

## Helping Your Child Eat During Cancer Treatment

This resource has tips for helping your child tolerate food and manage related discomfort during cancer treatment.

If your child has a different eating problem, talk with their healthcare provider.

### How treatment can affect appetite and eating

The side effects of treatment can change your child's food choices and appetite (desire to eat). Your child can have trouble eating during treatment. This usually gets better after treatment ends. Ask your child's doctor how their treatment can affect eating.

A pediatric clinical dietitian nutritionist can help you plan your child's diet in the hospital and when they're home. Read *Eating Well During Your Cancer Treatment* ([www.mskcc.org/pe/eating-cancer-treatment](http://www.mskcc.org/pe/eating-cancer-treatment)) to learn more.

### Side effects and symptoms of cancer treatment

Side effects of treatment are different for everyone. Some treatments can cause:

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| <ul style="list-style-type: none"><li>• Loss of appetite</li><li>• Sore mouth or throat</li><li>• Changes in taste</li><li>• Dry mouth</li><li>• Dental problems</li><li>• Weight gain or loss</li></ul> | <ul style="list-style-type: none"><li>• Nausea (feeling like you're going to throw up) and vomiting (throwing up)</li><li>• Diarrhea (loose or watery poop)</li><li>• Constipation (having fewer bowel movements than usual)</li></ul> |
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# How to manage symptoms that affect feeding or eating during treatment

## Infants (under 12 months old)

The American Academy of Pediatrics recommends the following feeding goals for infants below the age of 12 months:

- For the first 6 months, feed breastmilk only. After 6 months, you can choose to keep breastfeeding until age 2 to supplement other food.
- If you cannot breastfeed, feed infants age-appropriate infant formula.
- Start to introduce solid food when infants can sit up and keep their head upright and steady without help. This usually happens around 6 months. Try feeding different foods and textures, such as puréed foods and soft finger foods. Examples include sliced avocado spears or half of a ripe banana. If you're not sure of the right textures to feed your infant, talk to a pediatric clinical dietitian nutritionist.

These feeding goals are the same for infants getting cancer treatment. The side effects of their treatment may make it harder for them to feed. Because of their young age, they may not be able to tell you what their symptoms are. This can make it hard to understand what symptoms are affecting them the most.

- Your infant may not be able to finish their usual amount when bottle feeding. Feed them less formula or breast milk more often.
- If your infant is breastfeeding for less time, try on-demand or cluster feeding instead of keeping a feeding schedule. If you can pump, try pumping and feeding them breastmilk in a bottle.
- If your infant has trouble feeding enough, you can give them more calories in their formula or pumped breastmilk. A pediatric clinical dietitian nutritionist can help with this.
- When starting solids, avoid trying a new food or new texture during chemotherapy cycles. It can be hard to tell whether your infant is having side effects from chemotherapy or having trouble with the food.

- Some first foods that are high in nutrients include:
  - Animal proteins, such as meat or chicken.
  - Mashed or puréed lentils.
  - Avocado.
- When starting solids, it's important to introduce mashed or pureed fruit and vegetables. This includes berries, sweet potatoes, and bananas.
- Some foods are considered allergens. Introduce them with caution. This includes eggs, yogurt, and salmon. It is very important to avoid introducing new allergens during chemotherapy cycles or when starting new medicine. Talk with your healthcare provider and pediatric clinical dietitian before you introduce possible allergens.

If you notice your infant is still struggling to meet formula goals, watch for signs of dehydration, such as:

- Having no tears when crying.
- Fewer wet diapers.
- Being more fussy than usual.
- Dry mouth or tongue.

If you notice any of these signs, call your care team.

## Children (older than 1 year)

- **Let your child eat when they're hungry.** Eating smaller meals more often may work best for them. They may eat more than 3 meals a day. For example, offer a small snack or “mini meal” every 2 to 3 hours. Even a few bites or handfuls of foods high in calories and protein every 30 or 60 minutes is helpful.  
Read the “How to add calories and protein to your child’s diet” section of this resource to learn more.

- **Limit the amount your child drinks during mealtimes.** Liquids are filling and can make your child too full to eat solid foods. Offer plenty of liquid throughout the day. This includes high-calorie options such as milkshakes, smoothies, dairy, or plant-based milk.
- **Make mealtimes fun.** Try changing the time and place of meals to see what works. Invite a friend to join your child for meals or snacks. Plan a picnic, even if it's in the house. Play music or watch a favorite TV show during meals.
- **Do not force your child to eat.** Do not threaten, nag, or punish them if they cannot eat enough food.

## How to treat a sore mouth or throat

During treatment, have your child rinse their mouth often with water. This helps remove food and bacteria and helps their mouth heal. Give them a straw for drinking liquids.

Hot and warm food can bother your child's mouth and throat. Instead, try giving them cold food or food at room temperature (68° to 72° F, or 20° to 22° C). Have them try food and drinks at different temperatures. Ask them which temperature they prefer. This will help you decide how to make their meals.

Try soft food and drinks that are easy to chew and swallow, such as:

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| <ul style="list-style-type: none"> <li>• Yogurt, including drinkable yogurt, such as Go-GURT®.</li> <li>• Ice cream, milk, and milkshakes.</li> <li>• Peach, pear, and apricot nectars. Most nectars have more calories than regular juices.</li> <li>• Bananas, applesauce, and other soft fruit.</li> <li>• Watermelon or cantaloupe.</li> <li>• Custards or puddings.</li> </ul> | <ul style="list-style-type: none"> <li>• Cottage cheese, mashed potatoes, or macaroni and cheese.</li> <li>• Gelatin, such as Jell-O®.</li> <li>• Scrambled eggs.</li> <li>• Oatmeal, cream of wheat, or other cooked cereals.</li> <li>• Puréed or mashed vegetables, such as peas and carrots.</li> <li>• Puréed meats.</li> </ul> |
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Ask your child's doctor about anesthetic (A-nes-THEH-tik) lozenges and sprays. These help numb their mouth and throat to make them less sensitive. This can make eating more comfortable.

If your child's teeth and gums are sore, tell their dentist. They can suggest special products to clean your child's teeth.

## How to manage taste changes during treatment

Have your child rinse their mouth using tea, ginger ale, salted water, or water with baking soda before they eat. This helps clear their taste buds.

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

Red meat, such as beef, can taste unpleasant. Instead, try:

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| <ul style="list-style-type: none"><li>• Poultry, such as chicken or turkey</li><li>• Fish without a strong odor (smell)</li><li>• Eggs</li><li>• Dairy products</li></ul> | <ul style="list-style-type: none"><li>• Beans</li><li>• Tofu</li><li>• Peanut butter</li></ul> |
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If your child does not have a sore mouth or throat, season food with tart flavors. These flavors can be easier to taste. Try using citrus fruits such as lemon, lime, or orange, or citrus juices such as lemonade or orange juice. You can also use vinegar or try pickled food, such as pickled vegetables.

Flavor food with seasonings or marinades you don't usually use. Try garlic, onion, or other herbs and spices.

Season meat or fish with sweet juices, fruits, or citrus dressings. For example, season sweet and sour pork with pineapple, or chicken with honey glaze. Add a small amount (less than 1 teaspoon) of sugar to food. This helps the food taste better and less salty, bitter, or acidic.

Blend fresh fruit into milkshakes, ice cream, or yogurt. You can also offer your child frozen fruit, such as cantaloupe, grapes, and watermelon.

Fresh vegetables may have more appeal than canned or frozen ones. If your child has neutropenia (low white blood cell count), ask their clinical dietitian nutritionist how to safely handle fruits and vegetables. Read *Neutropenia (Low White Blood Cell Count)* ([www.mskcc.org/pe/neutropenia](http://www.mskcc.org/pe/neutropenia)) to learn more.

Have your child try lemon drops, mints, or chewing gum. They help get rid of bad tastes that stay in their mouth after they eat. Make sure your child brushes their teeth well after eating candy to prevent cavities.

## How to treat dry mouth

Offer things that help make more saliva. This includes tart food and drinks, such as lemonade. Do not try this if your child also has a sore mouth or throat. You can also try sugar-free hard chewing gum, candy, or popsicles.

Some treatments can raise the risk of tooth decay. Sugar-free gum, candy, or popsicles can be better than ones with sugar. This is very true if your child has dry mouth from eating more candy and popsicles than usual.

Ask your child's doctor or dentist about products that can help coat and protect their mouth. Read *Mouth Care During Your Cancer Treatment* ([www.mskcc.org/pe/mouth-care](http://www.mskcc.org/pe/mouth-care)) to learn more.

Give your child food with broth, sauce, gravy, butter, or salad dressing. These make food moist and easier to chew and swallow.

Offer soft and puréed foods. Have them take a sip of water every few minutes during meals. This makes it easier to swallow and talk.

Keep your child's lips moist with lip balm, such as Aquaphor® or A&D® ointment.

## How to treat nausea and vomiting

### Nausea

Offer small amounts of food often and slowly throughout the day. This can help prevent nausea and manage nausea from treatment. For example, offer 6 to 8 small snacks or meals, not 3 large meals.

Avoid serving meals in a room that's too warm or has cooking smells, if you can. They can make your child feel nauseous.

If your child has nausea during treatment, avoid giving them food for 1 to 2 hours before treatment. If early-morning nausea is a problem, offer dry toast or

crackers right after they wake up.

Do not force your child to eat their favorite foods while they're nauseous. That can make them dislike those foods later.

Serve foods at room temperature or cooler, and drinks that are cool or chilled. Try freezing their favorite drinks in popsicle molds.

Let your child rest for at least 1 hour after meals. Being too active after eating can slow digestion and cause nausea.

Try giving foods that help with nausea, such as:

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| <ul style="list-style-type: none"><li>• Plain toast and crackers.</li><li>• Plain or fruit-flavored yogurt.</li><li>• Fruits and vegetables that are soft or bland, such as canned peaches or pears.</li><li>• Skinless chicken that is baked or broiled, not fried.</li></ul> | <ul style="list-style-type: none"><li>• Oatmeal.</li><li>• Pretzels.</li><li>• Angel food cake.</li><li>• Sherbet or sorbet.</li><li>• Sips of clear liquids, such as water, broth, milk-free ices, Jell-O, and fruit juices.</li></ul> |
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If your child has neutropenia, ask their clinical dietitian nutritionist how to safely handle fruits and vegetables.

Avoid foods that cause nausea, such as:

- Fatty, greasy, or fried food, such as French fries.
- Hot and spicy food.
- Very sweet food, such as rich desserts.
- Food with strong odors.

## Vomiting

Your child may vomit (throw up) after feeling nauseous. Vomiting can be caused by treatment, smells, indigestion (pain or discomfort in your child's stomach), or movement. For some children, being in certain places, such as the hospital, can make them throw up.

If the vomiting lasts for more than 24 hours, call your child's doctor.

Uncontrolled vomiting can cause dehydration. In some cases, if you can control your child's nausea, you can stop them from throwing up.

If your child vomits, do not give them anything to eat or drink. Wait until they stop vomiting. Then, offer small amounts of clear liquids such as water, tea, clear broth, or Jell-O®. Read *Clear Liquid Diet* ([www.mskcc.org/pe/clear-liquid-diet](http://www.mskcc.org/pe/clear-liquid-diet)) to learn more.

When they're able to have clear liquids without throwing up, slowly start offering foods they normally eat. Keep offering small amounts of liquid as often as your child can drink without throwing up.

If your child does not feel nauseous or vomit, slowly work up to a regular diet. Ask their doctor about medicine to help control their nausea.

Read *Managing Nausea and Vomiting* ([www.mskcc.org/pe/nausea\\_vomiting](http://www.mskcc.org/pe/nausea_vomiting)) to learn more.

## How to manage diarrhea

Diarrhea can cause dehydration. Call your child's doctor if they have loose bowel movements more than 3 times in a 24-hour period.

If your child has diarrhea or loose bowel movements, offer foods that are low in fat and fiber. This includes:

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| <ul style="list-style-type: none"><li>• Low-fat yogurt without fruit.</li><li>• Rice with broth.</li><li>• Noodles.</li><li>• Farina or cream of wheat.</li><li>• Hard-boiled eggs.</li><li>• Ripe bananas</li></ul> | <ul style="list-style-type: none"><li>• Canned or cooked fruit without skins.</li><li>• Low-fat cottage cheese.</li><li>• Chicken or turkey without the skin.</li><li>• Tender or ground beef.</li><li>• Baked or broiled fish (not fried).</li></ul> |
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Until the diarrhea stops, avoid:

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| <ul style="list-style-type: none"><li>• Vegetables high in fiber, such as broccoli, corn, beans, cabbage, and cauliflower.</li><li>• Greasy, fatty, or fried foods.</li><li>• Carbonated (fizzy) drinks.</li></ul> | <ul style="list-style-type: none"><li>• Foods high in sugar, such as fruit-flavored gelatin desserts.</li><li>• Strong spices, such as hot pepper, curry, and Cajun spice mix.</li><li>• Fruit juices.</li></ul> |
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Offer small amounts of food and liquid throughout the day. Do not offer 3 large meals. Offer liquid at room temperature and avoid serving very hot or very cold food.

Give your child solid foods and liquids that have sodium (salt) and potassium. This helps to replace minerals lost during diarrhea. Foods high in salt include bouillon and fat-free broths. Foods high in potassium includes bananas, boiled or mashed potatoes, peaches, and apricots.

Read *Managing Diarrhea* ([www.mskcc.org/pe/diarrhea](http://www.mskcc.org/pe/diarrhea)) to learn more.

## How to manage constipation

To control constipation, give your child plenty of liquids. Offer them a warm or hot drink about 30 minutes before they usually have a bowel movement (poop). It may be best to do this when they first wake up, 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. Foods high in fiber include:

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| <ul style="list-style-type: none"><li>• Whole-grain breads and cereals.</li><li>• Brown rice.</li><li>• Wheat bran added to food such as casseroles and homemade breads.</li></ul> | <ul style="list-style-type: none"><li>• Dried fruits, such as raisins and prunes.</li><li>• Raw or cooked fruits and vegetables, such as cauliflower, peas, apples, pears, oranges, and berries.</li></ul> |
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Leave the skins on raw fruits and vegetables to raise the amount of fiber. If your child has neutropenia, ask their clinical dietitian nutritionist how to safely handle fruits and vegetables.

When possible, try to get your child to move and be active. Talk to their doctor or a physical therapist about the amount and type of physical activity that's right for them.

Read *How to Manage Constipation* ([www.mskcc.org/pe/constipation](http://www.mskcc.org/pe/constipation)) or watch *How To Manage Constipation During Chemotherapy* ([www.mskcc.org/pe/constipation-during-chemo](http://www.mskcc.org/pe/constipation-during-chemo)) to learn more.

## How to manage dental problems

Some cancer treatments cause tooth decay. Treatments include radiation to the head or neck, and high-dose chemotherapy before a stem cell transplant. Visit your child's dentist regularly.

Snacking often and eating sugary foods can also harm teeth. Limit how much chewy candy your child eats. Encourage them to brush their teeth after snacks and meals. Use extra-soft or soft toothbrushes, especially when their gums or teeth are sensitive.

## How to manage weight gain or loss

### Weight gain

Some medicine, such as prednisone (Deltasone®) or dexamethasone (Ozurdex®, Maxidex®), can increase appetite and cause weight gain. If your child is taking 1 of these medicines, talk with their doctor about why your child is gaining weight.

Only start a weight-loss diet if their doctor recommends it. If your child has a big appetite, their clinical dietitian nutritionist can help you plan healthy meals and snacks.

### Weight loss

Your child may lose weight if they're eating less than usual. Your care team may recommend offering foods high in calories and protein. Protein helps keep bodies strong and rebuild muscles. High-calorie foods help your child stay at a healthy weight for their age and size.

# How to add calories and protein to your child's diet

If your child is losing weight, use the foods listed below to add calories and protein to their diet. Calorie counts below are estimates (not exact). Food can have different calories, depending on the brand. Talk with your clinical dietitian nutritionist about which foods are best and safe for your child to eat.

**Avocado, 2 tablespoons: 50 calories, 1 gram of protein**

- Spread on crackers or toast.
- Dice and toss into salad or egg omelets.
- Purée with lemon juice and a pinch of salt to make a salad dressing.
- Slice and add to a sandwich.

**Butter and margarine, 1 tablespoon: 100 calories, 0 grams of protein**

- Add to soup, mashed and baked potatoes, hot cereal, grits, rice, noodles, and cooked vegetables.
- Stir into creamy soups, sauces, and gravies.
- Combine with herbs and seasonings and spread on fish and egg dishes, cooked meat, and hamburgers.
- Melt and use as a dip for seafood, such as shrimp, scallops, crab, and lobster.

**Whole milk, 1 (8-ounce) cup: 150 calories, 8 grams of protein**

**Heavy cream, 1 tablespoon: 50 calories, 0 grams of protein**

- Mix 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 whole milk instead of low-fat milk.
- Use cream instead of milk in recipes.
- Make hot chocolate with cream and add marshmallows.

**Cheese, 1 ounce: 100 calories, 8 grams of protein**

- Melt on top of casseroles, potatoes, and vegetables.
- Add to omelets, sandwiches, and vegetables.
- Add extra to pizza.
- Try cheese sticks.

**Cream cheese, 1 tablespoon: 50 calories, 2 grams of protein**

- Spread on breads, muffins, fruit slices, and crackers.
- Roll into balls and coat with chopped nuts, wheat germ, or granola.

**Sour cream, 1 tablespoon: 26 calories, 0 grams of protein**

- 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, 1 tablespoon: 100 calories, 0 grams of protein**

- Use as a spread on sandwiches.
- Combine with meat, fish, and egg or vegetable salads.
- Use as a binder in croquettes.

**Honey or jam, 1 tablespoon: 60 calories, 0 grams of protein**

- Add to bread, cereal, milk drinks, and fruit and yogurt desserts.
- Use as a glaze for meats.

**Granola, ½ cup: 200 to 300 calories, 5 grams of protein**

- 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 (raisins, prunes, apricots, dates, and figs), 1 to 2 ounces or 2 to 4 tablespoons: 100 calories, 0 grams of protein**

- Cook dried fruits. Serve them 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, 4 ounces:** 150 to 270 calories, 3 to 4 grams of protein

**Yogurt, 8 ounces:** 150 calories, 7 grams of protein

**Frozen yogurt, 4 ounces:** 117 calories, 2 grams of protein

- 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.
- Put ice cream or frozen yogurt between cake slices, cookies, or graham crackers.
- Make breakfast drinks with fruit.

**Eggs, 1 large egg:** 80 calories, 6 grams of protein

- Chop or hard-boil and add to salads, dressings, vegetables, casseroles, and creamed meats.
- Add extra eggs or egg whites to quiches, pancake and French toast batter, or scrambled eggs and omelets.
- Make custard with eggs, milk, and sugar.
- Add extra hard-boiled yolks to deviled-egg filling and sandwich spreads.
- Do not use raw or undercooked eggs. They can carry germs that can make your child sick.

**Nuts, seeds, and wheat germ, 1 tablespoon:** 25 calories, 4 to 6 grams of protein

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

**Peanut butter, 1 tablespoon: 95 calories, 4 grams of protein**

- 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 to wash the vegetables well.
- Blend with milk drinks and beverages.
- Swirl into soft ice cream and yogurt.

**Meat, 3 ounces: 120 to 200 calories, 25 grams of protein**

**Fish, 3 ounces: 100 to 175 calories, 18 grams of protein**

**Tofu, 3 ounces: 130 calories, 15 grams of protein**

- Add chopped, cooked meat, fish, or tofu to vegetables, salads, casseroles, soups, and sauces.
- Wrap and bake cooked meat, fish, or tofu into biscuit dough or pie crust.
- Add to omelets, quiches, sandwich fillings, and stuffing.

**Legumes (peas, beans, and lentils), 1 (8-ounce) cup: 100 to 200 calories, 9 grams of protein**

- Cook and use in soups.
- Add to casseroles, pastas, and grain dishes.
- Mash cooked beans with cheese and milk.
- Add black beans and melted cheese to nachos.

# Quick and easy snack ideas

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| <ul style="list-style-type: none"><li>• Cereal with or without milk.</li><li>• Cheese cubes with crackers or fruit.</li><li>• Chicken or fish spreads on crackers or breads.</li><li>• Dips made with cheese, beans, or sour cream.</li><li>• Fresh, canned, or dried fruit chunks dipped in yogurt, nut butter, or marshmallow fluff.</li><li>• Granola on yogurt, ice cream, pudding, hot cereal, pancakes, or canned or fresh fruit.</li><li>• Milkshakes or “instant breakfast” drinks.</li><li>• Store-bought smoothies and shakes, such as Bolthouse Farms®, Naked Juice®, or Ripple Kids®.</li><li>• Nuts (can be added to yogurt, cereal, or made into trail mix).</li></ul> | <ul style="list-style-type: none"><li>• Nut butter spread on fruit or crackers, or eaten on bread with jam or jelly. Pita bread.</li><li>• Plain or buttered popcorn.</li><li>• Pretzels, chips, or crackers.</li><li>• Fresh, washed vegetables with dips, such as:<ul style="list-style-type: none"><li>◦ Hummus</li><li>◦ Guacamole</li><li>◦ Bean dip</li><li>◦ Onion dip</li><li>◦ Tzatziki (tzuh-ZEE-kee)</li><li>◦ Babaganoush (ba-ba-ga-NOOSH)</li><li>◦ Queso (KAY-sow)</li></ul></li><li>• Pizza bagel or English muffin.</li><li>• Pudding and custard.</li><li>• Plain or chocolate whole or 2% milk, or a lactose-free alternative.</li><li>• Yogurt and fruit shakes.</li></ul> |
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Some of these food items can cause choking in children under age 4:

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| <ul style="list-style-type: none"><li>• Nuts</li><li>• Popcorn</li><li>• Fruit chunks</li><li>• Grapes</li></ul> | <ul style="list-style-type: none"><li>• Peanut butter (unless it's thinned out with water or milk until it's runny)</li><li>• Hard cheese cubes</li><li>• Cubed meat</li><li>• Hot dogs</li></ul> |
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Always watch infants and children under age 4 during meals to keep them from choking.

# Smoothie recipes

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

## Breakfast smoothie

2 (8-ounce) servings: 560 calories, 27 grams of protein

### Ingredients

- ½ cup milk
- ½ apple (peeled)
- ½ cup granola
- ¼ cup plain, whole-milk Greek yogurt
- ½ medium banana
- 1 tablespoon honey
- 3 drops vanilla extract
- 4 cubes ice

## Banana smoothie

2 (8-ounce) servings: 405 calories, 10 grams of protein

### Ingredients

- ½ cup milk
- 1 ½ medium bananas
- ½ cup plain, whole-milk Greek yogurt
- 2 teaspoons honey
- 3 drops vanilla extract
- 4 cubes ice

## Caribbean Craze smoothie

2 (8-ounce) servings: 435 calories, 8 grams of protein

### Ingredients

- ½ cup coconut milk
- ¼ cup pineapple (canned)
- ¼ cup orange juice
- ½ cup plain, whole-milk Greek yogurt
- 1 teaspoon honey
- 3 drops vanilla extract
- 4 cubes ice

## S'mores smoothie

2 (8-ounce) servings: 720 calories, 16 grams of protein

### Ingredients

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

# Nutritional supplements

Your child may not get enough calories and protein from their diet alone. Their care team may suggest oral (taken by mouth) nutritional supplements to add extra calories and protein to their diet. These come as liquids, powders, or oils.

Some nutritional supplements can be added to foods. Others can be taken alone.

Most supplements are lactose-free (do not have lactose). This means your child can have them even if they have trouble digesting milk products.

## Examples of nutritional supplements

MSK does not endorse any of the products listed below. All supplements are kosher except for Super Soluble Duocal®.

Some supplements must be used within a certain amount of time. Others must be refrigerated after you open them. Follow the instructions on the package for safe use and storage.

### **Carnation Breakfast Essentials® (Nestlé)**

8-ounce serving (with 6 ounces of milk): 280 calories, 13 grams of protein.

- Milk-based, flavored, sweetened powder.
- Mix with milk or water.
- Flavors: Chocolate, vanilla, strawberry.
- Available in premixed, ready-to-drink containers.
- Available with and without lactose.
- Other versions have extra fiber, more calories, extra protein, or are sugar-free.

## **PediaSure® (Abbott Nutrition)**

8-ounce serving: 240 calories, 7 grams of protein

- Milk-based, flavored, sweetened liquid.
- Flavors: Vanilla, chocolate, strawberry, banana, others.
- OK to use if you are lactose intolerant.
- Gluten-free.
- Available with or without fiber.

## **PediaSure® Peptide (Abbott Nutrition)**

8-ounce serving: 237 calories, 7 grams of protein

- Milk-based, sweetened, liquid drink.
- Flavors: Vanilla, strawberry.
- Made for children with stomach problems, such as nausea, diarrhea and digestion problems.
- Gluten-free.

## **Kate Farms Kids Nutrition®**

8.45-ounce serving: 250 calories, 8 grams of protein

- Plant-based shake.
- Flavors: Chocolate, vanilla, strawberry.
- Appropriate for lactose intolerance, milk protein allergy.
- Gluten-free.

## **Ensure Original® (Abbott Nutrition)**

8-ounce serving: 220 calories, 9 grams of protein

- Milk-based shake.
- Flavors: Vanilla, milk chocolate, dark chocolate, strawberry, coffee latte, butter pecan.
- Gluten-free.
- OK to use if you are lactose intolerant.

## **Ensure Plus® (Abbott Nutrition)**

8-ounce serving: 350 calories, 13 grams of protein

- Milk-based shake.
- Flavors: Vanilla, milk chocolate, dark chocolate, strawberry, coffee latte, butter pecan.
- Gluten-free.
- OK to use if you are lactose intolerant.

## **Ensure Clear® (Abbott Nutrition)**

10-ounce serving: 180 calories, 9 grams of protein

- Clear liquid drink.
- Flavors: Blueberry pomegranate, mixed fruit.
- Lactose-free, fat-free, and gluten-free.

## **Resource Breeze® (Nestlé)**

8-ounce serving: 250 calories, 9 grams of protein

- Fruit drink.
- Flavors: Orange, wild berry.
- Lactose-free and fat-free.

## Super Soluble Duocal® (Nutricia)

1-scoop serving: 25 calories

- Unflavored, powdered calorie and fat booster.
- For children ages 1 year and older.
- Mix into food and drinks.
- Use only as directed by your clinical dietitian nutritionist or healthcare provider.

## Nutricost™ Protein Powder

1-scoop serving: 140 calories, 30 grams of protein

- Unflavored, 100% whey protein powder.
- For children ages 5 and older.
- Mix into food and drinks. Use only as directed by your clinical dietitian nutritionist or healthcare provider.

## Contact information for nutritional supplements

<p>Abbott Nutrition 800-227-5767 <a href="http://www.abbottnutrition.com">www.abbottnutrition.com</a></p>	<p>Kate Farms 805-845-2446 <a href="http://www.katefarms.com">www.katefarms.com</a></p>
<p>Nestlé 800-422-ASK2 (800-422-2752) <a href="http://www.neslehealthscience.us">www.neslehealthscience.us</a></p>	<p>Nutricia 800-365-7354 <a href="http://www.nutricia-NA.com">www.nutricia-NA.com</a></p>

# Common questions

## **My child has neutropenia. Their doctor says they should follow a food safe diet. What can my child eat?**

Your child's clinical dietitian nutritionist or nurse will give you guidelines on how to follow a food safe diet. Read *Food Safety During Cancer Treatment* ([www.mskcc.org/pe/food-safety](http://www.mskcc.org/pe/food-safety)) for more help with meal planning.

## **Can my child have sugar?**

Yes. There is not enough scientific evidence to show that avoiding sugar prevents cancer growth or recurrence (coming back).

Natural sugars, such as those found in fruit, vegetables, and dairy, are part of a balanced diet. We do not recommend restricting foods unless your child's care team or clinical dietitian nutritionist recommends it.

## **What can my child eat to help raise their white blood cell counts?**

No supplements or foods raise white blood cell counts. You can use iron supplements to raise red blood cell counts, but not white blood cells. Talk with your child's doctor for more guidance.

## **What can my child eat to help strengthen their immune system?**

A healthy diet high in calories and protein is the best way to strengthen their immune system. This includes eating many kinds of food.

## **Which foods should my child avoid during chemotherapy?**

There are certain food guidelines for some chemotherapy medicine. Your child's doctor will give you this information. You should always offer many different foods to keep your child as healthy as possible during treatment.

## Why do my child's potassium and magnesium levels sometimes drop during treatment?

Your body needs normal levels of magnesium and potassium to keep your heart and nervous system healthy. Some chemotherapy medicine, such as cisplatin, can make your child lose magnesium and potassium through their urine (pee). If your child takes these medicines, follow your doctor's instructions for keeping their levels in a normal range.

## Should my child avoid dairy?

There is no scientific evidence that shows a link between dairy products and pediatric cancers. Dairy is a good source of calcium, which your child needs to grow. If your child cannot have dairy, there are many non-dairy options available.

## Are there any vitamins, minerals, or herbal supplements my child can take?

Some herbal remedies, botanical home remedies, or other dietary supplements can stop treatment from working as it should. Talk with your child's care team before using any of these remedies during treatment.

Do not give your child any vitamin, mineral, or herbal supplements during treatment unless your doctor says it's OK. There is no scientific evidence that these can cure cancer or stop it from coming back.

Read *Herbal Remedies and Cancer Treatment* ([www.mskcc.org/pe/herbal-remedies](http://www.mskcc.org/pe/herbal-remedies)) to learn more. You can also visit the MSK Integrative Medicine Service website, "About Herbs, Botanicals & Other Products" at [www.aboutherbs.com](http://www.aboutherbs.com).

# MSK resources

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

- *Clear Liquid Diet* ([www.mskcc.org/pe/clear-liquid-diet](http://www.mskcc.org/pe/clear-liquid-diet))
- *Food Safety During Cancer Treatment* ([www.mskcc.org/pe/food-safety](http://www.mskcc.org/pe/food-safety))
- *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/constipation-during-chemo](http://www.mskcc.org/pe/constipation-during-chemo))
- *How to Manage Constipation* ([www.mskcc.org/pe/constipation](http://www.mskcc.org/pe/constipation))
- *Managing Diarrhea* ([www.mskcc.org/pe/diarrhea](http://www.mskcc.org/pe/diarrhea))
- *Managing Nausea and Vomiting* ([www.mskcc.org/pe/nausea\\_vomiting](http://www.mskcc.org/pe/nausea_vomiting))
- *Mouth Care During Your Cancer Treatment* ([www.mskcc.org/pe/mouth-care](http://www.mskcc.org/pe/mouth-care))
- *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](http://www.cancer.org)

800-227-2345

Has information on diet and other cancer-related topics.

CancerCare

[www.cancercare.org](http://www.cancercare.org)

800-813-4673 (800-813-HOPE)

CancerCare has information and resources for people living with cancer, including support groups and education.

## American Institute for Cancer Research (AICR)

[www.aicr.org](http://www.aicr.org)

800-843-8114

AICR has information on diet and cancer prevention research and education.

## National Cancer Institute (NCI)

[www.cancer.gov](http://www.cancer.gov)

800-422-6237 (800-4-CANCER)

NCI has information about cancer, including summaries of treatment guidelines. It also has research news, clinical trial listings, links to medical literature, and more.

## National Comprehensive Cancer Network (NCCN)

[www.nccn.org/patientresources/patient-resources](http://www.nccn.org/patientresources/patient-resources)

215-690-0300

NCCN 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](http://dietary-supplements.info.nih.gov)

301-435-2920

ODS has information about individual vitamins, minerals, and other dietary supplements.

If you have questions or concerns, call your healthcare provider. A member of your care team will answer Monday through Friday from 9 a.m. to 5 p.m. Outside those hours, you can leave a message or talk with another MSK provider. There is always a doctor or nurse on call. If you're not sure how to reach your healthcare provider, call 212-639-2000.

If you have questions or concerns, contact your healthcare provider. A member of your care team will answer Monday through Friday from 9 a.m. to 5 p.m. Outside those hours, you can leave a message or talk with another MSK provider. There is always a doctor or nurse on call. If you're not sure how to reach your healthcare provider, call 212-639-2000.

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

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