

## Preventing Dehydration

Dehydration is the most common reason for readmission among new ileostomy patients. Patients with an ileostomy either no longer have or are temporarily diverted from their colon. The colon is the part of the digestive tract responsible for absorbing fluid. When stool is diverted "higher up" through an ileostomy that fluid leaves the body rather than being reabsorbed.

Patients with an ileostomy need to monitor their intake of fluids and ileostomy output and actively manage diet and medications, adjusting both intake and output as necessary. Whether your ileostomy is temporary or permanent, it is important to understand the signs and symptoms of dehydration related to fluid loss through your stoma.

### Monitoring

The first successful step towards preventing dehydration at home is to close monitoring of ostomy output. The more fluid you lose in your stool the more likely you are to become dehydrated. Ileostomy patients need to be aware of their input and output ("I's and O's").

- Input: How much fluid you take in daily by mouth
  - Drink 10-12 glasses of non-caffeinated, nonalcoholic beverages every day.
- Output: Daily Stool and Urine output.
  - You should expect no more than 1200 ml of ostomy output daily.
  - You should expect a minimum of 500ml of ostomy output daily.
  - Urine should be a light-yellow color; dark tea colored urine can mean you are dehydrated.
  - Use a measuring container to measure your output. Early on actual measurements are important. Recording just the number of times a bag is emptied is not enough information, since some bags are emptied when 1/2 full while others at 1/4 full.
  - Record your input and output daily.
  - After the initial postoperative period (2-3 weeks), if ostomy output continues to be under 1200ml you may discontinue measuring. You may want to remeasure for accuracy when the output increases due to diarrhea or flu.

### Signs of Dehydration and Electrolyte Imbalances

- Fatigue, light headedness, dry mouth, stomach cramps, muscle cramps, decreased or dark urine, rapid weight loss, diarrhea or increased stoma output, increased thirst.
- Pinch test: pinch the skin on your forearm, if it remains a "tent" you may be dehydrated.

## Electrolytes

Sodium and Potassium (electrolytes) can become depleted when output is high.

### Sodium

- Sodium (Na<sup>+</sup>) low: loss of appetite, abdominal cramping, drowsiness, faintness, cold feeling in arms and legs.
- Sodium is found in broth and low sugar sports drinks.
- Foods to help replace sodium: canned soups and vegetables, broth and bouillon cubes, tomato sauce, snack chips (pretzels, salted crackers, potato chips), processed foods (cheeses, meats), canned fish (tuna, salmon), ready to eat cereal (instant oatmeal), table salt, ketchup, soy and BBQ sauces), V8 juice, sports drinks.

**If you are on a sodium restricted diet, ensure you check with your doctor before replacing sodium in your diet.**

### Potassium

- Potassium (K<sup>+</sup>) low: fatigue, muscle weakness, gassy bloated feeling, shortness of breath, decreased sensation in arms and/or legs.
- Potassium is found in orange juice, bananas, low sugar sports drinks, milk
- Foods to replace potassium: Potatoes, bananas, avocado, tomato sauce, paste, soup), melon (cantaloupe, honeydew), pumpkin, sweet potato, smooth nut butters (peanut, almond), brown sugar, molasses, maple syrup, chocolate, coffee, tea, coconut water, juices (orange, carrot, tomato, vegetable) sports drinks.

## Fluids

- Drink a glass of water every time you empty your pouch.
- Drink 10-12 glasses of fluid a day. If drinking alcohol or caffeine replace each glass with an additional glass of water.
- Drinking coffee and tea increase urine and salt output.
- Wait 20-30 minutes after a meal to consume liquids to prevent it from being washed down. (Small sips with the meal are ok)
- If drinking sports drinks for electrolyte replacement, try diluting the drink with water 1 : 1 to reduce the amount of sugar per serving. (ex. 1/2 cup water + 1/2 cup Gatorade).

## Diet

- **Foods that help reduce high output:** cheese, cheesecake, smooth nut butters, pretzels, white rice, tapioca, matzo, water crackers, marshmallows and jell-o, bananas, applesauce, oatmeal.
- When making changes to your diet to reduce output try one strategy at a time and for a few days to determine the benefit, or lack of benefit, to each strategy.

- Keep a food journal to track foods that you may not be tolerating well. It can be helpful to add new foods, one at a time every 3 days to get an accurate assessment of your response.
- Never try to decrease fluid intake to slow ostomy output. Instead try anti-diarrheal medications and foods known to slow output.
- Sugar free foods that contain mannitol, sorbitol, isomaltose, or xylitol can cause gas, bloating, diarrhea and abdominal cramping.
- Timing of meals is important. Traditionally the largest meal is dinner, this will cause higher output late in the day. Try limiting foods and fluids later in the day to decrease output during the night.
- Foods containing simple sugar can worsen diarrhea, this includes many sports drinks and juices.
- Common simple sugars: candy, sugar, pastries, honey, jam and jellies, sweetened drinks.
- Eat protein, fat, complex carbohydrates, and soluble fiber (see below) at each meal.
- High fructose corn syrup found in fruit drinks, baked goods and soda can cause diarrhea.

## **Fiber**

- **6 weeks after surgery** when your stoma size no longer changes and swelling relating to surgery has subsided you may slowly increase the fiber in your diet. Introducing one new food at a time is recommended. If you are unsure about advancing your diet, call your surgeon or ostomy nurse.
- To thicken stool and consistency slowly increase the amount of soluble fiber in your diet.
- Soluble fiber: Oat products (oatmeal, oat bran), barley, tapioca, pectin, banana flakes, legumes (cooked/ canned chickpeas, kidney beans, and lentils with skins peeled off).
- Psyllium fiber powder, 1-2 teaspoons with 1 glass of water (Konsyl, Metamucil)
- Adding soluble fiber to meals can increase its effectiveness.
- Taking Psyllium powder supplement prior to a meal may help slow output.

## **Medications**

- Your surgeon may recommend Lomotil or Imodium to control output. You may take up to 8, 2mg tabs a day (of either).
- As with any strategy begin slowly when introducing the medication. You may begin with 1 tab 2-4 times a day and advance to 2 tabs 4 times daily if necessary.
- Some patients find taking 1 Imodium tablet prior to meals and 2 at bedtime is ideal. Imodium should be used to prevent further episodes of high output. Once you determine how much Imodium you need to take, to control your output, a regular schedule is best.