



Caring for Ostomates

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Disclosures

- None

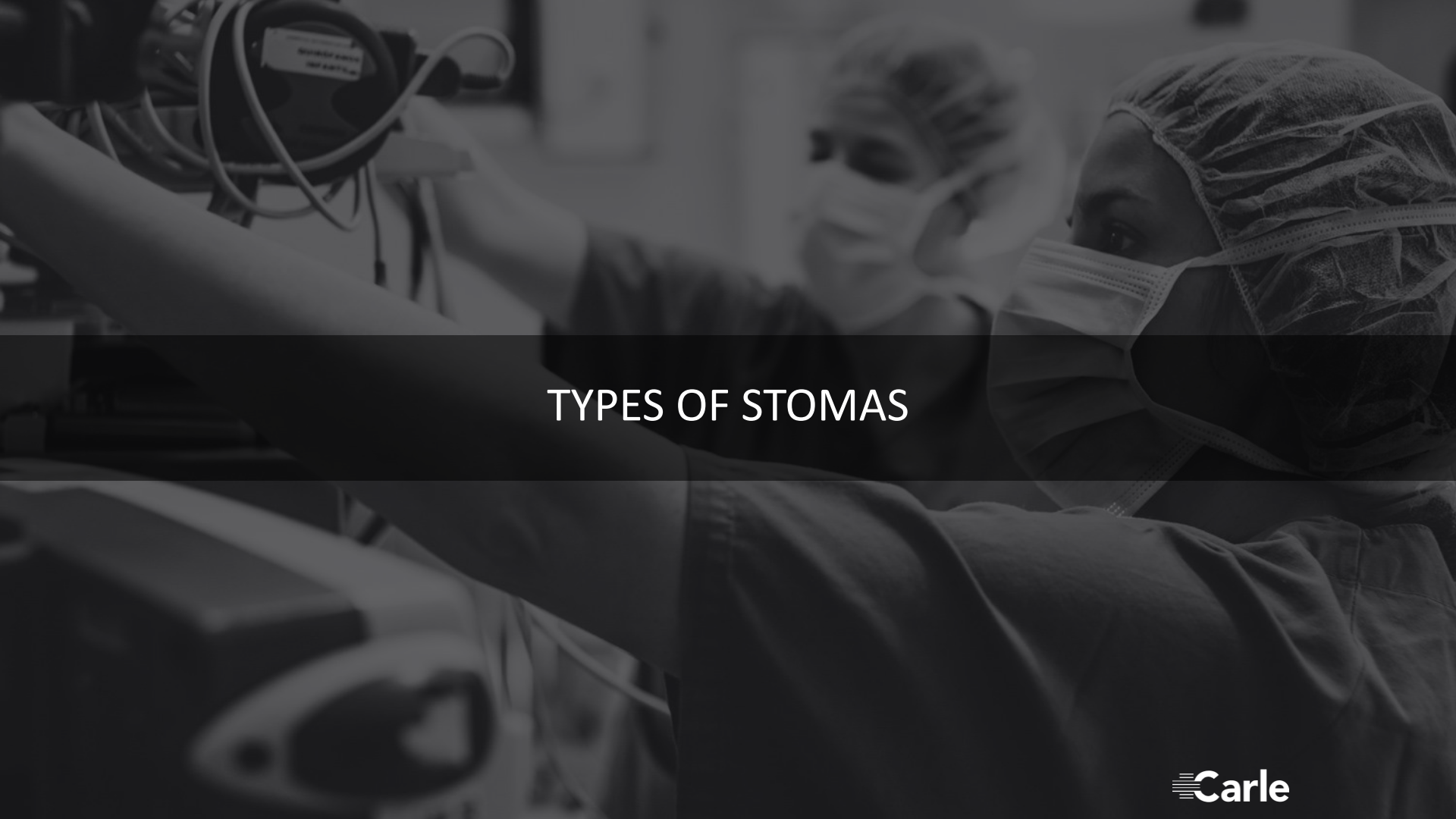
Objectives

- Compare and contrast different types of intestinal stomas
- Discuss the most common complications of different ostomies
- Explore the implications of an ostomy on the medical care of patients
- List the resources available for patient education for ostomates

Overview

- ~725,000 – 1 million people in the US with an ostomy
- 100,000 colostomy/ileostomy operations per year in US
- High complication rates (37 – 55%)
- Impact on Quality of Life
- Cost

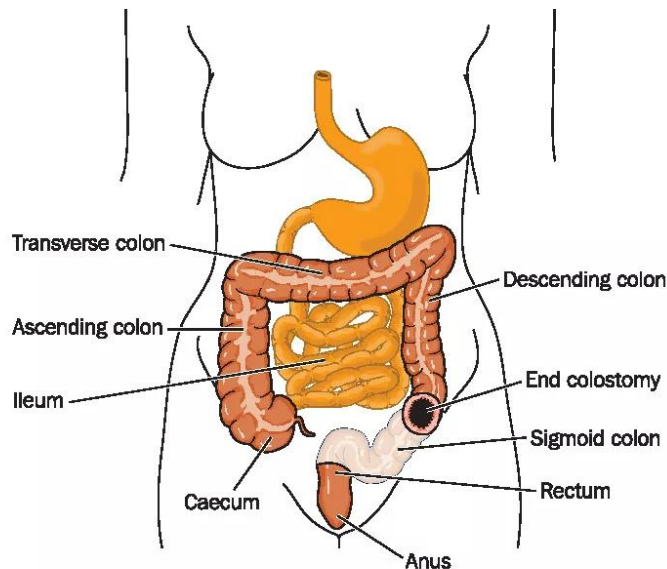




TYPES OF STOMAS

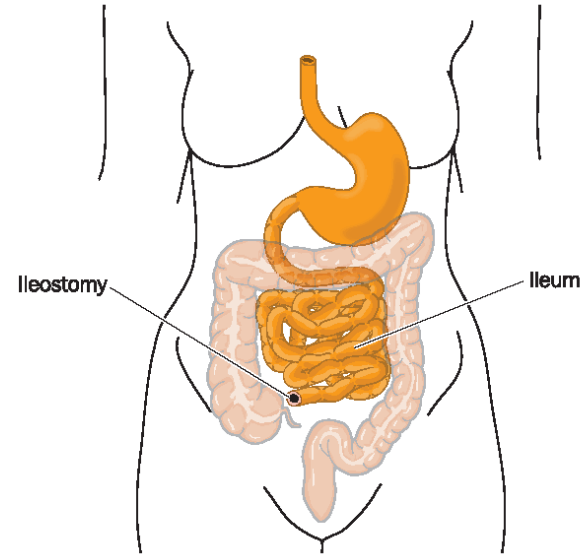
Colostomy

- Large Intestine (Colon) brought through the abdominal wall
- Temporary or permanent
- Created for:
 - Cancer
 - Diverticulitis
 - Imperforate Anus
 - Hirschprung's disease
 - Trauma
- Output can be liquid or formed



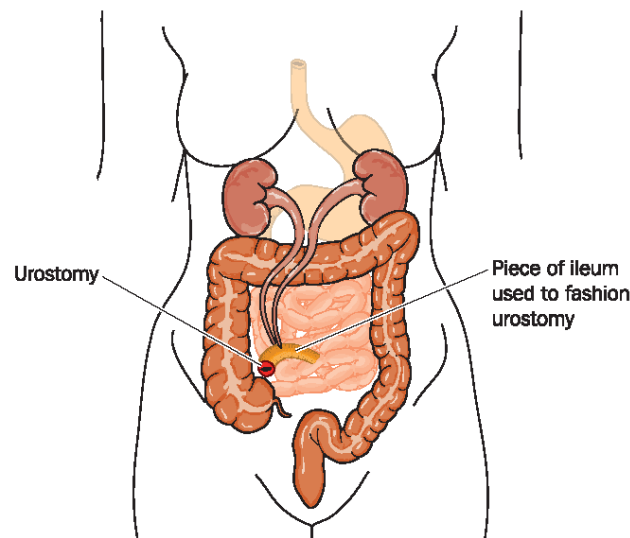
Ileostomy

- Distal small intestine (Ileum) brought through the abdominal wall
- Temporary or permanent
- Created for:
 - Ulcerative colitis
 - Crohn's disease
 - FAP
 - Trauma
 - Cancer
- Output will be liquid or slightly thicker
- Concern for dehydration

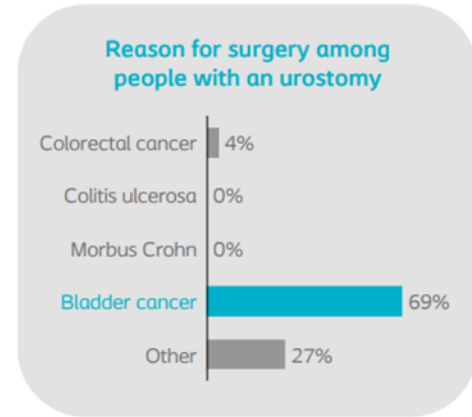
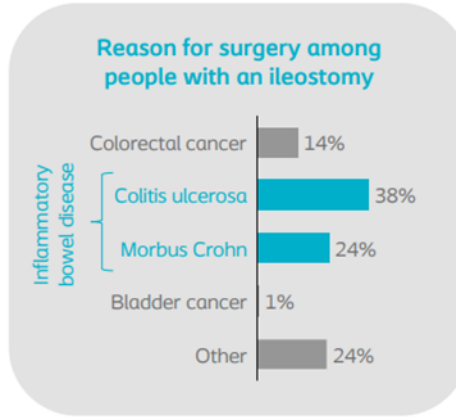
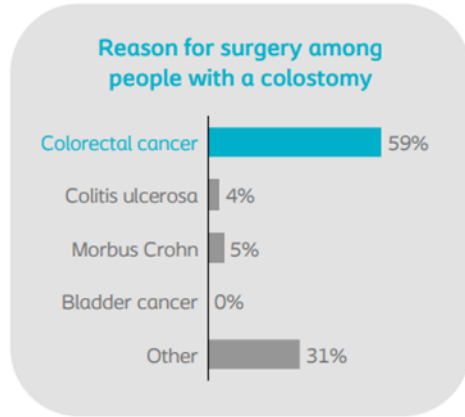


Urostomy

- Ureters drain into a defunctionalized limb of ileum which is brought through the abdominal wall
- Created for:
 - Bladder cancer
 - Spinal cord injuries
 - Bladder malfunction
 - Birth defects
- Drains urine



Reasons for the Ostomy





EPIDEMIOLOGY

- ~725,000 – 1 million people in the US with an ostomy
- 100,000 colostomy/ileostomy operations per year in US
- Typical patients are >50 yo
- Equal distribution of men and women

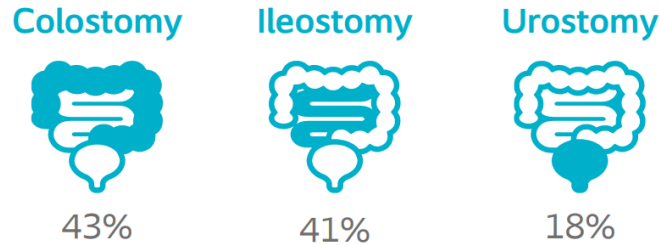


Dis Colon Rectum 2015; 58: 375-387

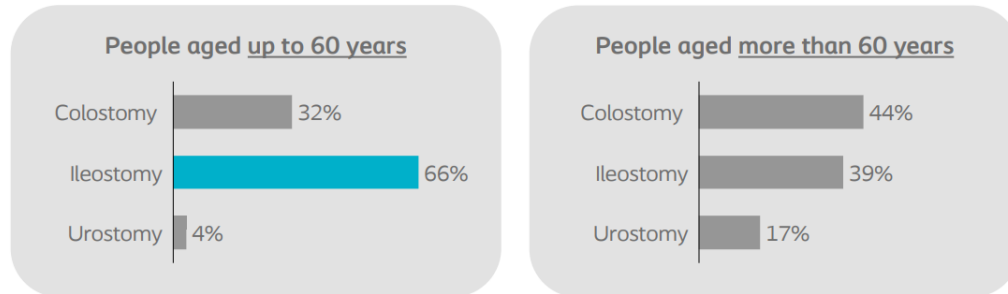
Ostomy Life Study 2016. Coloplast

Prevalence

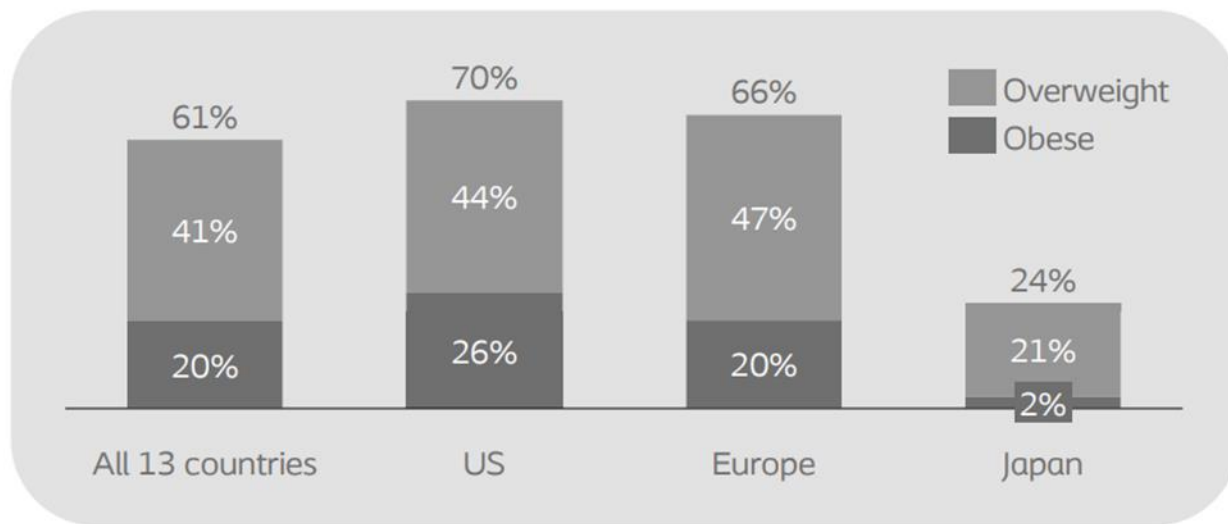
- Global prevalence of colostomy and ileostomy are equal



- Ileostomies are more prevalent in younger people



- 60% of all people with an ostomy are overweight or obese (similar to the general population)





PATIENT CARE

General Information

- Ostomy appliances
 - Adhesive flange (wafer) + Collecting bag
 - One-piece or two-piece
 - Wide variety; specialized appliances
- Generally the flange is changed every 3-7 days
- Flange consists of a pectin-like adhesive wafer ring surrounded by waterproof tape
- Sizing and trimming the flange is crucial
 - Wait a minimum of 6 weeks before ordering pre-cut models due to expected changes in the stoma
- Collecting bags can be clear or opaque; open or closed

Emptying an Ostomy



Colostomy Patients

Colostomy function is based on the level of diversion

- The colon primarily functions to reabsorb water from waste material
 - Distal stomas produce more solid stool
- Colonic transit time varies from 24 -150 hours
 - Colostomies may function periodically
- Colostomy irrigation may be an option for some patients
- Not common to require changes to medications, even long-acting medications

Ileostomy Patients

- Ileostomies bypass the colonic absorption of sodium and water
 - Creates variable fluid and electrolyte imbalances
- Majority of nutritional absorption occurs in the first 150 cm of intestine
- Ileostomy outputs can be highly variable (200 -1200 mL daily)
- Patients may require vitamin supplementation
- Patients may require adjustment to extended release medications

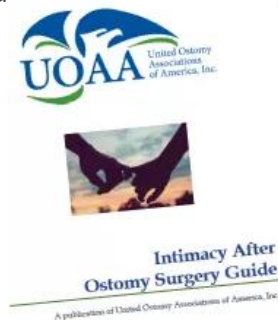
Medications

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 [®] Gelscaps, Mag-Ox 400, Uro-Mag).	Products containing calcium may cause calcium stones (e.g., Children's Mylanta [®] , Mylanta [®] Gelscaps).
Antibiotics	Caution—May destroy normal flora (may cause diarrhea).	May lead to diarrhea and risk of dehydration (e.g., ampicillin, 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

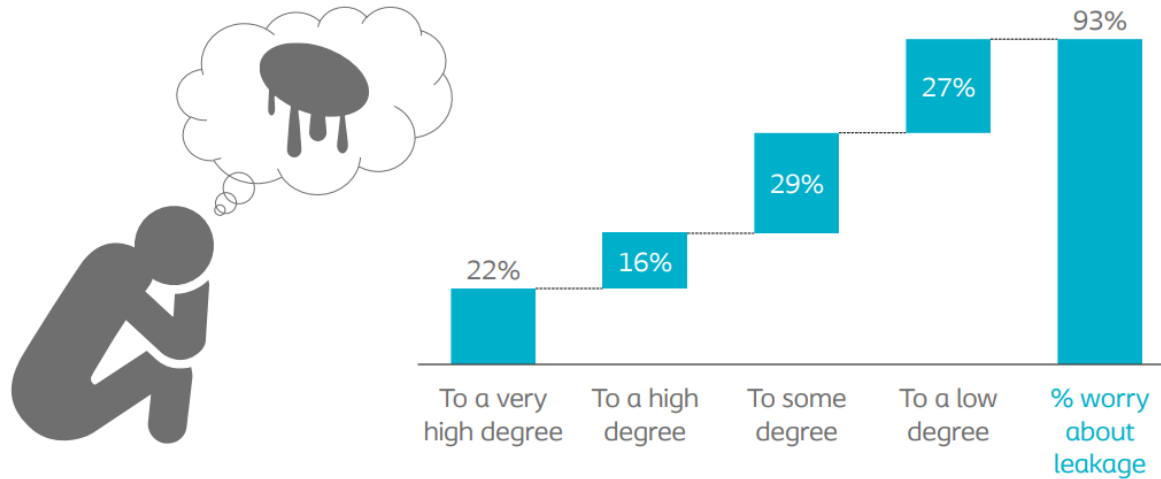
Activities

- Ostomates should be encouraged to resume regular activities.
 - Heavy lifting can be problematic because of hernia
- 65% of ostomates exercise at least once per week
- Patients can shower with the pouch in place
- Swimming and bathing are also fine
 - Long periods of water exposure can loosen the pouch so wear time can decrease
- Sex
 - Dysfunction can be related to surgery or may be psychological
 - Support groups can be helpful



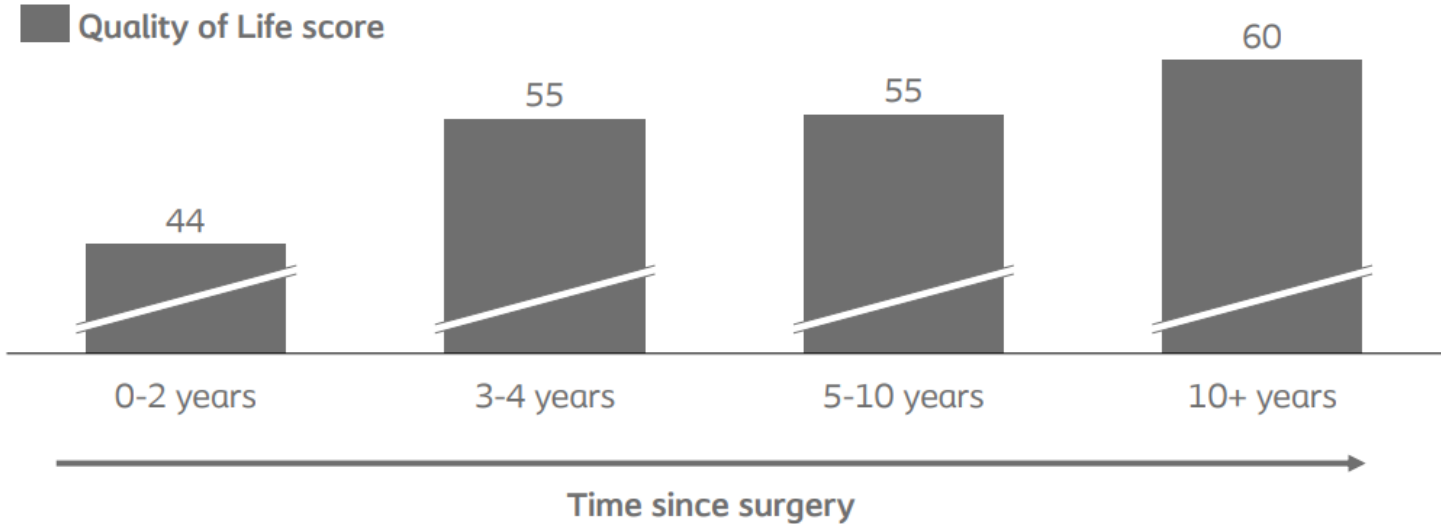
Quality of Life

Fear of leakage is something almost all people with an ostomy **worry about**



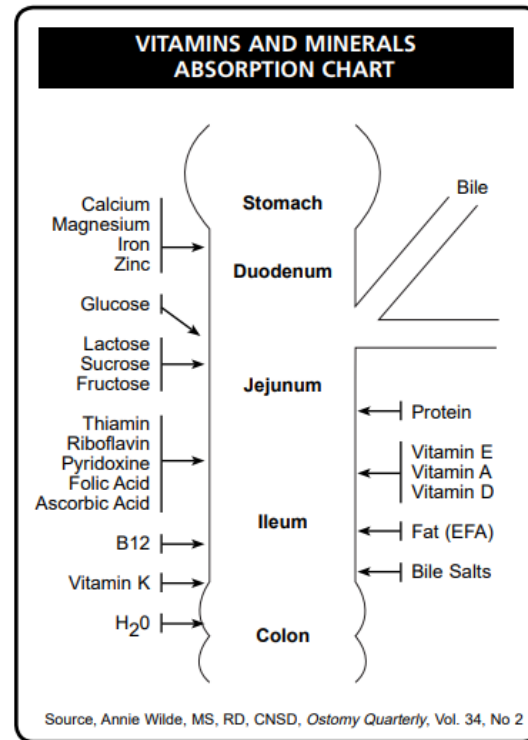
Quality of Life

- Increases significantly 2 years after surgery



Dietary Management

- No specific “Ostomy Diet”
 - A lot of opinions!
- Nutritional needs vary with disease process, amount of remaining bowel
- Most patients will start on a Low-residue diet in the immediate post-op
- Should be able to eat a regular diet within 6-8 weeks
- Dietary logging can be helpful for some patients



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	Odor Producing	Increased Stools	Stoma Obstructive
Alcoholic bev.	Asparagus	Alcoholic bev.	Apple peels
Beans	Baked Beans	Whole grains	Cabbage, raw
Soy	Broccoli	Bran cereals	Celery
Cabbage	Cabbage	Cooked cabbage	Chinese vegetables
Carbonated bev.	Cod liver oil	Fresh fruits	Corn, whole kernel
Cauliflower	Eggs	Greens, leafy	Coconuts
Cucumbers	Fish	Milk	Dried fruit
Dairy products	Garlic	Prunes	Mushrooms
Chewing gum	Onions	Raisins	Nuts
Milk	Peanut butter	Raw vegetables	Oranges
Nuts	Some vitamins	Spices	Pineapple
Onions	Strong cheese		Popcorn
Radishes			Seeds

Color Changes	Odor Control	Constipation Relief	Diarrhea Control
Asparagus	Buttermilk	Coffee, warm/hot	Applesauce
Beets	Cranberry juice	Cooked fruits	Bananas
Food colors	Orange juice	Cooked vegetables	Boiled rice
Iron pills	Parsley	Fresh fruits	Marshmallows
Licorice	Tomato juice	Fruit juices	Peanut butter
Red Jello®	Yogurt	Water	Pectin supplement
Strawberries		Any warm or hot beverage	Tapioca
Tomato sauces			Toast

Wound Ostomy Continence Nurse

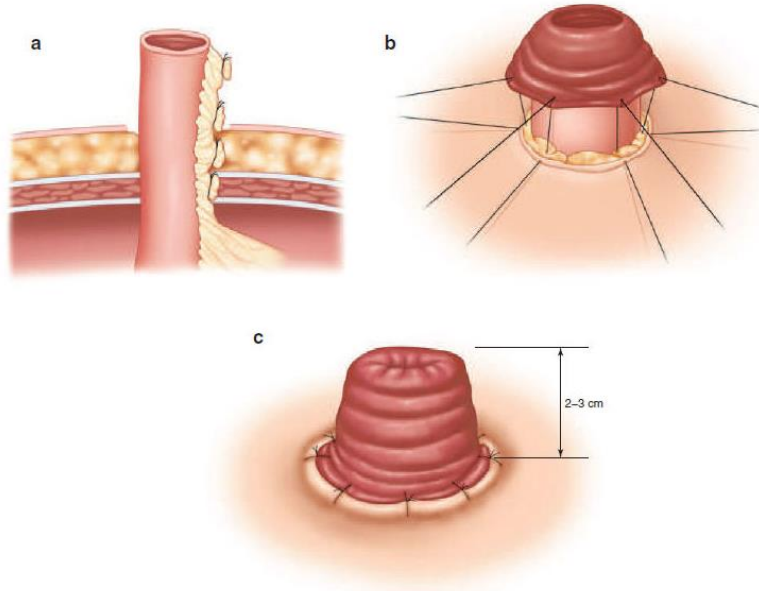
- Your best resource for questions and concerns about Ostomates
- Your Patient's best resource
- A Real-life Superhero...



A low-angle photograph of a construction worker in a blue uniform and orange safety harness, standing on a complex metal scaffolding. The worker is positioned in the upper left quadrant, looking down. The scaffolding consists of numerous vertical and horizontal metal poles connected by clamps. In the background, a tall building with many windows is visible under a clear sky. The entire image has a semi-transparent dark grey overlay.

COMMON COMPLICATIONS

The ASCRS Textbook of Colon and Rectal Surgery, 3e > Chapter 55. Intestinal Stomas



Complications

The ASCRS Textbook of Colon and Rectal Surgery, 3e > Chapter 55. Intestinal Stomas

Table 2. Stoma complications

<i>Complication</i>	<i>Incidence rates (%)</i>
Retraction	0–22
Parastomal hernia	0–40
Stoma prolapse	0–10
Stoma necrosis	0–7
Peristomal skin problems	10–42
Total complications	12–72

Adapted from Salvadalena G. Incidence of complications of the stoma and peristomal skin among individuals with colostomy, ileostomy, and urostomy: a systematic review. J Wound Ostomy Continence Nurs. 2008;35(6):596–607 [31]

Early Complications

- Leakage
- Peristomal dermatitis
- Dehydration
- Ischemia
- Abscess

Late Complications

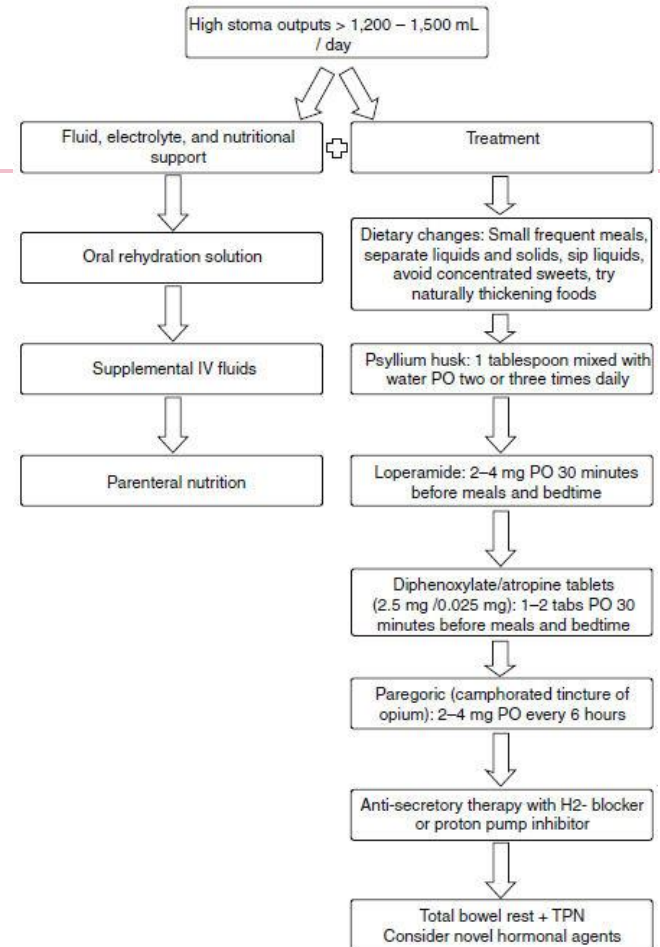
- Prolapse
- Stenosis
- Parastomal hernia
- Fistula

High Output and Dehydration

- Most common with small bowel stomas
- Normal ileostomy output is 800 -1200 mL daily
- High output: >1200 mL/day
- Can be transient: 50% resolve spontaneously within 2 weeks
 - Resolution of normal post-operative ileus
- Persistent high outputs managed with: dietary changes, behavioral changes, medications

Management of High Output

- Smaller, more frequent meals
- Sipping fluids (vs gulping)
- Separately consume solids and liquids
- Limit concentrated sweets
- Fiber supplementation
- Hypotonic oral fluid restriction
- WHO Oral rehydration solution:
 - 3/8 tsp salt (NaCl)
 - ¼ tsp salt substitute (KCl)
 - ½ tsp baking soda (NaHCO₃)
 - 2 Tbsp + 2 tsp sugar (sucrose)
 - 1L water (+/- sugar-free flavoring)

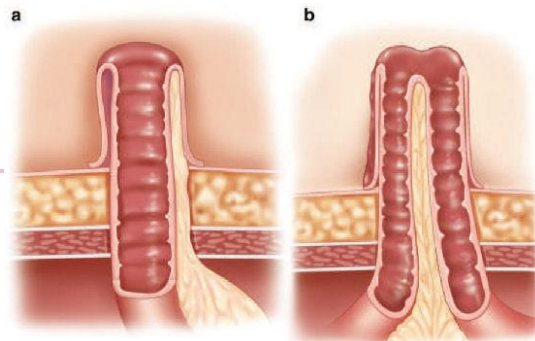


Foodstuff Bolus Obstruction

- Most common in ileostomies
- Generally secondary to high-residue foods
 - Nuts, seeds, shellfish, sausage casings, raw produce
- May require irrigation

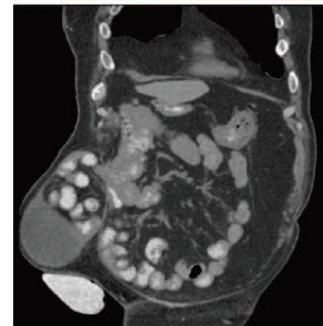
Stoma Prolapse

- Manage based on severity of symptoms
- Modification of appliance
- May require operative revision
- Pseudoprolapse may be seen during pregnancy
 - Less than 3 cm
 - Resolves following delivery
 - Caused by increased intraabdominal pressure



Parastomal Hernia

- Stoma trephine will enlarge over time
- High prevalence
- Symptoms: bulge, pain, obstruction, pouching difficulties
- Mild symptoms may be managed with appliance modifications, support belt
- Repair dictated by degree of symptoms
 - High recurrence rates



Pyoderma Gangrenosum

- Rare inflammatory skin disease
- Painful ulcers
- Seen on 0/6% of ostomates
 - 0.5-5% of IBD
 - 25-50% idiopathic
 - Associated with RA, heme malignancy
- Multidisciplinary approach
- Treat underlying condition
- Aggressive wound and stoma care





RESOURCES

Resources



- UOAA www.ostomy.org
- WOCN www.wocn.org
- ASCRS www.fascrs.org
- ACS Ostomy Home Skills Program
<https://www.facs.org/education/patient-education/skills-programs/ostomy-program>
- American Urological Association www.auanet.org
- Crohn's and Colitis Foundation www.crohnscolitisfoundation.org
- Friends of Ostomates Worldwide www.fowusa.org
- www.newbieostomy.com
- www.veganostomy.ca



American
Urological
Association



ASCRS
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Questions?

