

MANAGING HIGH OUTPUTS FROM AN ILEOSTOMY

The typical output from an ileostomy is between ½–1 litre (2 to 4 cups) per 24-hour period. Outputs greater than 1500 mL (6 cups) per day are “high output ileostomies”. They can lead to dehydration, excessive loss of sodium and potassium (electrolytes) and kidney problems requiring medical attention.

Signs of dehydration and electrolyte imbalance can include dry mouth, less urine output, dark-colored urine, feeling dizzy when standing, significant fatigue and abdominal cramping.

Here are some tips to help manage high outputs through your ileostomy;

- Drink 1–1½ litres (4–6 cups) of an oral rehydration solution each day. You can make your own using our recipes or purchase one from the pharmacy such as Hydralyte™ or Pedialyte™. Regular sports drinks which are high in sugar, such as Gatorade™ or Powerade™ are **not** a good choice for high output ileostomies.
- Limit intake of other fluids (including plain water) to ½ litre (2 cups) per day. Avoid coffee, tea, pop, iced tea, lemonade, fruit juices and alcohol. These fluids can increase output and loss of sodium and potassium.
- Sip on fluids before or after meals.
- Sip on fluids throughout the day along with a salty, starchy snack (e.g. salted pretzels or soda crackers).
- Limit lactose as this may worsen output (**BOX D**).
- Consume foods high in potassium. (**BOX E**).
- Add extra salt to your foods (1 teaspoon per day) and choose salty foods. You can also use HalfSalt™ which contains both sodium and potassium.
- If these suggestions are not effective, talk to your doctor or registered dietitian about medications to help reduce high output.

BOX E

High Potassium Foods

- Artichokes
- Avocados
- Baked potatoes
- Bananas
- Bran/bran cereals
- Dried beans, peas, lentils
- Dried fruits
- Nuts/seeds
- Prune/orange/grapefruit juice
- Tomato sauce
- Vegetable/tomato juice



BOX C

Staying Hydrated

No matter which type of stoma you have, it is important to drink plenty of fluids to keep your stoma functioning and prevent dehydration. Drink 1½–2 litres (6–8 cups) of fluid per day. Anything that is liquid at room temperature counts as fluid (e.g. water, milk, soups). Tired of drinking plain water? Try our infused water recipes. If you are experiencing higher stool output, add extra salt to your foods or add some higher sodium foods (e.g. soups, pretzels, salted crackers).

BOX D

Tips to Reduce Lactose

- Limit dairy milk, yogurt and soft cheeses to small amounts at one time
- Try hard cheeses which are low in lactose (gouda, havarti, cheddar, parmesan)
- Try lactose-free milk or soy beverage and lactose-free yogurt
- Speak with your dietitian about possibly including commercial nutritional supplements that are low in lactose

INFUSED WATER

How to add flavour to plain water



Fill a mason jar or jug with water in the morning and add the flavours you enjoy:

- Orange or lemon slices
- Cucumber slices
- Strawberry slices with mint leaves
- Lime and a piece of ginger root
- Watermelon pieces and basil leaves
- Piece of pineapple and blueberries
- Lemon slices with sprig of thyme
- Frozen berries

RESOURCES

Ostomy Canada Society
www.ostomycanada.ca

Vancouver United Ostomy Association:
A handbook for new ostomy patients.
www.uoavancouver.com/publications.html

United Ostomy Associations of America:
Type “eating with an ostomy” in search field.
www.ostomy.org

BC Cancer: Type “low fibre food choices” in search field.
www.bccancer.bc.ca

Alberta Health Services: How to increase fibre. Type “fibre facts” in search field.
www.albertahealthservices.ca

Colorectal Cancer Canada
www.colorectalcanadacancer.ca

Nourish Extra guides for people with colorectal cancer: Part 1: What to eat and drink after ostomy surgery, Part 2: Managing nutrition-related side effects, Part 3: Eat well after treatment.
View/download www.nourishonline.ca

AUTHORS

Angela Martens, RD
Registered Dietitian
CancerCare Manitoba
Winnipeg, Manitoba

Rima Nasrah, MSc, RD
Registered Dietitian
Jewish General Hospital
Montreal, Quebec

We thank **Jennifer Black, RD**, Oncology dietitian, Calgary, Alberta, **Jason George, RD**, Dr. H Bliss Murphy Cancer Centre, St. John's, Newfoundland and Labrador, **Cherith McGregor, RD**, Saskatoon Cancer Centre, Saskatoon, Saskatchewan, and **Tracey Rapier, RD**, Sunnybrook's Odette Cancer Centre, Toronto, Ontario, for reviewing this publication.

Nourish Extra is a publication of the *Nourish: Canada's Nutrition Companion for Oncology Patients and Caregivers* series: Information relating to nutrition and cancer and advice from registered dietitians who are working in oncology centres across Canada. **Nourish is a free publication which is available in print and online.** www.nourishonline.ca facebook.com/nourishonline

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Nourish Extra was made possible through an educational grant provided by Taiho Pharma Canada, Inc.

19-02-E TAIHO PHARMA CANADA, INC.

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WHAT TO EAT AND DRINK AFTER OSTOMY SURGERY

A guide for people with colorectal cancer

Nourish

EXTRA

CANADA'S NUTRITION COMPANION FOR ONCOLOGY PATIENTS AND CAREGIVERS



ORAL REHYDRATION SOLUTION FOR HIGH OUTPUT ILEOSTOMIES

Mix your own!

RECIPE 1

3 cups water
+
1 cup orange juice
+
¼ tsp Windsor Half Salt™
+
⅜ tsp salt

RECIPE 2

4 cups water
+
6 tsp sugar
+
½ tsp salt

RECIPE 3

4 cups water
+
8 tsp sugar
+
1 tsp salt
+
1 cup orange juice

COPING WITH CHANGES TO THE DIGESTIVE TRACT

Treatment for colorectal cancer often includes surgery which may be combined with other treatments such as chemotherapy and radiation. Depending on the type of surgery, you may need to alter your diet to help manage changes in bowel function and ensure your body is getting the nutrition it needs to heal and stay well nourished.

Chewing food thoroughly is the important first step of digestion. When you eat, foods and fluids pass through your digestive tract where they are broken down and absorbed into the body. After they have been swallowed, foods and fluids travel through the esophagus, stomach, small intestine, large intestine, rectum and anus. What isn't absorbed, is passed out of the body as stool through the anus (SEE ILLUSTRATION BELOW).

Surgery for colorectal cancer may alter or shorten the digestive tract and affect the way nutrients are absorbed.

WHAT IS AN OSTOMY?

An **OSTOMY** (or stoma) is a surgical opening from the small or large intestine to the outside of the body. Stool and gas pass out of the body through the stoma. The bag that collects the stool is placed over the stoma and is stuck to the abdomen. This opening can be either permanent or temporary.

In an **ILEOSTOMY**, the ileum (last part of the small intestine) is brought out through a stoma in the abdominal wall. A typical output through an ileostomy is loose stool with a porridge-like consistency.

A **COLOSTOMY** brings part of the colon (large intestine) out through a stoma in the abdominal wall. The stool that passes through a colostomy is typically soft and formed. The colostomy bag is usually emptied once or twice a day depending on one's diet and activity level.

OSTOMY PLACEMENT AND NUTRIENT ABSORPTION IN THE DIGESTIVE TRACT

The following illustration shows common placements of stomas and the location of nutrient absorption. In the colon, water is absorbed from the undigested waste as it moves towards the rectum, so the consistency of the stool will depend on where the stoma is placed. As a general rule, the higher in the digestive tract the stoma is placed (e.g. ileostomy in the small intestine) the softer the output.

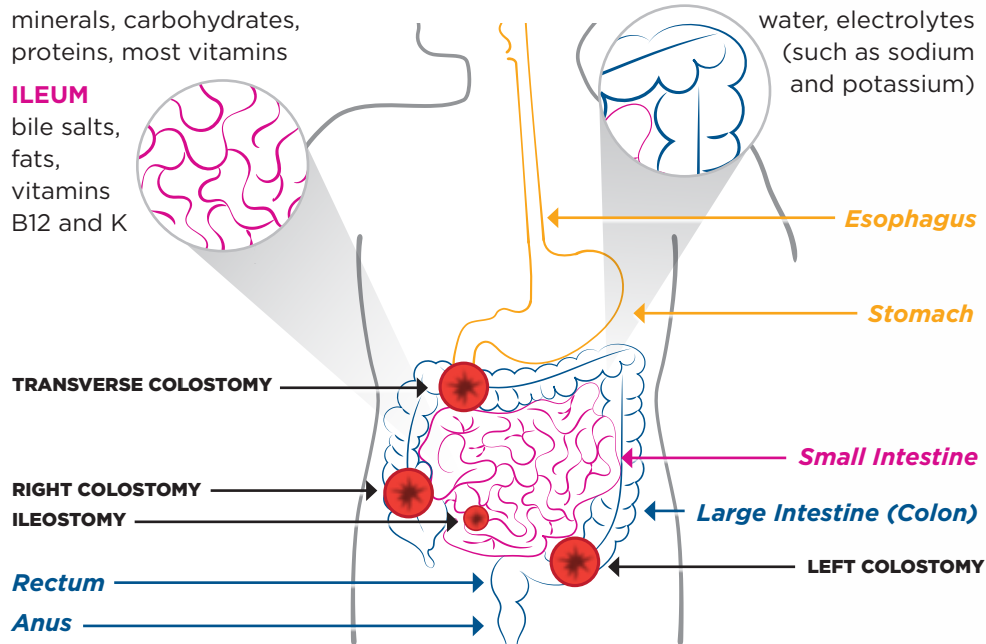
NUTRIENT ABSORPTION IN SMALL INTESTINE

minerals, carbohydrates, proteins, most vitamins

ILEUM
bile salts, fats, vitamins B12 and K

NUTRIENT ABSORPTION IN LARGE INTESTINE

water, electrolytes (such as sodium and potassium)



WHAT TO EAT AND DRINK AFTER OSTOMY SURGERY

There is no special diet that you should be following if you have an ostomy. However, you might benefit from removing or adding certain foods to help manage issues you have with your stool output (TABLE 1).

Your stoma may be smaller or more swollen for the first few weeks following surgery. This can increase the risk of stoma blockage. For this reason, the following tips are important for the **first 6 to 8 weeks after ostomy surgery**:

- Eat 4 to 6 small meals throughout the day. Do not skip meals.
- Limit the amount of fibre in your diet. High fibre foods (**BOX A**) may bother you, cause pain, or block your stoma. This is only temporary and you can gradually increase the fibre after that period. Choose low-fibre foods instead (**BOX B**).
- Drink enough fluid to stay hydrated (**BOX C**).
- Chew foods thoroughly to aid digestion and prevent blocking your stoma.
- Eat slowly in a relaxed setting, if possible, to help prevent stomach gas and pain.
- Try not to swallow air. Sit upright while eating. Limit carbonated beverages and drinking from straws or bottles.
- Limit caffeine intake as it may increase output (found in coffee, teas, chocolate and some soft drinks).
- Choose foods and liquids low in lactose if you become lactose intolerant shortly after surgery (**BOX D**). Lactose is the natural sugar found in milk. Common symptoms are bloating or cramps after consuming dairy products.

BOX A

High Fibre Foods

FOODS WITH INSOLUBLE FIBRE

- Dried beans, peas & lentils*
- Dried fruit
- Nuts & seeds
- Popcorn
- Skins & seeds found in fruits and vegetables
- Wheat bran or bran cereals
- Whole grain foods (brown rice, quinoa, whole grain breads or crackers)

FOODS WITH SOLUBLE FIBRE

- Applesauce
- Barley
- Chia seeds
- Dried beans, peas & lentils*
- Mashed potatoes
- Oat bran & oatmeal
- Peeled pears
- Rice bran
- Rice pudding

* These foods have both, insoluble and soluble fibre



WHAT TO EAT AND DRINK AFTER OSTOMY REVERSAL

If you have a temporary ostomy, you can go back to emptying your bowels in the usual way after the reversal procedure. However, it will take some time before your stools become normal again. You might experience loose stools, feel the need to go often to empty your bowels or have leaky stools. Some general tips that can help you get regular more quickly include:

- Eat small, frequent meals.
- Eat foods low in fibre (**BOX B**) and gradually reintroduce high fibre foods based on your tolerance.
- Drink enough fluids.
- Avoid foods that give you gas (TABLE 1).
- Limit fatty foods and spicy dishes.
- Limit carbonated beverages, alcohol and caffeine.

BOX B

Low Fibre Foods

- Breads, crackers, pasta made with white flour
- Breakfast cereals with less than 2 grams of fibre per serving
- Fruits with seeds and skins removed
- Peeled and cooked vegetables
- White rice

Note: Animal-based foods do not contain fibre.



Did you know?

If you have an ostomy, you might not be fully absorbing some nutrients and medications. Talk to your doctor or dietitian about whether or not you need to take nutritional supplements. Speak to your pharmacist about special forms of medications (e.g. liquid or gelatin medications or uncoated tablets) that may be easier for your body to absorb.

TABLE 1

ISSUES WITH STOOL OUTPUT AFTER OSTOMY SURGERY

If you are experiencing any of the following issues with your stoma output, try adding/eliminating one food at a time to see which foods are the potential "offenders". Every person reacts differently. The following list of food items can guide you in making better choice

INCREASED/LOOSE STOOL

FOODS TO LIMIT	FOODS TO TRY	
▼ Alcohol	▼ Fatty meats such as bacon, salami, bologna	▲ Applesauce
▼ Artificial sweeteners such as sorbitol and xylitol	▼ Foods high in insoluble fibre (see BOX A)	▲ Barley
▼ Baked beans	▼ Kale	▲ Creamy peanut butter
▼ Broccoli	▼ Licorice	▲ Foods high in pectin such as peeled apples, peaches, oranges, pears or bananas
▼ Brussels sprouts	▼ Milk	▲ Oatmeal or oat bran
▼ Cabbage	▼ Onions	▲ Starchy foods such as boiled or mashed potatoes, white bread, boiled rice, white pasta
▼ Cauliflower	▼ Prune juice	▲ Tapioca or rice pudding
▼ Coffee	▼ Raw fruits or vegetables	
▼ Dried beans & lentils	▼ Spicy foods	
▼ Fatty/fried foods	▼ Sugary foods & drinks	

EXCESSIVE ODOR

FOODS TO LIMIT	FOODS TO TRY	
▼ Asparagus	▼ Fish	▲ Buttermilk
▼ Baked beans	▼ Garlic	▲ Cranberries
▼ Brussels sprouts	▼ Green vegetables	▲ Fresh parsley
▼ Cabbage	▼ Kale	▲ Oranges
▼ Cauliflower	▼ Onions	▲ Tomato juice
▼ Cucumber	▼ Peanut butter	▲ Vinegar (add to fish dishes)
▼ Eggs	▼ Strong cheeses	▲ Yogurt

EXCESSIVE GAS/WIND

FOODS TO LIMIT	FOODS TO TRY	
▼ Asparagus	▼ Corn	▼ Onions
▼ Beer	▼ Cucumber	▼ Peas
▼ Bell peppers	▼ Dairy products	▼ Radishes
▼ Broccoli	▼ Dried beans & lentils	▼ Spinach
▼ Brussels sprouts	▼ Kale	▼ Sweet potatoes
▼ Cabbage	▼ Melon	▼ Turnips
▼ Carbonated beverages	▼ Mushrooms	
▼ Cauliflower	▼ Oat bran	

STOMA BLOCKAGE

FOODS TO LIMIT	FOODS TO TRY	
▼ Black olives	▼ Mushrooms	▲ Cooked vegetables
▼ Celery	▼ Nuts/seeds	▲ Stewed/baked/pureed fruits and vegetables
▼ Coconut	▼ Peas	▲ Fluids (BOX C)
▼ Dried fruit	▼ Pineapple	
▼ Fruit & vegetable skins	▼ Popcorn	
▼ Lettuce	▼ Stringy vegetables	
▼ Mango	▼ Sweet corn	
▼ Meats with casings	▼ Tough & stringy meats	

CONSTIPATION / SMALL, DRY OR HARD TO PASS STOOL

FOODS TO TRY		
▲ Bran cereals	▲ Vegetables	▲ Prune juice
▲ Wheat or oat bran	▲ Whole grain breads	▲ Fluids (BOX C)
▲ Fresh fruits		