcare team may suggest oral nutritional supplements. You can get these supplements as liquids, powders, or oils. Some supplements can be added to foods, while others can be eaten alone to add extra calories and protein to your child’s diet. Most supplements are lactose-free, which means that your child can have them even if they have trouble digesting milk products.

MSK doesn’t endorse any of the products listed below. All supplements are kosher except Super Soluble Duocal®.

<table>
<thead>
<tr>
<th>Brand</th>
<th>Description</th>
<th>Nutritional Content</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carnation Breakfast Essentials® (Nestlé)</td>
<td>• Milk-based, flavored, sweetened powder that can be mixed with milk or water</td>
<td>280 calories and 13 grams of protein when mixed with 6 ounces of whole milk.</td>
<td>• Available with and without lactose</td>
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<tr>
<td></td>
<td>• Available in chocolate, vanilla, and strawberry flavors</td>
<td></td>
<td>• Some versions come with extra fiber, more calories, and extra protein</td>
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<tr>
<td></td>
<td>• Also available in premixed, ready-to-drink containers</td>
<td></td>
<td>• Some versions are sugar-free</td>
</tr>
<tr>
<td>PediaSure® (Abbott Nutrition)</td>
<td>• Milk-based, flavored, sweetened liquid</td>
<td>240 calories and 7 grams of protein in each 8-ounce serving.</td>
<td>• Suitable for lactose intolerance</td>
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<tr>
<td></td>
<td>• Available in vanilla, chocolate, strawberry, banana,</td>
<td></td>
<td>• Gluten-free</td>
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<td></td>
<td></td>
<td></td>
<td>• Available with or without fiber</td>
</tr>
<tr>
<td>Product Name</td>
<td>Description</td>
<td>Calories and Protein</td>
<td>Special Features</td>
</tr>
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| Scandishake® (Aptalis Pharma US, Inc.)            | • Powdered, high-calorie shake  
• Available in vanilla, chocolate, and strawberry flavors | 600 calories and 12 grams of protein when mixed with 8 ounces of whole milk. | • Available in lactose-free version                    |
| PediaSure® Peptide (Abbott Nutrition)            | • Milk-based, sweetened, liquid drink  
• Available in vanilla and strawberry flavors | 237 calories and 7 grams of protein in each 8-ounce serving. | • Made especially for children with diarrhea and other stomach problems, including nausea and digestion problems  
• Gluten-free |
| Ensure Original® (Abbott Nutrition)              | • Milk-based shake  
• Available in vanilla, milk chocolate, dark chocolate, strawberry, coffee latte, and butter pecan flavors | 220 calories and 9 grams of protein in each 8-ounce serving. The higher calorie version, Ensure Plus®, has 350 calories and 13 grams of protein in each 8-ounce serving. | • Gluten-free  
• Appropriate for those who are lactose intolerant |
| Ensure Clear® (Abbott Nutrition)                 | • Clear liquid drink  
• Available in peach, blueberry pomegranate, and mixed fruit flavors | 180 calories and 9 grams of protein in each 10-ounce serving. | • Lactose-free, fat-free, gluten-free  
• Refrigerate after opening |
| Ensure Clear® Therapeutic Nutrition (Abbott Nutrition) | • Clear fruit drink  
• Available in apple and mixed berry flavors | 200 calories and 7 grams of protein in each 6.8-ounce serving. |                                                      |
| Resource Breeze® (Nestlé)                        | • Fruit drink  
• Available in peach, orange, and wild berry flavors | 250 calories and 9 grams of protein in each 8-ounce | • Lactose-free  
• Fat-free  
• Refrigerate after |
<table>
<thead>
<tr>
<th>Product</th>
<th>Serving Information</th>
<th>Opening Information</th>
</tr>
</thead>
</table>
| Super Soluble Duocal® (Nutricia) | - Unflavored, powdered calorie and fat booster  
- For children ages 1 year and older  
- Can be mixed in foods and drinks | 25 calories in each scoop.  
- Use only as directed by your dietitian or doctor  
- After opening, use within 1 month |
| Nutricost™ Protein Powder | - Unflavored, 100% whey protein powder  
- For children 5 years or older  
- Can be mixed in foods and drinks | 140 calories and 30 grams of protein in each scoop.  
- Use only as directed by your dietitian or doctor  
- After opening, use within 1 month |

**Contact information for buying oral nutritional supplements**

**Abbott Nutrition**  
1-800-227-5767  
[www.abbottnutrition.com](http://www.abbottnutrition.com)

**Nestlé**  
800-422-ASK2 (800-422-2752)  
[www.neslehealthscience.us](http://www.neslehealthscience.us)

**Nutricia**  
800-365-7354  
[www.nutricia-NA.com](http://www.nutricia-NA.com)

**Frequently Asked Questions**

**My child is neutropenic and their doctor says they should follow a low-microbial diet. What can my child eat?**

Your child’s dietitian or nurse will give you guidelines on how to follow a low-microbial diet. Read the resource *Low-Microbial Diet* ([www.mskcc.org/pe/low_microbial_diet](http://www.mskcc.org/pe/low_microbial_diet)) for more help with meal planning.
Can my child have sugar?
Yes. There isn’t enough scientific evidence to show that avoiding sugar will prevent cancer growth or cancer recurrence (coming back).

Naturally occurring sugars (such as those found in fruits, vegetables, and dairy) are part of a balanced diet. We don’t recommend restricting foods unless your child’s medical team or dietitian recommends to.

Is there anything my child can eat to help their white blood cell counts increase?
There aren’t any supplements or specific foods known to increase white blood cell counts. Iron supplements can be used to increase red blood cells, but not white blood cells. Speak with your child’s doctor for more guidance.

Is there anything my child can eat to help strengthen their immune system?
The best way for your child to strengthen their immune system is to eat a healthy high-calorie and high-protein diet that includes many different foods.

What foods should my child avoid while getting chemotherapy?
There are specific dietary guidelines for some chemotherapy medications. Your child’s doctor will give you this information. Otherwise, offer a variety of foods to keep your child as healthy as possible during treatment.

Why do my child’s potassium and magnesium levels sometimes drop during treatment?
Some chemotherapy medications (such as cisplatin) can make your child lose magnesium and potassium. The magnesium and potassium are removed from their body through their urine. Normal levels of magnesium and potassium are needed to keep the heart and nervous system healthy. If your child is taking a chemotherapy medication that affects their potassium and magnesium levels, your doctor will tell you how to keep their levels in a normal range.

Should my child avoid dairy?
There isn’t any scientific evidence that shows a strong link between dairy products and pediatric cancers. Dairy is the best source of calcium, and your child needs calcium to grow. We recommend that your child get calcium from healthy dairy products, as well as other sources, such as leafy green vegetables.
Are there any vitamins, minerals, or herbal supplements my child can take?

Talk with your child’s healthcare team before giving your child any herbal remedies, botanical home remedies, or other dietary supplements during treatment. They can stop treatment from working as it should. Don’t give your child any vitamin, mineral, or herbal supplements during treatment, unless your doctor approves. There isn’t any scientific evidence that dietary supplements or herbal remedies can cure cancer or stop it from coming back.

For more information, read the resource *Herbal Remedies and Cancer Treatment* ([www.mskcc.org/pe/herbal_remedies](www.mskcc.org/pe/herbal_remedies)). You can also visit the MSK Integrative Medicine Service website, “About Herbs, Botanicals & Other Products” at [www.aboutherbs.com](http://www.aboutherbs.com).

**Resources for Patients and Caregivers**

**MSK resources**

You can find these resources online, or you can ask your nurse or dietitian.

- *Constipation* ([www.mskcc.org/pe/constipation](http://www.mskcc.org/pe/constipation))
- *Diarrhea* ([www.mskcc.org/pe/diarrhea](http://www.mskcc.org/pe/diarrhea))
- *Eating Well During and After Your Cancer Treatment* ([www.mskcc.org/pe/eating_cancer_treatment](http://www.mskcc.org/pe/eating_cancer_treatment))
- *Herbal Remedies and Cancer Treatment* ([www.mskcc.org/pe/herbal_remedies](http://www.mskcc.org/pe/herbal_remedies))
- *How to Manage Constipation During Chemotherapy* ([www.mskcc.org/pe/chemo_constipation](http://www.mskcc.org/pe/chemo_constipation))
- *Low-Microbial Diet* ([www.mskcc.org/pe/low_microbial_diet](http://www.mskcc.org/pe/low_microbial_diet))
- *Mouth Care During Your Cancer Treatment* ([www.mskcc.org/pe/mouth_care](http://www.mskcc.org/pe/mouth_care))
- *Nausea and Vomiting Due to Chemotherapy* ([www.mskcc.org/pe/nausea_vomiting_chemotherapy](http://www.mskcc.org/pe/nausea_vomiting_chemotherapy))
- *Neutropenia (Low White Blood Cell Count)* ([www.mskcc.org/pe/neutropenia](http://www.mskcc.org/pe/neutropenia))
External resources

American Cancer Society (ACS)
www.cancer.org
800-227-2345
Has information on diet and other cancer-related topics.

CancerCare
www.cancercare.org
800-813-4673 (800-813-HOPE)
Has information and resources for people living with cancer, including support groups and education.

American Institute for Cancer Research
www.aicr.org
800-843-8114
Has information on diet and cancer prevention research and education.

National Cancer Institute (NCI)
www.cancer.gov
800-422-6237 (800-4-CANCER)
Has information about cancer, including summaries of treatment guidelines, research news, clinical trial listings, links to medical literature, and more.

National Comprehensive Cancer Network (NCCN)
www.nccn.org
215-690-0300
Has information and resources for people living with cancer and their caregivers, including support groups and education.

NIH Office of Dietary Supplements (ODS)
dietary-supplements.info.nih.gov
301-435-2920
Has information about individual vitamins, minerals, and other dietary supplements.
**Cookbooks**

*American Cancer Society’s Healthy Eating Cookbook: a Celebration of Food, Friends, and Healthy Living* (4th ed.)
Publisher: American Cancer Society

*What to Eat During Cancer Treatment: 100 Great Tasting, Family Friendly Recipes to Help You Cope*
By: Jeanne Besser, Kristina Ratley, Sheri Knecht, and Michele Szafranski
Publisher: American Cancer Society

*American Cancer Society Complete Guide to Nutrition for Cancer Survivors: Eating Well, Staying Well During and After Cancer* (2nd ed.)
Publisher: American Cancer Society

*The Cancer Survival Cookbook: 200 Quick & Easy Recipes With Helpful Eating Hints*
Authors: Christina Marino and Donna Weihofen
Publisher: Houghton Mifflin Harcourt

*Easy-to-Swallow, Easy-to Chew Cookbook: Over 150 Tasty and Nutritious Recipes for People Who Have Difficulty Swallowing*
Authors: Donna Weihofen, Joanne Robbins, and Paula Sullivan
Publisher: Houghton Mifflin Harcourt

*The I Can’t Chew Cookbook: Delicious Soft Food Recipes for People With Chewing, Swallowing, and Dry Mouth Disorders*
Author: J. Randy Wilson
Publisher: Hunter House

*Available in electronic format.*

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If you have any questions, contact a member of your healthcare team directly. If you're a patient at MSK and you need to reach a provider after 5:00 PM, during the weekend, or on a holiday, call 212-639-2000.

For more resources, visit [www.mskcc.org/pe](http://www.mskcc.org/pe) to search our virtual library.