

Ostomy Nutrition Guide



A publication of



A Message To You...

Ostomy surgery is a lifesaving surgery that enables a person to enjoy a full range of activities, including traveling, sports, family life and work. Thousands of people annually undergo ostomy surgery for various reasons and return to a healthy, functioning lifestyle.

The United Ostomy Associations of America (UOAA) is a volunteer organization dedicated to helping those who have or will have ostomy or other diversionary surgery by providing one-on-one support, local chapter meetings, conferences, and educational material through its web site, printed material and The Phoenix magazine.

You have many peers in the UOAA who are ready to answer your questions, provide support and reassure you that you can have a full, productive life after ostomy surgery.

*We invite you to join us as we fulfill our mission in helping others.
From the United Ostomy Associations of America.*

**Each Person is an individual. Always consult your physician or registered dietician for your individual needs.*

OSTOMY NUTRITION GUIDE

Reviewed and Revised by Michelle Pasia, MPH, RD, LD in 2017

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INTRODUCTION

This guide provides some basic information about the effects ostomy surgery has on digestion and food absorption. After healing is complete and the ostomy is functioning normally, most people with ostomies can return to a normal diet. If you have a special diet because of heart disease, diabetes or other health problems, you should ask your doctor about a diet that will work with both that problem and your ostomy. More detailed information about any special dietary and nutritional needs can be obtained through a registered dietitian (nutrition specialist) and your doctor.

Overview of Common Ostomy Diversions

The following is an overview of common ostomy diversions that will help you better understand their effect on the digestive system. Both fecal and urinary diversions interrupt the normal process of elimination and will have some influence on its function.

Bowel Diversions

Colostomy: A portion of the large intestine is removed or by-passed. The remaining portion of the functioning large intestine (colon) is brought through the abdominal wall, creating a stoma.

Ileostomy: The entire colon, rectum, and anus are removed or by-passed. The small intestine (ileum) is brought through the abdominal wall, creating a stoma.

Continent Ileostomy (abdominal pouch): An internal reservoir with a nipple valve is constructed from a section of small intestine and the valve is brought through the abdominal wall to create a stoma for intubation to empty the reservoir/pouch.

Ileoanal Reservoir/Pelvic Pouch: A pelvic pouch/reservoir is constructed from small intestine, which is brought down and attached to the anus. Evacuation is through the anus.

Bladder Diversions

Urostomy: The bladder is removed or bypassed. A conduit is constructed from a segment of small intestine into which ureters are implanted and brought through the abdominal wall and an external stoma is created.

Continent Urinary Reservoir: The bladder is removed or bypassed. An internal reservoir is constructed from a segment of the small or large intestine into which the ureters are implanted and a stoma is created for intubation to empty the reservoir/pouch.

DIETARY GUIDELINES

BASIC FOOD GROUPS CHART

Nutritional goals for individuals who have had ostomy or related surgeries require some adaptation of dietary information provided for the general public. Specifics of adaptation depend on the type of ostomy and its management. This book provides a guideline for a healthy lifestyle

For the first six to eight weeks after surgery a soft/bland diet may be needed. These foods are

Whole Grains	Vegetables	Fruits
<p>Foods to choose for 6 to 8 weeks after surgery: White bread, rolls, crackers, low-fiber cereal (cream of wheat, cream of rice), white rice. Gradually add back higher fiber foods, with 3-5 grams per serving.</p> <p>At least half of your grain choices should be whole grain.</p> <p>One serving equals = 1 slice of bread 1 cup ready-to-eat cereal 1/2 cup cooked cereal, rice, pasta, quinoa 1/2 bun or English muffin 1/4 bagel</p> <p>During the first 6-8 weeks after surgery, limit insoluble fiber, e.g., wheat, bran, corn and nuts. Add these foods gradually to determine tolerance.</p>	<p>Vegetables to choose for 6-8 weeks after surgery: soft-cooked green beans, carrots, squash and stewed tomatoes. You may need to begin with mashed, boiled or pureed vegetables without the skin. Gradually add back fresh vegetables trying one new food every 3 days.</p> <p>A minimum of 3-5 servings each day</p> <p>One serving equals = 1 cup raw 1/2 cup cooked 1/2 cup juice</p> <p>Eat slowly and chew your food to decrease chance of a blockage. Eat with caution: raw celery, mushrooms, green/red/yellow peppers, cabbage, peas, corn, foods with kernels, nuts, and seeds and soy. Some vegetables like beets may make output red in color.</p>	<p>Fruits to choose for up to 6 weeks after surgery may need to be cooked and or peeled. Start with apples, bananas and canned/pureed fruit packed in water or juice.</p> <p>Fresh fruit is always better than canned or juiced fruit.</p> <p>2-4 servings per day One serving equals = 1 medium-size fruit 1/2 banana 1 cup berries or melon 1/2 cup canned or cooked 1/2 cup 100% juice</p> <p>Include foods that contain soluble fiber such as applesauce and bananas. Limit coconut, pineapple and raisins. Dried fruit may cause a blockage, eat with caution.</p>

Digestion

Digestion begins in the mouth when food is broken down by chewing and mixed with ptyalin, a digestive enzyme in saliva. In the stomach, food is mixed with gastric juices into a semi-liquid state. The small intestine is approximately 21 feet long. Bile and pancreatic enzymes, along with small intestine enzymes, break food down so it can be absorbed and used for energy. The digestion process usually takes two to six hours to complete through the small intestine.

The large intestine, or colon, is five to six feet in length and serves as a storage area for the residues of digestion (wastes). Some water and sodium are absorbed from the stool in the colon. The stool may remain in the colon for 12 to 48 hours.

lower in fiber such as white bread vs. whole wheat bread. Also, vegetables and fruits may need to be cooked before eating them. Please note more specific information in the chart below. Gradually adding back food over time is important to insure a balanced diet. Each person is different and keeping a food log to determine what you tolerate can be helpful. The USDA Dietary Guidelines were used to determine the basis of a healthy diet.

Milk, Yogurt, Cheese	Meats, Proteins	Fats, Oils, Sweets
<p>Some experience lactose intolerance after surgery. Gradually add back dairy.</p> <p>2-3 servings per day</p> <p>One serving equals = 1 cup milk or yogurt 1 1/2 oz. natural cheese 2 oz. processed cheese</p> <p>Slowly add milk and milk products to your diet. If excessive gas or diarrhea occur, omit from diet for several days and reintroduce in small amounts.</p>	<p>Protein-rich foods may need to be limited 6-8 weeks after surgery. Slowly add meat/fish/beans one food at a time to determine tolerance.</p> <p>6-10 oz. daily</p> <p>One serving equals = 1 oz. cooked meat (Count 1/2 cup beans, 1 egg, or 2 tsp. peanut butter as 1 oz. of meat.)</p> <p>Bake, boil, roast, grill, or cook by pan sautéing (minimal fat is absorbed). Select or prepare meats in their natural juice instead of gravies or sauces.</p>	<p>Broth, bouillon, cream soups made with skim milk and lean meats. Sweets/ desserts such as angel food cake, vanilla wafers, graham crackers, nonfat frozen dessert and frozen yogurt.</p> <p>Use Sparingly</p> <p>Use fat in moderation including that used in food preparation.</p> <p><i>Note: If you have a fat intolerance, use fat-free items. Decrease usage of caffeine. It can increase acid content of your stomach and increase the transit time of your gastro-intestinal tract.</i></p>

Absorption

Following the mechanical (chewing) and chemical digestion, the nutrients from food are ready for absorption into the blood and lymphatic system via the small intestine. Almost all absorption occurs in the small intestine. For absorption to take place, carbohydrates, fats and protein must be completely digested or broken down into simple forms. Vitamins, minerals and water are absorbed in their original form.

Your gastrointestinal tract is a highly organized, specialized, and segmented filter designed to absorb only those things that the cells in your body want or need, and allowing the residual (stool) to pass unabsorbed, essentially remaining outside of your

DIETARY GUIDELINES cont.

body. See the Vitamins and Minerals Absorption chart.

Many people with ostomies have no idea what portions of their bowel were removed and what remains. Get the operative reports from each surgery or ask your surgeon about the extent of the surgical procedure(s).

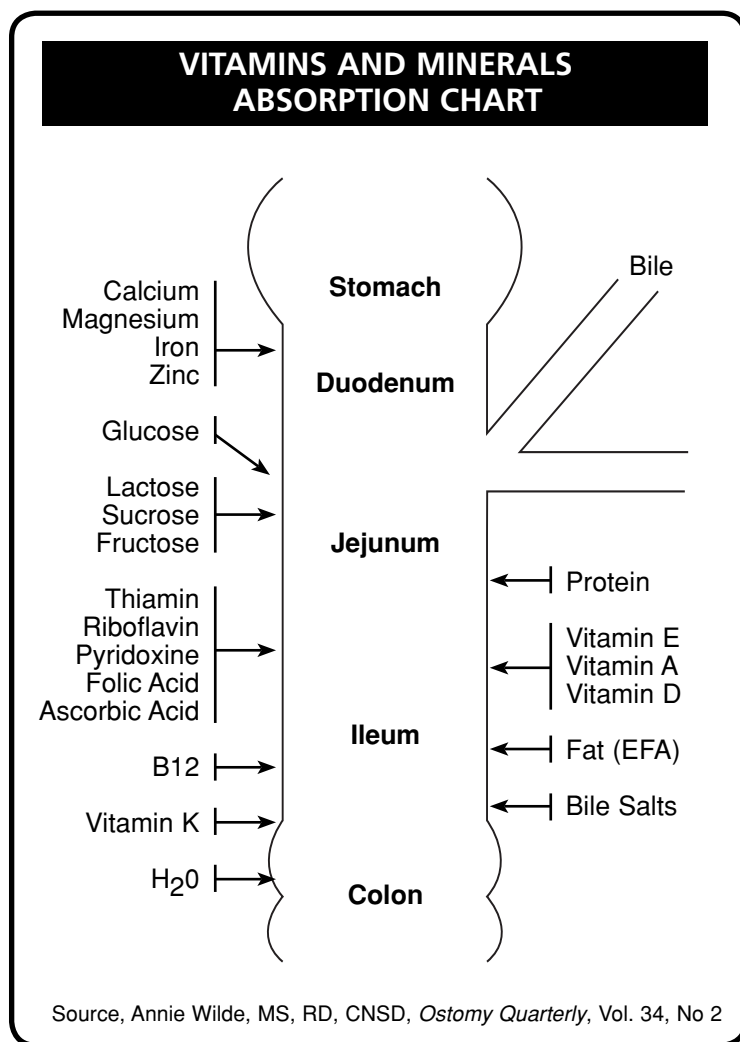
Your nutritional needs will vary based on the bowel you have remaining, the health of the remaining bowel, your overall health and other conditions or diagnoses. All individuals with ostomies have lost a portion of their bowel and will need to compensate by optimizing their diet for the nutrients in question.

Actual changes in your diet may appear minor, it could be that the only one who will notice is you. If minor adjustments do not seem to help, a registered nutrition support dietitian or certified nutrition support nurse with experience with malabsorptive disorders can assist with determining your personal needs.

Bowel Function/Output

Conventional Ileostomy – the stool is liquid to semi-liquid and may contain particles of undigested food residue. The flow cannot be controlled and elimination occurs periodically.

Continent Ileostomy – the stool is semi-liquid to a toothpaste consistency, containing undigested food particles.



High-Volume Ostomy (Short Bowel Syndrome) – A condition where sections of the small intestine have been removed or by-passed due to disease, surgical complications or injury. The shortened length of the small intestine can create problems with digestion, absorption and ostomy management. Consult with your physician and/or ostomy nurse for prescribed medications to slow motility if diarrhea is a problem.

SUPER NUTRIENTS CHART

Description	Health Effects	Food Sources
Vitamin C (anti-oxidant)	Protects against some cancers and heart disease.	Green & red peppers, oranges, grapefruit, broccoli, strawberries, other fruits and vegetables
Vitamin B6	Helps immune system & prevents heart disease.	Potatoes, bananas, fish, chicken, pork, beef and avocados
Potassium (mineral)	Helps lower blood pressure, risk of stroke and helps regulate fluid and salt balance.	Beets, greens, beans, avocados, yogurt, fish and bananas
Beta Carotene (anti-oxidant)	Aids in bone growth and assists the immune system.	Fruits, green and yellow vegetables
Selenium (mineral)	May protect against prostate cancer.	Nuts, tuna, oysters, fish, poultry wheat germ, brown rice, oatmeal and eggs
Zinc (mineral)	Helps wound healing and benefits the immune system.	Oysters, crab, beef, poultry, pork, lamb, nuts, milk products and beans
Calcium (mineral)	Builds strong bones and teeth. Regulates heart beat and muscle contractions.	Dairy products, sardines, collard greens, salmon, broccoli, beans, almonds and seeds
Magnesium (mineral)	Reduces risk of heart disease and strengthens bones.	Almonds, spinach, sunflower seeds, fish, tofu, wheat bran, brown rice, avocados and beans
Folic Acid - vitamin B needed for cell division and protein synthesis	Reduces the risk of birth defects and protects from cancer and heart disease.	Beans, spinach, oatmeal, corn, asparagus, avocado, peas, broccoli and brussel sprouts

Source, Peggy Christ, RNET, *Ostomy Quarterly*, Vol. 1, No. 37

GENERAL GUIDELINES

Ileostomy & Colostomy (Bowel Surgery)

Individuals who have had ostomy surgery will want to eat a regular balanced diet that includes the necessary vitamins, minerals and calories needed for good health. Usually after surgery you will start out with a low-fiber/low-residue diet because these foods are easier to digest and will not overwork the bowel during recovery. The swelling in the bowel reduces in about six to eight weeks, then a regular diet can be resumed, adding specific foods one at a time to judge their effects. Add new foods gradually to your diet to determine their effect on your ostomy management. Add a new food every three days to have a more accurate check on tolerance points. Keeping a food journal is helpful. See Food Journal on page 7.

For the first year of recovery from surgery (especially if you had a long history with your disease), you may need to take a multi-vitamin supplement. The vitamins could vary from a one-a-day type to a higher dosage type (stress tab) to replenish the nutrients that were lost or needed to rebuild your nutritional state. Discuss this with your physician.

Key Tips:

Eat a variety of foods and continue to try to introduce new foods into your diet. Keep in mind that over time you may be able to tolerate different foods. Each food group provides a combination of key nutrients for optimum bodily function. Follow individual preferences considering food requirements, tolerances and any restrictions.

Eat at regular intervals. Skipping meals increases the incidence of watery stools and flatus (gas). Avoid fasting and skipping meals. Eating every 3-4 hours is ideal.

6-8 weeks after surgery begin to choose foods with dietary fiber. Fiber adds bulk to the stool. Its purpose is aiding the transportation of stool along the intestinal tract for elimination. The best sources of fiber are fresh fruit and vegetables, and whole grains.

Lactose intolerance is common. If you notice gas, abdominal bloating, increase in liquid output or diarrhea ten minutes to several hours after the ingestion of a dairy product, eliminate it for several days. You may then add milk/yogurt/cheese one ounce at a time to determine your tolerance. You may also change to lactose-free milk, soy milk (can cause gas), rice milk, almond milk or taking lactase tablets.

Include all of the unsaturated fats. If you have a fat intolerance (you notice a large amount of fat in your output), consult your physician. If you tolerate fats, try to eat a variety of monounsaturated (olive oil, canola oil, peanut oil), polyunsaturated (corn oil, safflower oil, sunflower oil) and Omega 3 fats (fish oil, flaxseed oil/seeds and walnuts). Continue to limit saturated fats such as butter, red meat, bacon and high-fat dairy.

Maintain adequate hydration by consuming 6-8 glasses of water per day. Typically, people with ileostomies may need even more fluids due to higher output.

FOOD JOURNAL

Keeping a food journal may be beneficial for some people. If you are having persistent gas, diarrhea or you just do not feel well, a journal may help you see patterns related to how or what you eat and when problems occur. Often you may need to consult a registered dietitian (RD) to review the journal with you. It is important to consult a registered dietitian who has an understanding of gastrointestinal diseases and ostomies. There are many different ways to keep a food journal. Below is a sample journal.

Date	Time	Food -Solid and Liquid	Medications	Physical Symptoms	Cravings	Emotions

Source: Judith Crim-Ehlers, RD, CEDC, 2002

GENERAL GUIDELINES Cont.

Continent Diversions (Bowel Surgery)

For several months after surgery, the pouch will adapt to its new status. During this time, stool consistency gradually thickens, capacity increases and the number of daily bowel movements will decrease. This is not a steady change. There will be ups and downs. Improvements should become reliable after one year.

Diet and medications help to improve pouch function. Immediately after surgery, eat to slow down the digestive process and allow the pouch to enlarge. This will decrease the number of bowel movements and help prevent peri-anal irritation (ileo-anal reservoir). Food tolerances vary from person to person, so what works for someone else may affect you differently. If you do not tolerate something now, try it again in a few months. Skipping meals does not stop output. Eat to slow it down.

Remember, when you eat is as important as what you eat, so try adjusting the time between meals, or see if your body responds better to a different meal time. Traditional meal patterns cause increased output later in the day. Sleep better by limiting foods and fluids in the evening. Be patient and keep experimenting to find the combinations that give you the results you want.

Note: Review all the information and food charts in this guide. The effects of your diet will generally be the same as indicated for traditional ileostomy and colostomy.

Important Tips for Continent Diversions:

- Eat regularly-don't skip meals. Empty bowels produce gas.
- When adding new foods to your diet, try a little bit with other foods.
- Small, frequent meals are best – always chew thoroughly.
- Rice, potatoes or pasta once daily may reduce frequency and irritation.
- High potassium foods will help offset the effects of diarrhea.
- Limit foods containing simple sugars – they aggravate diarrhea which include sweets, many desserts and high-sugar beverages such as juices and soda.
- Drink six to eight glasses of fluid each day – but not with meals.

Anal Irritants

- Chinese/oriental vegetables
- Coconut
- Dried fruits (raisins, figs)
- Foods with seeds, nuts
- Raw fruits (oranges, apples)
- Raw vegetables (celery, corn, coleslaw)
- Spicy foods

Limit Simple Sugars

- Sugar
- Candy
- Pastries
- Honey
- Jam, jellies
- Sweetened drinks

Short Bowel Syndrome

Some patients with an ostomy may also have what is known as Short Bowel Syndrome. It is important to talk to your doctor if you think you may have this condition.

What is Short Bowel Syndrome?

Short Bowel Syndrome (SBS) or often referred to and indicated as intestinal failure, is a potentially fatal gastrointestinal disorder in which patients are unable to absorb enough nutrients and fluids through the intestine from the foods and liquids they consume. SBS generally occurs when a large portion of the small intestine has been removed by surgery as a result of disease or injury. Though SBS can occur in people with a complete bowel, most cases will develop after the surgical resection of the small and/or large bowel (colon).

What are Common Symptoms?

If you have SBS, you may experience symptoms related to difficulty in absorbing the proper amounts of vitamins, minerals, nutrients, electrolytes and fluids. Adults with SBS often experience symptoms of malnutrition including, poor skin and nails, weight loss, and low energy. Infants and children fail to grow and develop. Symptoms vary according to the individual.

The following symptoms may occur at any time, but exacerbations indicate lack of adequate nutritional management:

- Diarrhea (various types) and high ostomy output. This major symptom is often accompanied by dehydration, malnutrition, weight loss and fatigue. Reasons vary with the type of resection and the amount and functionality of the remaining bowel.
- Abdominal pain and bloating
- Weight loss and malnutrition
- Dehydration
- Fatigue and weakness
- Blood in stools

How is Short Bowel Syndrome Diagnosed?

The diagnosis of SBS is based on a combination of a physical exam, laboratory tests and imaging exams and evaluation of operative reports.

How is Short Bowel Syndrome Treated and Managed?

Management options for SBS are patient-specific and complex. There are a lot of factors, like the location and parts of bowel remaining after surgery, that help determine the management plan. The initial management plan may change over time. The treating doctor, often with the help of a registered dietitian or certified nutrition support clinician, will develop a plan that is best for each patient.

If you are a patient with SBS, you typically cannot get the proper amount of nutrition and fluid from your diet. That's why the primary treatment goal is to ensure that you get the nutrition and fluid that you need (including proteins, carbohydrates, lipids, vitamins and minerals.) At the same time, doctors will focus on symptoms management using therapeutic medications.

GENERAL GUIDELINES Cont.

Short Bowel Syndrome (Cont.)

Some patients who cannot maintain adequate nutrition and hydration by mouth may be given the alternative of intravenous nutrition and hydration. This is commonly known as Total Parenteral Nutrition, TPN. IV access needs to be established with a special IV that can remain in place for an extended period. TPN is often just administered at bedtime to allow patients normal activity during the daytime.

Are there Complications of Short Bowel Syndrome? If you have SBS, you may or may not experience these common complications:

- Small bowel bacteria overgrowth
- Kidney stones
- Electrolyte abnormalities/imbbalances
- Vitamin and mineral deficiencies
- Acidosis
- Parenteral nutrition (PN) related line problems
- Gastric Hypersecretion
- Oxalate Kidney Stones
- Bowel obstructions

Again, it is important to talk to your doctor if you think you may have this condition.

Urostomy (Bladder Surgeries)

The urinary system is a simple network with complex functions. It plays a role in fluid balance, electrolyte balance, acid-base balance and excretion of waste. To maintain healthy kidney function, drink sufficient fluids to keep the urine diluted. If urine color is darker than usual, it is an indication of concentrated urine which requires an increase in fluid intake. Certain foods and drugs can discolor the urine or produce a strong odor.

Urine pH Balance

Urine pH is defined as the fluid's degree of acidity or alkalinity. When the food you eat is burned in the body, it yields a mineral residue called "ash." This ash can be either acidic or basic (alkaline) depending on whether the food that is "burned" contains mostly acidic or basic ions. Most fruits and vegetables actually give an alkalized ash and tend to alkaline the urine. Meats and cereals will usually produce an acidic ash.

Acid Ash Foods	Alkaline Ash Foods	Neutral Foods
Most meats	Milk	Butter
Breads & cereals	Bananas	Coffee
Cheese	Beans	Cream
Corn	Beets	Honey
Crackers	Greens	Salad oils
Cranberries	Spinach	Syrups
Eggs	Most fruits	Tapioca
Macaroni	(including citrus fruits)	Tea
Nuts	Most vegetables	
Pasta, Rice		
Prunes, Plums		
Fish		
Poultry		

Unless otherwise indicated, the urine should be maintained in an acid state. To maintain an acid urine state, increase your daily fluid intake to eight to ten (8 oz.) glasses of water. Drink cranberry juice in place of orange juice or other citrus juices which tend to make the urine more alkaline, take vitamin C daily (if okayed by physician) and try to eat an acid ash diet (see above listing).

FLUIDS AND ELECTROLYTES

Electrolyte Balance

Electrolytes refer to the normal chemicals dissolved in body fluids needed to maintain body activity. If electrolytes are out of balance, a person may become weak or ill and may need to take medications by mouth or intravenously.

Electrolyte balance (especially potassium and sodium) is important. When the colon (large intestine) is removed, a greater risk for electrolyte imbalance can occur. Diarrhea, excessive perspiration and vomiting can increase this risk. A person with short bowel syndrome is at high risk. Their electrolytes should be monitored closely. Your diet should include fluids and foods rich in electrolytes. A general rule is to “salt foods to taste.” Do not exclude sodium in the diet.

Fluid and Electrolyte Problems

Problem	Symptoms	Treatment
Dehydration	Increased thirst, dry mouth, dry skin, decreased urine output, fatigue, shortness of breath, headaches, dry eyes and abdominal cramping.	Increase fluids (any type, Gatorade/PowerAde high in potassium & sodium) Daily intake of fluids should be 8-10 (8 oz.) glasses.
Sodium Depletion	Loss of appetite, drowsiness, headaches, abdominal and leg cramping, feelings of faintness, particularly when standing, cold sensation in arms and/or legs.	Increase intake of foods and beverages high in sodium, such as any regular soup, bouillon, Gatorade/PowerAde.
Potassium Depletion	Fatigue, muscle weakness, gas, bloating, shortness of breath, decreased sensation in arms and legs.	Increase intake of foods high in potassium, such as orange juice, bananas, Gatorade/PowerAde.

Foods high in potassium: black-eyed peas, bananas, bouillon, chicken, fish, oranges, pinto beans, potatoes, raisins, tomato or vegetable soup, veal, watermelon and yogurt.

Foods high in sodium: broth, buttermilk, canned soups, canned vegetables, cheese, soy sauce, table salt, tomato juice and commercially prepared foods and bread.

Preparing and Utilizing Electrolyte Drinks

Excessive fluid loss of more than one quart of liquid stool in 24 hours can cause dehydration and require medical attention. (Normal ileostomy pouch emptying is five to eight times daily.) Balance intake of fluids with the output from the stoma. Water is an excellent natural beverage; however, over-consumption of water can wash away electrolytes in the body. Drink a combination of water and electrolyte beverages. The glucose ingredients in electrolyte drinks aid in absorption of electrolytes. Foods with low osmolarity, which aids in maintaining fluid balance in the bowel, are best. A high-sugar beverage may cause further fluid loss and dehydration.

Homemade Electrolyte Drink

1 teaspoon salt
1 teaspoon baking soda
1 teaspoon white Karo syrup
1 6-ounce can frozen orange juice
Add water to make one quart, mix well

Or Quick Fix

Orange juice – 4 ounces
Water – 4 ounces
Pinch of salt

Diluted Electrolyte Drinks (Brand Names)

(Improve taste, tolerance, lower calories, and decrease cost)

1/2 quart (500 cc) – commercial electrolyte drinks

1/2 quart (500 cc) - water

1 teaspoon salt substitute (potassium chloride)

Mix well

Brand Name Electrolyte Drinks - 8 oz. serving*

Brand/8 oz.*	Sodium	Chloride	Potassium	Glucose	Calories
Gatorade/PowerAde	5.2	2.8	.83	14.0	60
Pedialyte	17.7	15.4	4.0	4.0	24

*Units are per ounce/ML

Water

Water is essential for every cell in the body. Water controls body temperature, serves as building material and solvent and transports nutrients. Thirst is a signal that the body needs fluids and may already be dehydrated. Daily losses must be replaced. Any liquid containing water (milk, juice, etc.) helps to meet your daily requirement. You can also get water from the food you eat. (e.g., tomatoes have a 94 percent water content). Drinking coffee or tea will decrease hydration because they increase urine and salt output. Be sure when drinking coffee or tea to increase your water consumption to counter balance the increased loss of water.

Encourage fluid intake of eight to ten (8 oz.) glasses of liquids each day. Drinking more fluids is helpful in flushing out the kidneys, eliminating impurities in the blood, and helping you to maintain the proper electrolyte balance.

FOOD REFERENCE CHART FOR PEOPLE WITH AN OSTOMY

For individuals who have had ostomy surgery, it is important to know the effects of various foods on ileal output. The effects may vary with the remaining portion of functioning bowel.

Listed below are some general guidelines of the effects of foods after ostomy surgery. Use trial and error to determine your individual tolerance. Do not be afraid to try foods that you like, just try small amounts.

Gas Producing

Alcoholic bev.
Beans
Soy
Cabbage
Carbonated bev.
Cauliflower
Cucumbers
Dairy products
Chewing gum
Milk
Nuts
Onions
Radishes

Odor Producing

Asparagus
Baked Beans
Broccoli
Cabbage
Cod liver oil
Eggs
Fish
Garlic
Onions
Peanut butter
Some vitamins
Strong cheese

Increased Stools

Alcoholic bev.
Whole grains
Bran cereals
Cooked cabbage
Fresh fruits
Greens, leafy
Milk
Prunes
Raisins
Raw vegetables
Spices

Stoma Obstructive

Apple peels
Cabbage, raw
Celery
Chinese vegetables
Corn, whole kernel
Coconuts
Dried fruit
Mushrooms
Nuts
Oranges
Pineapple
Popcorn
Seeds

Color Changes

Asparagus
Beets
Food colors
Iron pills
Licorice
Red Jello®
Strawberries
Tomato sauces

Odor Control

Buttermilk
Cranberry juice
Orange juice
Parsley
Tomato juice
Yogurt

Constipation Relief

Coffee, warm/hot
Cooked fruits
Cooked vegetables
Fresh fruits
Fruit juices
Water
Any warm or hot beverage

Diarrhea Control

Applesauce
Bananas
Boiled rice
Marshmallows
Peanut butter
Pectin supplement
Tapioca
Toast

MEDICATIONS

Ileostomy Absorption Concerns

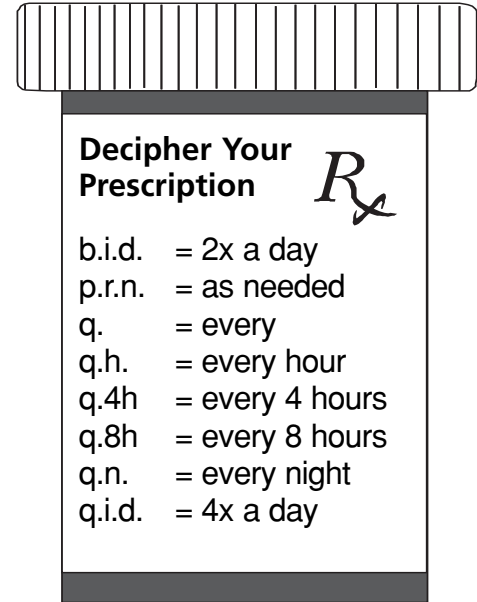
Due to the absence of the colon and often altered transit time through the small intestine, the type of medication taken must be carefully considered when prescribing for the person with an ileostomy.

Medications in the form of coated tablets or time-release capsules may not be absorbed and no benefit received. A large number of medications are prepared in this way. Before the prescription is completed by the physician, the patient with an ileostomy should inform him of this difficulty. If the medication required is available only in this form and not destroyed by the stomach juices, then the tablet may be crushed between two spoons and taken with water. This often results in an evil-tasting mixture but absorption is ensured.

The best type of medication for the person with an ileostomy is either in the form of uncoated tablets or in liquid form. Although this is not the most palatable mode of treatment, these dosage forms ensure that the medication prescribed is being absorbed. A pharmacist can assist in choosing the form of a medication that will be best absorbed.

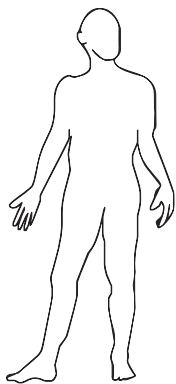
After ileostomy surgery, never take laxatives. For a person who has an ileostomy, taking laxatives can cause a severe fluid and electrolyte imbalance.

Transit time varies with individuals. If food passes through undigested, be aware that this may be a sign that the nutrients are not being absorbed properly. Prolonged incidences of decreased absorption may lead to various sub-clinical or clinical nutritional deficiencies.



Decipher Your Prescription *Rx*

- b.i.d. = 2x a day
- p.r.n. = as needed
- q. = every
- q.h. = every hour
- q.4h = every 4 hours
- q.8h = every 8 hours
- q.n. = every night
- q.i.d. = 4x a day



What's a body made of? Sugar and spice and everything nice.

An average 140 pound person's body weight consist of:

- 84 pounds water (60%)
- 28 pounds fat (20%)
- 29 pounds of a combination of (20%)
 - protein (up to 25 pounds)
 - minerals (up to 7 pounds)
 - carbohydrates (up to 1.4 pounds)
 - vitamins (trace)

MEDICATION AND THE OSTOMATE CHART

The following information was developed to focus on a person with an ostomy. Absorption may vary with individuals and type of medication. Certain drug problems may arise depending on the type of ostomy you have and the medications you are taking. Make sure all your healthcare providers know the type of ostomy you have and the location of the stoma. This information will help your pharmacist and other healthcare providers monitor your situation.

Drug Group	Colostomy	Ileostomy	Urostomy
Antacids	Products containing aluminum may cause constipation (e.g., Amphogel [®] , Basalgel [®] , Maalox [®] , Fast-Acting Mylanta [®]).	Products containing magnesium may cause diarrhea (e.g., Maalox [®] , Fast-Acting Mylanta [®] , Mylanta [®] Gelcaps, Mag-Ox 400, Uro-Mag).	Products containing calcium may cause calcium stones (e.g., Children's Mylanta [®] , Mylanta [®] Gelcaps).
Antibiotics	Caution—May destroy normal flora (may cause diarrhea).	May lead to diarrhea and risk of dehydration (e.g., ampicilin, cephalosporins, sulfonamides, etc).	Usually no problem.
Birth Control Pills	Usually no problem.	Birth control pills may not be fully absorbed. There may be a possible need to use other forms of birth control.	Usually no problem.
Corticosteroids (Cortisone)	Sodium retention. Possible fungal infection under face-plate due to suppression of immune system.	Sodium retention. Possible fungal infection under face-plate due to suppression of immune system.	Sodium retention. Possible fungal infection under face-plate due to suppression of immune system.
Diuretics	Usually no problem.	Caution--may cause electrolyte imbalance.	Will increase urine flow—may cause electrolyte imbalance.
NSAIDS Nonsteroidal anti-inflammatory agents (e.g., Motrin[®], Aleve[®], etc.)	May cause bleeding from stomach or duodenum-gastric distress. Do not take on an empty stomach.	May cause bleeding from stomach or duodenum-gastric distress. Do not take on an empty stomach.	May cause bleeding from stomach or duodenum-gastric distress. Do not take on an empty stomach
Sulfa Drugs	Usually no problem.	Usually no problem.	Caution—use lots of water.
Vitamins	Liquid form is best. B complex may cause odor.	Liquid form is best. Vitamin B-12 is best by injection or nasal spray. Not absorbed well by oral route. Sublingual may be an option.	Tablet/Capsule okay. B complex may cause odor.

Source: Melvin F. Baron, PharmD, MPA, 2002

FREQUENTLY ASKED QUESTIONS

Question: How soon after ostomy surgery can I return to a normal diet?

Physicians and ostomy nurses suggest that you begin slowly, depending upon your recovery and/or other medical complications. Add back one new food at a time. If you experience any problems, discontinue for a few weeks and try again.

Question: In the past, certain foods caused me some trouble with digestion. How will they affect me since my ostomy surgery?

Check them out. You may find that some of those same foods will continue to be troublesome and others may not.

Question: Will my ileostomy continue to produce output even if I do not eat?

Yes, the small intestine will continue to produce gas and digestive juices. An empty digestive tract seems to produce excessive gas. Eat small meals to keep something in the gut. Peristalsis happens!

Question: After ostomy surgery, I have gained excess weight. What happened? What types of food should I eat?

The relaxation of dietary restrictions, freedom from debilitating illness and malabsorption promotes a rapid gain in weight. Follow the same weight reduction diet as recommended by nutritionists and dietitians. Eating smaller quantities of a well-balanced diet and increasing water intake will assist with weight reduction.

Question: What is meant by “low-residue” diet?

Low-residue refers to a dietary regime which eliminates bulk-forming, hard-to-digest or high-fiber foods.

Question: Will spicy foods cause any damage to my stoma?

If you can tolerate spicy foods through your digestive system, the output through your stoma should not cause any harm. The stoma is formed from the lining of the bowel and it is tough and can tolerate those spicy foods.

Question: What effects will oral odor control medications have on my ostomy?

Some individuals who have a colostomy report that they experienced some constipation from bismuth products found in oral odor control medications. Individuals who have an ileostomy have more benefits and fewer side effects from oral preparations (chlorophyll tablets, bismuth subgallate and bismuth subcarbonate). Most foods do not effect an individual with a urostomy. A strong urine odor may be an indication of dehydration and the need for increased fluid intake. Check with your doctor or ostomy nurse about any oral preparations and do not exceed the recommended dosage.

Question: Can sugar free foods containing mannitol, sorbitol, isomalt or xylitol have a bad effect on my gut?

Yes. The effect is probably the same for people with or without an ostomy. These are sugar alcohols used instead of or in addition to nutra-sweet and saccharin. The sugar alcohols can cause gas, bloating, abdominal pain and/or diarrhea.

FREQUENTLY ASKED QUESTIONS cont.

Question: Can the fat substitute Olestra[®] cause problems?

Maybe. In many people with gut diseases, it may cause severe abdominal cramping, gas, bloating and/or diarrhea.

Question: Should I be concerned about vitamin B-12 deficiency?

Vitamin B-12 is absorbed in the last section of the small bowel (terminal ileum). Ileostomy surgery necessitates the removal of some portion of the terminal ileum and some of the absorption abilities for vitamin B-12. Ask your ostomy nurse or physician to check out your B-12 level and prescribe some replacement therapies if needed. There are several therapies available including B-12 injection, B-12 nose spray, and some B-12 pills that absorb under the tongue (sublingual).

RESOURCES

United Ostomy Associations of America

UOAA is a volunteer-managed non-profit organization whose vision is the creation of a society where people with bowel and urinary diversions are universally accepted socially, in the work place, medically and psychologically. UOAA has a comprehensive website, www.ostomy.org, that includes ostomy information, support group locations and discussion boards so people can connect, ask questions and share advice.

UOAA staffs a national Help Line at 800-826-0826. Call to find the affiliated support group in your area or to talk to an ostomy nurse. Another free service offered by UOAA is provided by our advocacy legal specialist. If you experience some form of discrimination as a result of your surgery, call our Help Line and they will put you in touch with our specialist.

The official publication of the UOAA, *The Phoenix* magazine, is America's leading source for ostomy information, education and inspiration. Subscriptions to the magazine are a major source of funding for the UOAA and are available by calling 800-826-0826 or going online: www.phoenixuoaa.org.

Wound, Ostomy and Continence Nurses Society (WOCN)

The WOC(ET) nurse professional is an expert in the care of patients with wound, ostomy and continence problems. The UOAA can refer you to an ostomy nurse in your area. You can also contact the WOCN national office for information and local referrals: 1-888-224-9626 or visit www.wocn.org

Agencies That May Be Helpful

- American Dietetic Association, 1-800877-1600, www.eatright.org
- American Cancer Society, 1-800-ACS-2345 or www.cancer.org.
- American Pharmacists Association. www.pharmacists.com
- National Institutes of Health. www.nih.gov
- Visiting Nurse Association of America (VNAA), 202-384-1420, www.vnaa.org

GLOSSARY

Absorption: the ability of the digestive tract to process nutrients.

Dehydration: loss of water from the body tissues due to diarrhea, vomiting, excessive sweating.

Diarrhea: an abnormal profuse discharge from the intestines.

Electrolytes: products in body cells and solution that, when in balance maintain bodily processes. Included as electrolytes are sodium (Na), potassium (K), magnesium (Mg), calcium (Ca), chlorides (Cl), bicarbonate (HCO₃) and others.

Enzymes: an organic compound (chemical) capable of accelerating or initiating a body process, such as the digestion of foods.

Feces: waste products of the digestive system, also referred to as stool, bowel movements, etc.

Food Blockage: a bolus of food residue lodged behind a kink or narrowed segment of bowel that blocks normal flow of fecal contents through the intestine.

Insoluble Fiber: food substances that digestive enzymes cannot break down into a liquid.

Intubation: insertion of a tube into a hollow organ.

Lactose: a sugar present in milk.

Low-Residue Diet: refers to a dietary regime which eliminates bulk-forming foods, hard-to-digest foods, high-fiber foods.

Peristalsis: wave-like contractions occurring in the gastrointestinal tract that propel food substances toward elimination during the digestive process.

pH of Urine: how acid or alkaline urine is.

Reservoir: an anatomic structure that serves as a place to collect or retain fluid.

Soluble Fiber: food substances that can be dissolved into a liquid.

Transit Time: the amount of time it takes food to travel through the alimentary canal from the mouth until eliminated.

