

MANAGING
NUTRITION-RELATED
SIDE EFFECTS

**A guide for
people with
cancer of the
stomach or
gastroesophageal
junction (GEJ)**

Nourish

E X T R A

CANADA'S NUTRITION COMPANION
FOR ONCOLOGY PATIENTS
AND CAREGIVERS

Don't feel like eating?

You are not alone

This guide written by registered dietitians will help you with the most common side effects experienced by people who have cancer of the stomach or gastroesophageal junction (GEJ).

The cause of these side effects can be the cancer itself, its treatment or both. Chemotherapy, radiation and surgery can all bring about many challenges that make it difficult to eat enough, to eat regularly and to get enough nutrients to keep your body strong.

Talk to your healthcare team about side effects you are experiencing. Medications are very effective in reducing many of them, but there is a lot you can do yourself by making good nutritional choices.

We want to encourage you to take care of yourself by eating well. When so many things seem out of control, what you eat and how much you eat can play a key role in your treatment and recovery.

Research shows that people who maintain a healthy weight during cancer treatment respond better to therapy, recover faster and have a better quality of life.

Maintaining your weight

Most of the time, weight loss occurs from eating less than usual. Losing a lot of weight over a short period of time can affect your health. Rapid weight loss (a 10% decrease in your usual weight in less than 6 months) can weaken the immune system, slow healing and limit your ability to perform daily tasks.

Malnutrition and weight loss occurs in >70% of people diagnosed with stomach cancer.



Well nourished step-by-step

Step 1

Manage side effects caused by the cancer and its treatment.

When nausea, constipation, taste changes, diarrhea, sore mouth or throat pain are under control, it will be easier to eat. Discuss these symptoms with your healthcare team.

Step 2

Make every bite and sip count.

This will ensure you are getting the most energy and nutrients from what you eat and drink.

Controlling nausea

Nausea is very common and may worsen with chemotherapy or surgery. If left uncontrolled, it can lead to poor nutritional intake and unwanted weight loss. There are many medications to manage nausea. It is important to take nausea medications exactly as prescribed by your doctor. The following suggestions may also help:

- **Avoid food odours**, which may trigger nausea, by asking for help preparing meals.
- **Choose foods you can eat cold** or at room temperature.
- **Sip liquids from a covered cup.** This may also increase the amount you drink.
- **Plan to eat every 2-3 hours** throughout the day. Focusing on the frequency of eating instead of the amount eaten at one time often leads to eating more overall.
- **Drink plenty of fluids to prevent dehydration.** Sipping on fluids between meals is often better tolerated.
- **Remain in an upright position for 60 minutes after eating.** Lying down right after eating can worsen nausea and reflux symptoms.
- **Starchy foods are digested quicker** than higher fat foods and may be easier to eat. Try soda crackers, plain rice, dry cereals, toast, bread sticks, plain noodles, canned fruit or tea biscuits.
- **Eating or drinking foods and liquids with ginger may lessen nausea** for some individuals. Try ginger tea or cookies.

Coping with a sore mouth or throat

A sore mouth or throat can make eating uncomfortable or difficult. Speak with your doctor or nurse about proper mouth care to manage pain and to reduce the risk for infection. Here are some suggestions that may help you to stay well nourished:

- **Select softer foods and liquids** such as eggs, ground meats or poultry, fish, puddings, yogurt, cream soups, mashed potatoes, soft pasta or casseroles, smoothies, cereals soaked in milk or rice pudding.
- **Limit hard foods** such as crackers, nuts, toast with crust, hard fruits and vegetables, pretzels.
- **Avoid foods and liquids that are spicy or acidic** (e.g. tomatoes, citrus fruits, chili, hot sauces).
- **Try sucking on ice chips** or frozen fruit such as watermelon, grapes, peach slices or diced cantaloupe.
- **Prepare fruit smoothies or milkshakes.** Avoid adding fruit that contains small seeds, such as raspberries, strawberries and blackberries that can irritate a sore mouth or throat.
- **Add broth, sauces (non-tomato), gravy or soup** to soften and moisten foods.
- **If helpful, use a straw** to drink liquid to bypass mouth sores.
- **Do not use commercial mouthwashes** that contain alcohol. These can dry the mouth and increase pain.

Managing early satiety or fullness

Feeling full soon after eating often results in not eating enough. If you are feeling full because of irregular bowel movements, speak to your doctor about medications to treat constipation. Here are some other things you can do:

- **Eat small meals often during the day** and make every sip count.
- **Examine your plate** and focus on what provides the most energy. Make sure each meal contains a protein and a grain/starch.
- **Have smaller portions of high fibre foods** such as vegetables. Eating fibre makes you feel full faster.
- **Try not to fill up on liquids.** Drinking too much can make you feel full faster.
- **Avoid drinking 30-60 minutes** before and after meals.

Make every bite and sip count

If most of your side effects are under control and you still don't feel like eating, continue to make every bite and sip count. Here are some more measures worth trying.

- **Add protein** to every meal. (See tips in Box 1)
- **Increase the calories** of your small meals. (See tips in Box 2)

Play with flavour

- **Stock up on foods that taste better to you** so you can eat them more often.
- **Flavour foods with different spices, herbs and condiments.** Try rosemary, thyme, basil, ginger, cinnamon, curry, mint or coriander. Barbecue sauce, mustard, soy sauce, vinegars and relishes will add extra flavour.
- **Rinse your mouth before and after eating** to help freshen your mouth and remove any unpleasant tastes. Try a rinse made with 1 tsp baking soda or salt in 1 cup of warm water or flat soda water.

Change your routine

- **Choose items you enjoy** and are more likely to eat. It is okay to eat the same foods over and over again.
- **Take advantage of when your appetite is best;** be it in the evenings or the first thing in the morning.
- **Eat when you can.** It does not have to be at mealtime. You can have breakfast cereal at night, too!

Modify your surroundings

- **Make your surroundings pretty!** Use your best cutlery and china and decorate the table with linens, candles and flowers.
- **If you always eat in the kitchen, choose a different room in your home.** If the weather is nice, eat outside.
- **Try to enjoy meals with friends and family.** If you have to eat alone, read a book or a magazine or watch TV while you are eating. We tend to eat more when we are distracted.

1 HOW TO ADD PROTEIN to your meals and snacks

Include poultry, fish, red meat, eggs, tofu, beans, legumes, nuts, milk, cheese and yogurt	Add protein powder to cereals, smoothies, soups or when baking
Use pasteurized liquid eggs instead of raw eggs when preparing foods that will not be fully cooked	Use evaporated milk in puddings, cream soups and cereals
	Try hummus on pita bread or crackers

2 HOW TO ADD CALORIES to your meals and snacks

Add oil to soups and sauces	Add finely ground nuts to foods (e.g. yogurt, hot cereals)
Add butter to vegetables, pancakes, waffles and toast	Use milk or alternatives with higher fat content
Use oils with less flavour (e.g. canola) to add to hot cereals and smoothies	Choose creamy and chunky soups instead of broth
Use nut or seed butters or avocado to spread over bread or crackers	

3 Ideas for small and nutritious MEALS AND SNACKS

Muffins, scones or buns with nut butter, jam or cheese	Pasta with ground meat or poultry-based sauce
Cottage cheese with cut up fruit	Quiche or meat pie
Cereal with whole milk, soy beverage or eat dry	Cheese and crackers
Mix tuna with avocado and spread on bread or crackers	Yogurt or pudding
Egg salad sandwich	Soups with grated cheese
	Frozen meals
	Granola bars or trail mix

ASK the Dietitian

I have just had a stent placed in my esophagus to help me swallow. I have since noticed an increase in heartburn symptoms. Do you have any suggestions to help reduce my heartburn?

Having a stent placed in lower esophagus can result in more stomach acid and digestive enzymes moving up and into the esophagus. This can lead to increased heartburn (reflux) or a “burning” sensation in this area. Heartburn is commonly managed with over-the-counter or prescription medications. The following suggestions may also assist in reducing symptoms;

- **Limit or avoid alcohol and beverages containing caffeine** such as coffee, tea or cola.
- **Eat 5 to 6 small, soft meals and snacks per day.** Do not skip meals.
- **Limit foods such as spices,** chocolate, citrus juices, tomato, peppermint, garlic and onions.
- **Limit fried or fatty foods,** commercial baked goods, fatty cuts of meat and high fat dairy products. High fat foods slow stomach emptying and may make symptoms worse.
- **Choose lean ground or cut-up meats,** skinless, moist poultry, lower fat dairy products and use less added fat in cooking or at the table.
- **Wear loose-fitting clothing.**
- **Avoid eating two to three hours before bedtime.**
- **Remain upright during meals** and for 60 minutes after eating.

Angela Martens, RD

What is dumping syndrome and how can I manage it?

Dumping syndrome, or rapid stomach emptying, can develop after you have had part or all of your stomach removed. It occurs after eating when the contents of your stomach empty too quickly into your intestines. Symptoms can include cramps, diarrhea, nausea, vomiting, sweating, rapid heart rate, weakness and dizziness.

Making changes to the way you eat can help manage the symptoms of dumping syndrome. Here are some suggestions:

- **Eat smaller more frequent meals** instead of three large meals.
- **Take your time and chew foods well.**
- **Have a source of protein** at each meal. (See Box 1)
- **Include complex carbohydrates with meals,** such as whole grains, rice, oatmeal, pasta, and unsweetened, whole grain cereals.
- **Avoid foods and liquids that have a lot of sugar** such as juice, pop, candies and syrups.
- **Include foods that have soluble fibre** as these foods can slow the passage of nutrients in the intestines. Try oatmeal, apples, beets, carrots, beans or legumes.
- **Separate your solids and liquids.** Drink your fluids 30–60 minutes before or after a meal as this will decrease the amount of food in your stomach at one time.

If you have had surgery to your stomach, your body may not be able to use all of the vitamins and minerals found in food. Your healthcare team may monitor your vitamin B12, folate, iron, calcium and vitamin D levels. Your doctor or dietitian will tell you if you need to take any supplements.

Sarah Buchanan, RD

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- Ukleja, A (2006) Dumping syndrome. *Nutrition issues in Gastroenterology*, series 35.
- Dietitians of Canada. Managing heartburn. In: *PEN: Practice-based Evidence in Nutrition®*. 2008, Oct 28 (cited 2015, Nov 2).

RESOURCES

Canadian Cancer Society: www.cancer.ca

Write *Nutrition and Stomach Cancer* in search field

BC Cancer Agency: www.bccancer.bc.ca

Write *Nutrition Handouts* in search field

Debbie's Dream: www.debbiesdream.org

Write *Nutrition* in search field

National Cancer Institute: www.cancer.gov

Write *Nutrition in Cancer Care* in search field

American Cancer Society: www.cancer.org

Write *Stomach Cancer* in search field

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Lilly

Comforting Ginger Carrot Soup

A CREAMY, NUTRITIOUS SOUP TO PREPARE
IN ADVANCE AND FREEZE IN PORTIONS

Preparation Time: 10 minutes Cooking: 40 minutes Servings: 6

INGREDIENTS

- 2 tbsp olive oil
- 1 red onion, chopped
- 4 cloves garlic, chopped
- 1 tsp curry powder (optional)
- 3 cups carrots, diced
- 1 tbsp fresh ginger, grated
- 3 cups no salt added chicken stock
- 1 tsp lemon juice
- 1 can (370mL) evaporated milk
- To taste salt and pepper

MODIFIERS

To increase protein and calories, add:

- grated cheese
- sour cream
- soft or silken tofu
- Greek yogurt
- 35% cream
- vegetable oil

DIRECTIONS

1. In a large pot, heat olive oil over medium heat. Add the onions and cook until softened.
2. Add the garlic and the curry powder and continue to cook for another 5 minutes.
3. Add the carrots and the ginger and continue to cook for another 5 minutes.
4. Add the chicken stock and bring to a boil. Reduce the heat and simmer for 20-25 minutes or until the carrots are soft.
5. Add the lemon juice and the milk and heat it through.
6. Puree with an immersion blender or transfer to a blender and puree until smooth.

You can adjust the recipe by using the modifiers.

HELPFUL WITH THE FOLLOWING SIDE EFFECTS:

- Fatigue
- Change of taste and smell
- Nausea
- Dry mouth
- Swallowing difficulties

Nutrition Facts

Serving Size: 1 cup

Amount	% Daily Value
Calories 160	
Fat 9g	14%
Saturated 3.5g + Trans 0g	18%
Cholesterol 20mg	7%
Sodium 110mg	5%
Carbohydrate 15g	5%
Fibre 2g	8%
Sugars 11g	
Protein 5g	
Vitamin A	45%
Vitamin C	8%
Calcium	20%
Iron	2%