

# Managing Eating-Related Side Effects on Treatment

---

When a child has cancer, they may have a combination of treatments including: surgery, radiation therapy, chemotherapy, biological therapy, or stem cell transplant. All treatments damage some healthy cells along with the cancer cells. This damage to healthy cells causes side effects. Many side-effects can make it hard for your child to eat. They can also get in the way of their body's ability to get nutrition from the food eaten.

Side effects can vary from day to day and from child to child. Not all children with cancer have problems with eating. There are many days when eating can be a pleasure, even when having side effects. Eating-related side effects should fade away after treatment ends. In the meantime, doing what you can to manage side effects can help your child eat as well as possible.

## Why is eating important during cancer treatment?

- Can help your child tolerate treatment better by keeping their strength up and helping their immune system fight infections.
- Can improve your child's quality of life.
- Can help your child continue to grow and develop.
- Can give your child the energy to learn and play.

This handout will provide tips on how to manage eating-related side effects.



## TABLE OF CONTENTS

Constipation.....3

Diarrhea.....4

Dry Mouth.....5

Food Aversions.....5

Mouth Sores.....6

Nausea and Vomiting.....7

Taste and Smell Changes.....8

Where to go for more help and information.....8



## Constipation

Constipation can be caused by pain medication, some chemotherapy drugs, radiation to the stomach and abdomen, the location of a tumour, a low fibre diet, lack of exercise, and not drinking enough fluids.

### Tips to manage constipation:

#### 1. Offer high-fibre foods.

- Breads, cereals, pastas, and rice made from whole grains.
- Fruit (especially berries and citrus fruit).
- Vegetables (especially broccoli, carrots, corn, and leafy greens).
- Lentils and beans.



#### 2. Add extra fruit and vegetables to your child's food.

- Fruit can be added to smoothies, gelatin, desserts, or as a topping on yogurt, pancakes, or waffles.
- Add veggies to soup, pasta sauce, chili, curry, or shepherd's pie. A blender or food processor can help!
- Puréed fruit or shredded veggies can be added into muffin mixes and pancake batters too.

#### 3. Sprinkle unprocessed bran on cereal.

- Start with 10 mL (2 teaspoons) a day and gradually increase the amount up to 30 mL (2 tablespoons) a day.

#### 4. Encourage your child to drink lots of fluids, including water, milk, soup, or juice.

#### 5. Avoid foods that can cause constipation such as cheese, chocolate, and eggs.

#### 6. Encourage your child to be more active, if able.



#### High-Fibre Super Mix

30 mL (2 tbsp) bran  
250 mL (1 cup) applesauce  
150 mL ( $\frac{3}{4}$  cup) prune juice

1 serving = 125 mL ( $\frac{1}{2}$  cup)

Combine all ingredients. Spread on whole grain bread, crackers, or pancakes and serve. Store in the fridge and discard after 48 hours.

Makes about 3 servings.

80 calories, 1 gram protein, and 3 grams fibre per serving.

Try to give your child 2 servings every day if they are constipated.

## Diarrhea

It's important to recognize and treat diarrhea early so that your child does not become dehydrated. Signs of dehydration include dry skin or mouth, no tears when crying, urinating less often, and small amounts of dark-coloured urine.

### Tips to help with diarrhea:

**1. Limit foods with insoluble fibre.**

- Whole grain breads.
- Most raw fruit and vegetables (including berries, citrus fruit, dried fruit, and vegetables or fruit with skin).

**2. Offer foods with soluble fibre.**

- Oatmeal, potatoes, oat bran cereal and bread, applesauce, bananas, and rice.
- Canned or well-cooked fruit and vegetables may also be easier to digest.

**3. Avoid foods that produce gas.**

- Beans, lentils, broccoli, cauliflower, cabbage, carbonated beverages, and chewing gum.



**4. Limit high-fat foods.**

- Fried meats, French fries, greasy snack foods, higher-fat milk products, rich desserts, and added fats like butter or margarine.

**5. Limit large amounts of sweetened beverages.**

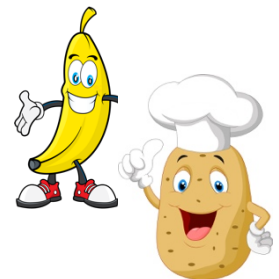
- Fruit drinks, juice, pop, or iced tea.

**6. Limit foods that contain lactose.**

- Milk, milkshakes, pudding, cheese, or ice cream.
- You can offer yogurt since it contains “good” bacteria that helps with digestion.

**7. Give your child foods high in salt and potassium if the diarrhea is severe and lasts a long time.**

- Store-bought broths and soup are a good source of sodium and provide extra fluids.
- Potatoes and bananas are high in potassium and also contain soluble fibre.
- Your child's doctor may also prescribe potassium supplements.



**8. Give liquids between meals and increase fluids after each loose stool.**

**9. Keep your child quiet after meals with quiet play or a nap to slow down bowel action.**

**\*Resume your child's normal diet gradually once the diarrhea goes away.**

---

## Dry Mouth

Surgery and radiation therapy to the head and neck area, as well as some kinds of chemotherapy can cause your child's mouth to be dry. A dry mouth can lead to tooth decay if not managed.

### Tips to manage dry mouth:

**1. Offer moist foods and liquids with foods to help your child swallow more easily.**

- Add butter, margarine, sauces, mayonnaise, gravy, or salad dressing to vegetables, pasta, meat, or baked goods.



**2. Older children can suck on a hard candy or chew gum to increase saliva.**

**3. Offer cut-up frozen grapes, strawberries, blueberries, or popsicles.**

- Sucking on ice chips can also help moisten the mouth.

**4. Offer your child sweet or sour foods – these foods help stimulate saliva production.**

- Berries, grapes, and mangos are naturally sweet foods. You can also offer desserts as a treat!
- Lemon juice, lime juice, or vinegar can be added to foods to make them more sour.



**5. Encourage your child to drink lots of fluids, especially water, throughout the day.**

## Food Aversions

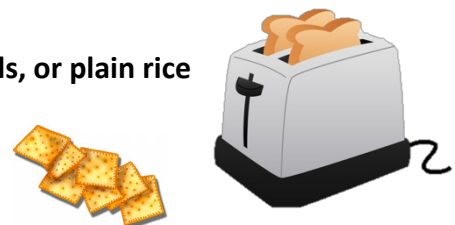
Children can sometimes associate getting sick or other unpleasant feelings, like pain or nausea, with certain foods. When children associate a food with something unpleasant, they may develop an aversion (an intense dislike) to that food and not want to eat it. For example, your child may associate the hospital with feeling sick and not eat well during a hospital stay.

### Tips to prevent food aversions:

**1. Do not offer your child's favourite foods when they are in pain or nauseated.**

- Your child may start to associate these foods or drinks with the side effect.
- Taking a break from these favourites may help avoid a food aversion in the future.

**2. Offer plain, bland food such as dry toast, crackers, pretzels, or plain rice or pasta with a bit of butter.**



## Mouth Sores

Mouth sores (mucositis) can occur in both the mouth and throat and can be very painful.

### Tips to help prevent pain or irritation and make eating easier:

- 1. Offer soft or moist foods that are easy to chew and swallow.**
  - Pudding, yogurt, custard, or gelatin.
  - Hot cereals (cooked to room temperature) or dry cereal soaked in milk
  - Soft fruit (including pears, peaches, canned or puréed fruit, bananas, or applesauce).
  - Well-cooked vegetables or mashed potatoes.
  - Pancakes, French toast, or waffles with lots of butter and syrup.
  - Soft casseroles, macaroni and cheese, or eggs.
  - Baby foods or puréed meats, pastas, and vegetables.
- 2. Offer popsicles, ice cream, or ice chips to provide needed fluids and to comfort inflamed areas.**
- 3. Avoid food or drinks that can irritate the mouth.**
  - Acidic foods (citrus fruits, lemonade, orange juice, grapefruit juice, tomato juice).
  - Spicy or salty foods (chicken wings, pepperoni, chili, or pickles).
  - Carbonated drinks (pop/soda, sparkling water).
  - Rough, coarse, or dry foods (raw vegetables, crackers, chips, nachos, toast).
- 4. Serve foods at room temperature.**
- 5. Make every bite count by giving your child food and drinks that are high in calories and protein.**
  - Liquid nutritional supplements or milkshakes are also good options if your child is eating less. See page 7 for more information.
- 6. Talk to your doctor about using a mouth rinse, cotton or glycerin swabs, or a lip ointment to help clean teeth and treat dry lips.**



#### Yogurt Juicicles

625 mL (2 ½ cups) plain yogurt

1 small can of frozen juice concentrate

Optional: 250 mL (1 cup) chunks of unsweetened, frozen, fresh, or canned fruit

Blend yogurt and fruit with frozen juice concentrate. Freeze in popsicle containers or small paper cups. Add a stick when the mixture is almost frozen.

Makes about 12 juicicles. 100 calories and 3 grams protein per juicicle.

## Nausea and Vomiting

It is often easier to prevent nausea than to treat it once it happens. Your child's doctor can prescribe anti-nausea medication (called anti-emetics) and may direct your child to take the medication before treatment, and for a few days after. Different medications work for different children, and your child may need more than one medication to feel better.

### Tips to help prevent and manage nausea and vomiting:

- 1. Offer bland, starchy foods to help absorb stomach acid.**
  - An empty stomach can actually make your child feel sicker.
  - Your child can nibble on dry foods like crackers, toast, dry cereals, or bread sticks after waking up and every few hours during the day.
- 2. Offer easy-to-digest foods.**
  - Try soup broth, clear liquids, soda crackers, toast, white rice, pretzels, dry cereals, gelatin, arrowroot or digestive cookies.
- 3. Offer lots of fluid between meals to keep your child hydrated and to dilute stomach acid.**
  - Have your child drink 30 minutes before the meal rather than with the meal.
  - You can give flat gingerale, water, diluted juices, sport drinks, or drinks that replace electrolytes that are made for children.
  - Cool liquids may be easier to drink than very hot or very cold liquids. Sucking on ice chips may also help.
- 4. Avoid foods that are acidic, spicy, strong-flavoured, sweet, fried, or have a strong odour.**
- 5. Avoid gas-producing vegetables such as broccoli, cauliflower, cucumbers, green peppers, and cabbage.**
- 6. Serve food at room temperature or colder.**
- 7. Keep your child away from the smell of food cooking and food preparation.**
- 8. Older children can suck on a hard candy to get rid of a bad taste in their mouth.**
- 9. Encourage your child to rinse their mouth often (with a saltwater solution or water) to get rid of bad tastes in their mouth.**



**\* Call your healthcare team if your child cannot stop vomiting or if vomiting continues more than 24 hours after treatment, even if your child is taking anti-emetics as directed.**

## Taste and Smell Changes

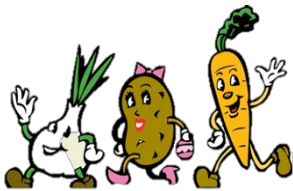
Cancer treatments can change your child's sense of taste and smell. Familiar foods may taste different or unappealing. The smell of food cooking may make your child feel sick.

### Ways to manage taste and smell changes:

1. Offer a variety of foods. Your child may develop new favourite foods.
2. Serve food when your child is hungry rather than at set mealtimes.
3. Try using plastic instead of metal cutlery to decrease a metallic taste.
4. Offer other sources of protein if your child finds that red meat tastes bitter or metallic.
  - Try chicken, turkey, eggs, Greek yogurt, cheese, fish, seafood, beans, or lentils.
5. Offer tart foods (citrus juices, pickles, or cranberry juice) to decrease metallic taste.
  - These foods can also improve taste when everything seems to be tasteless.
  - *Don't offer tart foods if your child has a sore mouth.*
6. Try barbequing or cooking outside to reduce kitchen smells.
7. Offer cold foods or let hot foods cool to room temperature.
  - The steam vapours of steaming-hot foods can increase the foods' smells.
8. Try different spices and seasonings to enhance the flavour of the food.
  - Some children find they have more taste for sweet or salty foods.
9. Encourage your child to rinse their mouth often to help get rid of bad tastes.



## Where to go for more help and information



- Your family doctor or clinic.
- A dietitian (go to [www.dietitians.ca](http://www.dietitians.ca) to find a dietitian near you).
- Patient education library – *How to increase your intake of protein and calories*: <https://www.hamiltonhealthsciences.ca/wp-content/uploads/2019/08/IncreaseProCal-trh.pdf>

### References:

*When Your Child Has Cancer: A guide to good nutrition.* Canadian Cancer Society 2009.