

Ostomy Surgery of the Bowel

National Digestive Diseases Information Clearinghouse



What is ostomy surgery of the bowel?

Ostomy surgery of the bowel, also known as bowel diversion, refers to surgical procedures that reroute the normal movement of intestinal contents out of the body when part of the bowel is diseased or removed. Creating an ostomy means bringing part of the intestine through the abdominal wall so that waste exits through the abdominal wall instead of passing through the anus.

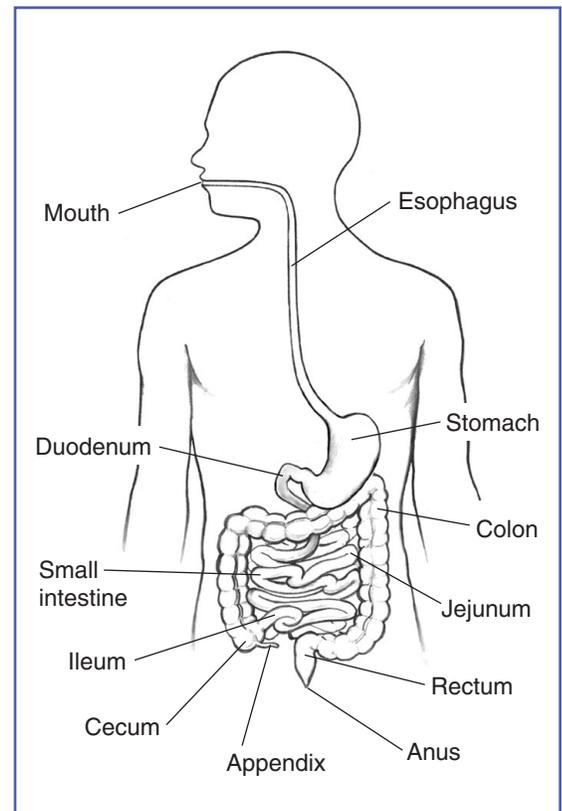
Ostomy surgery of the bowel may be temporary or permanent, depending on the reason for the surgery. A surgeon specially trained in intestinal surgery performs the procedure in a hospital. During the surgery, the person receives general anesthesia.

Ostomy surgeries of the bowel include

- ileostomy
- colostomy
- ileoanal reservoir
- continent ileostomy

What is the bowel?

The bowel is another word for the small and large intestines. The bowel forms the largest part of the gastrointestinal (GI) tract—a series of hollow organs joined in a long, twisting tube from the mouth to the anus. The anus is a 1-inch-long opening through which stool leaves the body. Organs that make up the GI tract include the mouth, esophagus, stomach, small intestine, large



The normal GI tract

intestine, and anus. The small intestine measures about 20 feet long in adults and includes

- the duodenum—the first part of the small intestine nearest the stomach
- the jejunum—the middle section of the small intestine between the duodenum and ileum
- the ileum—the lower end of the small intestine

Peristalsis—a wavelike movement of muscles in the GI tract—moves food and liquid through the GI tract. Peristalsis, along with the release of hormones and enzymes, helps food digest. The small intestine absorbs nutrients from foods and liquids passed from the stomach. Most food digestion and nutrient absorption take place in the small intestine.

The large intestine consists of the cecum, colon, and rectum. The cecum connects to the last part of the ileum and contains the appendix. The large intestine measures about 5 feet in adults and absorbs water and any remaining nutrients from partially digested food passed from the small intestine. The large intestine then changes waste from liquid to semisolid or solid feces, or stool. Stool passes from the colon to the rectum. The rectum measures 6 to 8 inches in adults and is located between the last part of the colon and the anus. The rectum stores stool prior to a bowel movement. During a bowel movement, stool moves from the rectum, through the anus, and out of the body.

Read more in *The Digestive System and How It Works* at www.digestive.niddk.nih.gov.

Why does a person need ostomy surgery of the bowel?

A person may need ostomy surgery of the bowel if he or she has

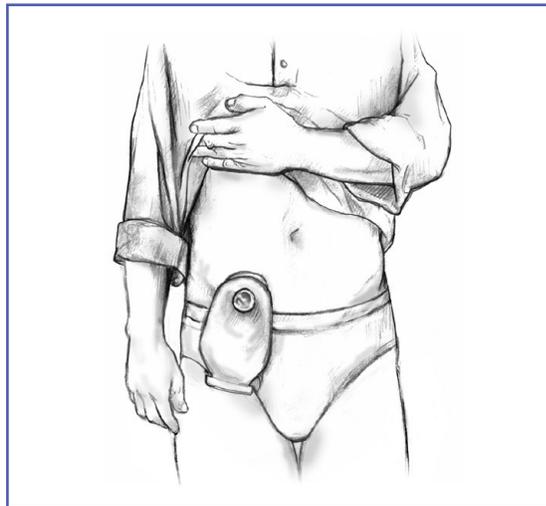
- cancer of the colon or rectum
- an injury to the small or large intestine
- inflammatory bowel disease—long-lasting disorders, such as Crohn’s disease and ulcerative colitis, that cause irritation or sores in the GI tract
- obstruction—a blockage in the bowel that prevents the flow of fluids or solids
- diverticulitis—a condition that occurs when small pouches in the colon called diverticula become inflamed, or irritated and swollen, and infected

Read more in these publications at www.digestive.niddk.nih.gov:

- *Crohn’s Disease*
- *Diverticular Disease*
- *Ulcerative Colitis*
- *What I need to know about Crohn’s Disease*
- *What I need to know about Diverticular Disease*

What is a stoma?

During ostomy surgery of the bowel, a surgeon creates a stoma by bringing the end of the intestine through an opening in the abdomen and attaching it to the skin to create an opening outside the body. A stoma may be three-fourths of an inch to a little less than 2 inches wide. The stoma is usually located in the lower part of the abdomen, just below the beltline. However, sometimes the stoma is located in the upper abdomen. The surgeon and a wound, ostomy, and continence (WOC) nurse or an enterostomal therapist will work together to select the best location for the stoma. A removable external collection pouch, called an ostomy pouch or ostomy appliance, is attached to the stoma and worn outside the body to collect intestinal contents or stool. Intestinal contents or stool passes through the stoma instead of passing through the anus. The stoma has no muscle, so it cannot control the flow of stool, and the flow occurs whenever peristalsis occurs. Ileostomy and colostomy are the two main types of ostomy surgery of the bowel during which a surgeon creates a stoma.

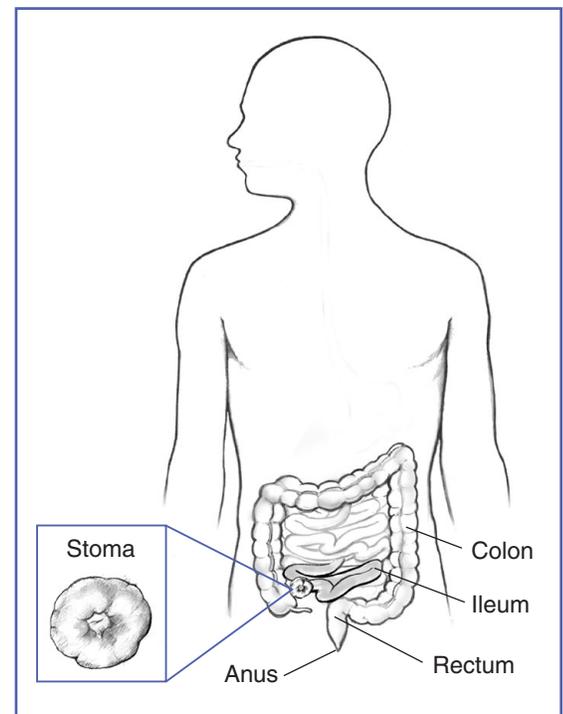


An ostomy pouch

What is an ileostomy?

An ileostomy is a stoma created from a part of the ileum. For this surgery, the surgeon brings the ileum through the abdominal wall to make a stoma. An ileostomy may be permanent or temporary. An ileostomy is permanent when the surgeon removes or bypasses the entire colon, rectum, and anus. A surgeon may perform a temporary ileostomy for a damaged or an inflamed colon or rectum that only needs time to rest or heal from injury or surgery. After the colon or rectum heals, the surgeon repairs the opening in the abdominal wall and reconnects the ileum so stool will pass into the colon normally. An ileostomy is the most common temporary bowel diversion. A surgeon performs an ileostomy most often to treat inflammatory bowel disease or rectal cancer.

Read more about rectal cancer at www.cancer.gov/cancertopics/types/colon-and-rectal.

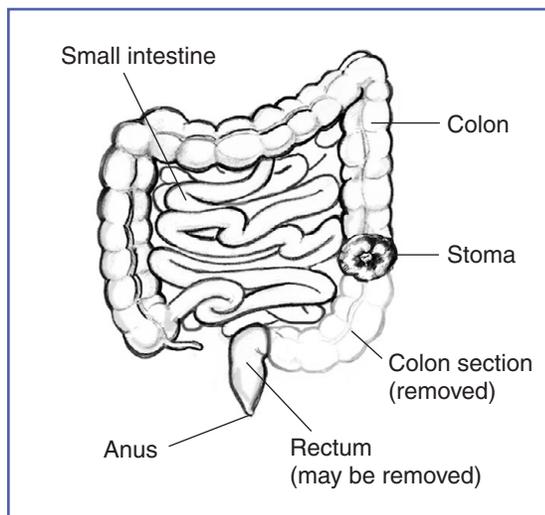


Ileostomy

What is a colostomy?

A colostomy is a stoma created from a part of the colon. For this surgery, the surgeon brings the colon through the abdominal wall and makes a stoma. A colostomy may be temporary or permanent. The colostomy is permanent when the surgeon removes or bypasses the lower end of the colon or rectum. A surgeon may perform a temporary colostomy for a damaged or an inflamed lower part of the colon or rectum that only needs time to rest or heal from injury or surgery. Once the colon or rectum heals, the surgeon repairs the opening in the abdominal wall and reconnects the colon so stool will pass normally. A surgeon performs a colostomy most often to treat rectal cancer, diverticulitis, or fecal incontinence—the accidental loss of stool.

Read more in *Fecal Incontinence* at www.digestive.niddk.nih.gov.

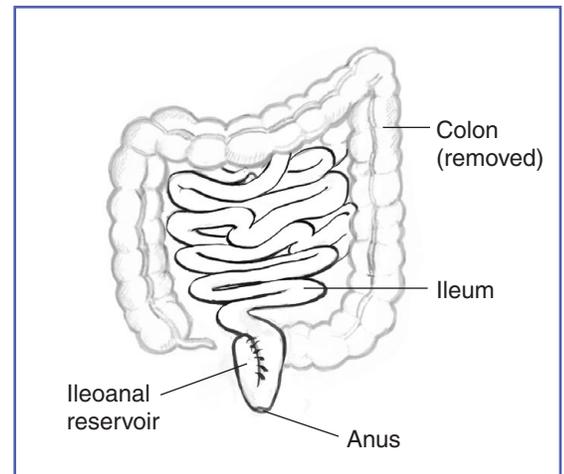


Colostomy

What is an ileoanal reservoir?

An ileoanal reservoir is an internal pouch made from the ileum. This surgery is a common alternative to an ileostomy and does not have a permanent stoma. Also known as a J-pouch or pelvic pouch, the ileoanal reservoir connects to the anus after a surgeon removes the colon and rectum. Stool collects in the ileoanal reservoir and then exits the body through the anus during a bowel movement. An ileoanal reservoir is an option after removal of the entire large intestine when the anus remains intact and disease-free. The surgeon often makes a temporary ileostomy before or at the time of making an ileoanal reservoir. Once the ileoanal reservoir heals from surgery, the surgeon reconnects the ileum to the ileoanal pouch and closes the temporary ileostomy. A person does not need a permanent external ostomy pouch for an ileoanal reservoir.

A surgeon creates an ileoanal reservoir most often to treat ulcerative colitis or familial adenomatous polyposis. Familial adenomatous polyposis is an inherited disease characterized by the presence of 100 or more polyps in the colon. The polyps may lead to colorectal cancer if not treated. People with



Ileoanal reservoir

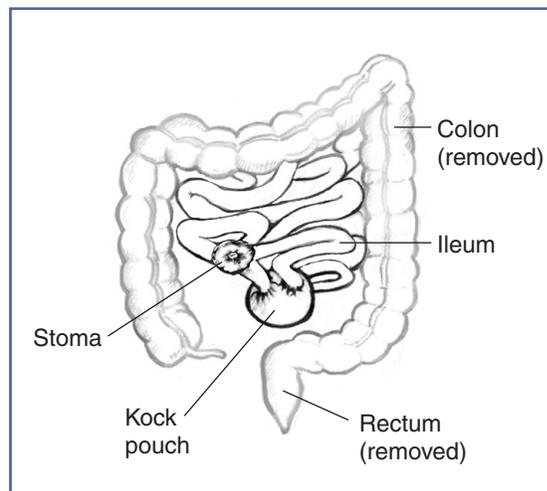
Crohn's disease usually are not candidates for this procedure.

Read more in *What I need to know about Colon Polyps* at www.digestive.niddk.nih.gov.

What is a continent ileostomy?

A continent ileostomy is an internal pouch, sometimes called a Kock pouch, fashioned from the end of the ileum just before it exits the abdominal wall as an ileostomy. The surgeon makes a valve inside the pouch so that intestinal contents do not flow out. The person drains the pouch each day by inserting a thin, flexible tube, called a catheter, through the stoma. The person covers the stoma with a simple patch or dressing. A continent ileostomy is an option for people who are not good candidates for an ileoanal reservoir because of damage to the rectum or anus and who do not want to wear an ostomy pouch.

Creating the Kock pouch is a delicate surgical procedure that requires a healthy bowel for proper healing. Therefore, a surgeon usually does not perform Kock pouch surgery during an acute attack of bowel disease. A



Continent ileostomy

continent ileostomy is now uncommon, and most hospitals do not have a specialist who knows how to perform this type of surgery. As with ileoanal reservoir surgery, the surgeon usually removes the colon and rectum to treat the original bowel disease, such as ulcerative colitis or familial adenomatous polyposis. People with Crohn's disease are not usually candidates for this procedure.

What are the complications of ostomy surgery of the bowel?

Complications of ostomy surgery of the bowel may include

- skin irritation
- stoma problems
- blockage
- diarrhea
- bleeding
- electrolyte imbalance
- infection
- irritation of the internal pouch, or pouchitis
- vitamin B12 deficiency
- phantom rectum
- short bowel syndrome
- rectal discharge

Skin Irritation

Skin irritation is the most common complication for people with an ostomy. If the external ostomy pouch does not fit properly, stool or stool contents can leak out around the stoma and under the pouch. When irritated, a person's skin will become itchy, red, and uncomfortable. When changing the pouch, a person can use an ostomy powder on the skin around the stoma

to treat skin irritation. If the skin irritation does not improve, the person should talk with a WOC nurse or an enterostomal therapist—who are specially trained in ostomy care and rehabilitation—or another health care provider about the symptoms. Skin irritation may occur around the stoma for people who have an ileostomy or a colostomy. People who have ileoanal reservoir surgery may have skin irritation around the anus. Sometimes, using a barrier ointment to protect the skin around the anus can help treat and prevent irritation.

Stoma Problems

Stoma problems include the following:

- **Hernia.** A stoma hernia, seen as a bulge in the skin around the stoma, is a weakening of the abdominal wall around the stoma site. As with all hernias, a stoma hernia continues to increase in size and may eventually need surgical repair when it becomes too large. Rarely, the intestine gets trapped or kinked within the hernia and becomes blocked. A blocked intestine that loses its blood supply requires emergency surgery.
- **Prolapse.** A stoma prolapse occurs when the bowel pushes itself through the stoma. A person may be able to push the bowel back through the stoma and keep it in place with a stoma shield. If not, the stoma prolapse may require special care and a larger ostomy pouch. A stoma prolapse that becomes blocked or loses its blood supply requires surgical repair.

- **Narrowing of the stoma.** Narrowing of the stoma makes it difficult for stool to pass through the stoma. A narrowed stoma may need surgical repair.

Blockage

Occasionally, an ileostomy or a colostomy does not function for a short time. If the stoma has not passed intestinal content or stool for 4 to 6 hours and the person is experiencing cramping or nausea, the ileum or colon may be blocked. Blockage may occur when foods that are hard to digest get stuck in the ileum or colon.

Abdominal adhesions in the ileum or colon may cause blockage as well. Abdominal adhesions are bands of fibrous tissue that form between abdominal tissues and organs, causing them to kink or narrow. Most blockages get better without additional surgery by not eating food and drinking only clear liquids to rest the bowel for a short time.

Read more in *Abdominal Adhesions* at www.digestive.niddk.nih.gov.

Diarrhea

Diarrhea is loose, watery stools. A person has diarrhea if he or she passes loose stools three or more times a day. Diarrhea occurs when intestinal contents pass through the small intestine too quickly for fluid and mineral absorption. When fluids and minerals such as sodium and potassium are not absorbed, they leave the body. Diarrhea can lead to dehydration, malnutrition, and weight loss. Diarrhea is common, even

normal, with an ileostomy or ileoanal reservoir. In most cases of diarrhea, the only treatment necessary is replacing lost fluids and electrolytes to prevent dehydration. Electrolytes are minerals in body fluids that are part of salts, including sodium, potassium, magnesium, and chloride. People should maintain good daily hydration by drinking plenty of water and liquids, such as fruit juices, sports drinks, caffeine-free soft drinks, and broths. In some cases of diarrhea, a health care provider may recommend changes in diet and may prescribe medications to treat diarrhea.

Read more in these publications at www.digestive.niddk.nih.gov:

- *Diarrhea*
- *What I need to know about Diarrhea*

Bleeding

As with any major surgery, ostomy surgery may cause internal bleeding. If too much blood is lost, the person may require a blood transfusion. Bleeding may also occur through the stoma or through the anus after surgery.

Electrolyte Imbalance

The main function of the large intestine is to absorb water, nutrients, and electrolytes from partially digested food that enters from the ileum. When a surgeon removes the large intestine, absorption of electrolytes does not occur to the same extent, making electrolyte imbalance more likely. Diarrhea, excessive sweating, and vomiting can increase the

chance of developing electrolyte imbalance. Symptoms of electrolyte imbalance may include

- fatigue, or feeling tired
- weakness
- nausea
- muscle problems such as spasms, weakness, uncontrolled twitching, and cramps
- dizziness and confusion

People with these symptoms require medical care and should contact a health care provider.

People who have had their large intestine removed should talk with a health care provider or dietitian about diets that help maintain electrolyte balance.

Infection

The GI tract is filled with bacteria that can leak out during ostomy surgery and infect areas inside the abdomen. Bacteria entering the body through the stoma or anus can also cause an infection. The person's skin around the stoma may also become infected with bacteria or skin fungus. Health care providers treat infections with antibiotics. Symptoms of infection may include

- fever
- back pain
- poor appetite
- nausea and vomiting

Irritation of the Internal Pouch, or Pouchitis

Pouchitis is an irritation or inflammation of the lining of an ileoanal reservoir or a continent ileostomy pouch. A health care provider treats pouchitis with antibiotics. For severe or chronic pouchitis, a health care provider may prescribe immunosuppressive medications, such as corticosteroids. Symptoms of pouchitis include

- frequent bowel movements with diarrhea
- an urgent need to have a bowel movement
- a feeling of pressure in the pouch
- abdominal pain
- cramping or bleeding
- dehydration
- low-grade fever
- a general unwell feeling

Vitamin B12 Deficiency

Ostomy surgery of the bowel may affect vitamin B12 absorption from food and result in a gradual drop in vitamin B12 levels in the body. Low levels of vitamin B12 can affect the body's ability to use nutrients and may cause anemia. Anemia is a condition in which red blood cells are fewer or smaller than normal, which prevents the body's cells from getting enough oxygen. Health care providers treat vitamin B12 deficiency with vitamin B12 supplements.

Phantom Rectum

Phantom rectum is the feeling of needing to have a bowel movement even though the rectum is not present. Phantom rectum is relatively common. Symptoms are usually mild and often go away without treatment. However, for some people, phantom rectum may occur for years after a surgeon removes the rectum. Some people with phantom rectum may feel pain. Health care providers treat rectal pain with medications such as pain relievers and sometimes antidepressants. To help control phantom rectum, a health care provider may recommend complementary therapies such as guided imagery and other relaxation techniques.

Short Bowel Syndrome

Short bowel syndrome is a group of problems related to inadequate absorption of nutrients after removal of part of the small intestine. People with short bowel syndrome cannot absorb enough water, vitamins, and other nutrients from food to sustain life. Diarrhea is the main symptom of short bowel syndrome. Other symptoms may include

- cramping
- bloating
- heartburn
- weakness and fatigue
- vomiting
- excessive gas
- foul-smelling stool

Short bowel syndrome is uncommon and can occur with Crohn's disease, trauma, or other conditions that lead to removal of a large amount of the small intestine.

A health care provider will recommend a treatment for short bowel syndrome based on a person's nutritional needs. Treatment may include nutritional support, medications, and surgery.

Read more in *Short Bowel Syndrome* at www.digestive.niddk.nih.gov.

Rectal Discharge

People with an ileostomy or a colostomy whose lower colon, rectum, and anus are still present may experience a discharge of mucus from their rectum. Mucus is a clear fluid made by the GI tract that coats and protects the lining of the bowel. Mucus within the bypassed part of the colon may leak out of the rectum from time to time or gradually build up, forming a small, stoollike ball that passes out of the rectum. A person cannot control mucus production and rectal discharge. However, people who have rectal discharge can learn how to manage and cope with this problem.

Seek Immediate Care

People should seek immediate medical care if they have any of the following symptoms, as complications of ostomy surgery can become a medical emergency:

- continuous nausea and vomiting
- dramatic change in stoma size, shape, or color
- continuous bleeding at the junction between the stoma and the skin that does not stop by applying pressure
- obstruction, prolapse, or narrowing of the stoma
- a deep cut in the stoma
- no output of intestinal content or stool from the stoma for 4 to 6 hours, with cramping and nausea
- severe diarrhea with risk of dehydration
- excessive bleeding from the stoma opening

Living with an Ostomy

At first, living with an ostomy can be overwhelming and scary for some people. However, most people adjust and lead active and productive lives. A WOC nurse or an enterostomal therapist will provide education, support, and medical advice on topics that include the following:

- what to expect after ostomy surgery
- caring for an ostomy
- resuming normal activities after ostomy surgery
- maintaining personal relationships after ostomy surgery
- coping with practical, social, and emotional issues

What to Expect after Ostomy Surgery

Once the person is home from the hospital, the first week or two are considered an extension of the hospital stay. Most people will tire quite easily when they first come home. Getting enough rest is important. Gradually, stamina and strength will improve. Most people can return to work about 6 to 8 weeks after surgery. People may have certain GI issues—such as gas, diarrhea, and constipation—as the bowel heals, depending on the type of bowel diversion.

Ileostomy and colostomy. During the early weeks and months after surgery, people with an ileostomy or a colostomy may have excessive gas. This extra gas will decrease once the bowel has had time to heal and the person resumes a regular diet.

Ileoanal reservoir. People with an ileoanal reservoir initially have about six to 10 bowel movements a day. The newly formed

ileoanal reservoir takes several months to stretch and adjust to its new function. After the adjustment period, bowel movements decrease to as few as four to six a day. People with an ileoanal reservoir may have mild fecal incontinence and may have to get up during periods of sleep to pass stool.

Continent ileostomy. Similar to people with an ileostomy or a colostomy, people with a continent ileostomy may have excessive gas during the early weeks and months after surgery.

Caring for an Ostomy

During the recovery in the hospital and at home, a person will learn to care for the ostomy. The type of care required depends on the type of ostomy surgery. A WOC nurse or an enterostomal therapist will teach a person about special care after ostomy surgery.

Ileostomy and colostomy. People with an ileostomy or a colostomy will learn how to attach, drain, and change their ostomy pouch and care for the stoma and the surrounding skin. Ostomy pouches, or pouching systems, may be one piece or two pieces. They include a barrier, also called a wafer or flange, and a disposable plastic pouch. In a two-piece system, the pouch can be detached or replaced without removing the barrier. For both systems, the barrier attaches to the skin around the stoma and protects it from stool. The length of time the barrier stays sealed to the skin depends on many things, such as

- how well the barrier fits
- the condition of the skin around the stoma
- the person's level of physical activity
- the shape of the body around the stoma

Most people can leave the barrier on for 3 to 7 days. However, a person should change the barrier as soon as stool starts to go underneath it and onto the skin.

Most ostomy pouches empty through an opening in the bottom. Emptying the pouch several times a day reduces the chance of leakage and bulges underneath the person's clothing. A person should empty the pouch when it is about one-third full. He or she should rinse the pouch in a two-piece system before reattaching it to the skin barrier.

How often a person needs to change his or her pouching system depends on the type of system. Many pouching systems may be worn for 3 to 7 days. Some pouching systems are made to be changed every day. When changing a pouch system, the person should

- wipe away any mucus on the stoma
- clean the skin around the stoma with warm water and a washcloth
- rinse the skin thoroughly
- dry the skin completely

People may use mild soap to clean the skin. However, the soap should not have oils, perfumes, or deodorants, which may cause skin problems or keep the skin barrier from sticking. A WOC nurse or an enterostomal therapist can give advice if a person has problems attaching the skin barrier or keeping it attached.

When changing the pouching system, people should inspect the stoma and contact a health care provider about any dramatic changes in stoma size, shape, or

color. People should look for blood and signs of skin irritation around the stoma. Sensitivities or allergies to ostomy products such as adhesives, skin barriers, pastes, tape, or pouch materials can cause skin irritation. People with pouching systems can test different products to see if their skin reacts to them. People should use only ostomy products recommended by their health care provider.

Ileoanal reservoir. People with an ileoanal reservoir will learn how to care for irritated skin around the anus resulting from frequent stools or fecal incontinence. A WOC nurse or an enterostomal therapist may recommend pelvic floor exercises to help strengthen the muscles around the anus.

Read more about pelvic floor exercises in *Kegel Exercise Tips* at www.urologic.niddk.nih.gov.

Continent ileostomy. People with a continent ileostomy will learn how to insert a catheter through the stoma to drain the internal pouch. They can drain the pouch by standing in front of the toilet or by sitting on the toilet and then emptying the catheter. During the first few weeks after a continent ileostomy, the person needs to drain the internal pouch about every 2 hours. After a few weeks, the person is able to go 4 to 6 hours between pouch drainings. The person should wash his or her hands with soap and water after using a catheter. The person should clean the skin around the stoma with warm water and a washcloth and let the skin dry completely.

Resuming Normal Activities after Ostomy Surgery

After ostomy surgery, people should be able to resume their normal activities after healing completes and their strength returns. However, they may need to restrict activities, including driving and heavy lifting, during the first 2 to 3 weeks after surgery. Strenuous activities, such as heavy lifting, increase the chance of a stoma hernia. A person who has recovered from the ostomy surgery should be able to do most of the activities he or she enjoyed before the ostomy surgery, even swimming and other water sports. The only exceptions may be contact sports such as football or karate. People whose jobs include strenuous physical activities should talk with their health care provider and employer about making adjustments to job responsibilities.

People should avoid extreme physical exercise and sports activities for the first 3 months. Walking, biking, and swimming are fine and should be encouraged as long as they are not overly strenuous.

People with an ostomy should talk with their health care provider about when they can resume normal activities.

Maintaining Personal Relationships after Ostomy Surgery

People with an ostomy should be able to maintain personal relationships just as before their surgery. Some people may worry that friends and relatives will have negative reactions to their ostomy and stoma. Only a spouse, sexual partner, or primary caretaker needs to know the details of the ostomy surgery. People can choose how much they share with others about their health condition, including the ostomy.

People can still maintain a satisfying sexual relationship after ostomy surgery and may resume sexual activity as soon as the health care provider says it is safe to do so. People should talk with their health care provider about any concerns they have with maintaining sexual relations. For people with ostomies, the health care provider can also give information about ways to protect the stoma during sexual activity. People with ostomies may want to ask about specially designed apparel to enhance intimacy. Communicating with a sexual partner is essential. People should share their concerns and wishes and listen carefully to their partner's concerns.

Coping with Practical, Social, and Emotional Issues

Although ostomy surgery can bring great relief, many people have problems coping with the practical, social, and emotional issues related to having this type of surgery. Every person reacts differently. A person's emotions may change frequently during recovery. People with an ostomy adjust faster and experience fewer problems when they have help from their family members, partners, and health care providers. Community and online resources for support and education are available to help people with an ostomy cope with practical, social, and emotional issues. A WOC nurse and an enterostomal therapist can provide a list of resources and support groups.

Eating, Diet, and Nutrition

For the first 6 to 8 weeks after ostomy surgery, the health care provider may recommend a low-fiber diet to give the bowel time to heal. The health care provider will tell a person when to add high-fiber foods to the diet. People should introduce fiber into the diet gradually, as high-fiber foods may cause blockage.

Most people are eventually able to resume their regular diet and eat what they like. However, various foods may affect the GI tract differently. Just as before ostomy surgery, certain foods are more likely to cause gas, diarrhea, constipation, or incomplete digestion. Foods such as cucumbers, cabbage, broccoli, onions, fish, eggs, and beans may cause more gas and odor than others. People should consume carbonated drinks and chew gum with moderation, as they may also cause gas. Constipation is often the result of an unbalanced diet or eating and drinking too little. After ostomy surgery, people should

- avoid large amounts of liquids with meals
- drink plenty of liquids between meals
- eat regularly
- avoid high-fiber foods on an empty stomach
- introduce new foods gradually
- chew foods thoroughly

People should talk with their health care provider or dietitian about what diet is right for them.

Points to Remember

- Ostomy surgery of the bowel, also known as bowel diversion, refers to surgical procedures that reroute the normal movement of intestinal contents out of the body when part of the bowel is diseased or removed.
- Ostomy surgeries of the bowel include
 - ileostomy—a stoma created from a part of the ileum
 - colostomy—a stoma created from a part of the colon
 - ileoanal reservoir—an internal pouch made from the ileum
 - continent ileostomy—an internal pouch, sometimes called a Kock pouch, fashioned from the end of the ileum just before it exits the abdominal wall as an ileostomy
- A person may need ostomy surgery of the bowel if he or she has
 - cancer of the colon or rectum
 - an injury to the small or large intestine
 - inflammatory bowel disease—long-lasting disorders, such as Crohn’s disease and ulcerative colitis, that cause irritation or sores in the gastrointestinal (GI) tract
 - obstruction—a blockage in the bowel that prevents the flow of fluids or solids
 - diverticulitis—a condition that occurs when small pouches in the colon called diverticula become inflamed, or irritated and swollen, and infected
- Complications of ostomy surgery of the bowel may include
 - skin irritation
 - stoma problems
 - blockage
 - diarrhea
 - bleeding
 - electrolyte imbalance
 - infection
 - irritation of the internal pouch, or pouchitis
 - vitamin B12 deficiency
 - phantom rectum
 - short bowel syndrome
 - rectal discharge
- At first, living with an ostomy can be overwhelming and scary for some people. However, most people adjust and lead active and productive lives.

Hope through Research

The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) and other components of the National Institutes of Health (NIH) conduct and support basic and clinical research into digestive disorders, including conditions treated with ostomy surgery of the bowel, such as inflammatory bowel disease, bowel obstruction, and diverticulitis.

Clinical trials are research studies involving people. Clinical trials look at safe and effective new ways to prevent, detect, or treat disease. Researchers also use clinical trials to look at other aspects of care, such as improving the quality of life for people with chronic illnesses. To learn more about clinical trials, why they matter, and how to participate, visit the NIH Clinical Research Trials and You website at www.nih.gov/health/clinicaltrials. For information about current studies, visit www.ClinicalTrials.gov.

For More Information

American Cancer Society

250 Williams Street Northwest
Atlanta, GA 30303
Phone: 1-800-227-2345
Internet: www.cancer.org

American Society of Colon and Rectal Surgeons

85 West Algonquin Road, Suite 550
Arlington Heights, IL 60005
Phone: 847-290-9184
Fax: 847-290-9203
Email: ascrs@fascrs.org
Internet: www.fascrs.org

Crohn's & Colitis Foundation of America

386 Park Avenue South, 17th Floor
New York, NY 10016
Phone: 1-800-932-2423
Email: info@ccfa.org
Internet: www.ccfa.org

National Cancer Institute

6116 Executive Boulevard, Suite 300
Bethesda, MD 20892-8322
Phone: 1-800-4-CANCER
(1-800-422-6237)
Fax: 301-496-0846
Internet: www.cancer.gov

United Ostomy Associations of America, Inc.

P.O. Box 512
Northfield, MN 55057-0512
Phone: 1-800-826-0826
Email: info@ostomy.org
Internet: www.ostomy.org

Wound, Ostomy and Continence Nurses Society

15000 Commerce Parkway, Suite C
Mt. Laurel, NJ 08054
Phone: 1-888-224-WOCN
(1-888-224-9626)
Fax: 856-439-0525
Email: wocn_info@wocn.org
Internet: www.wocn.org

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You may also find additional information about this topic by visiting MedlinePlus at www.medlineplus.gov.

This publication may contain information about medications and, when taken as prescribed, the conditions they treat. When prepared, this publication included the most current information available. For updates or for questions about any medications, contact the U.S. Food and Drug Administration toll-free at 1-888-INFO-FDA (1-888-463-6332) or visit www.fda.gov. Consult your health care provider for more information.

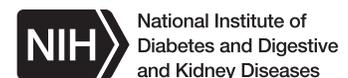
National Digestive Diseases Information Clearinghouse

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The National Digestive Diseases Information Clearinghouse (NDDIC) is a service of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK). The NIDDK is part of the National Institutes of Health of the U.S. Department of Health and Human Services. Established in 1980, the Clearinghouse provides information about digestive diseases to people with digestive disorders and to their families, health care professionals, and the public. The NDDIC answers inquiries, develops and distributes publications, and works closely with professional and patient organizations and Government agencies to coordinate resources about digestive diseases.

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