

## Let's Talk About...

# Small or large bowel loss

## What is small or large bowel loss?

Small or large bowel loss is a condition where your child has lost part of their bowel.

## What causes small or large bowel loss?

Bowel loss can be caused by:

- Necrotizing enterocolitis (injured tissue in the intestines)
- Intestinal atresia (small blockage in the intestine)
- Gastroschisis (intestines are outside the body)
- Intestinal malrotation (twisted bowels)
- Hirschsprung's disease (colon problem in which some of the large bowel nerves are missing)

Sometimes the amount of bowel, or intestine, affected is very small and easily fixed. Other times the bowel injury is bigger and can be harder to repair.



## What happens during small bowel loss?

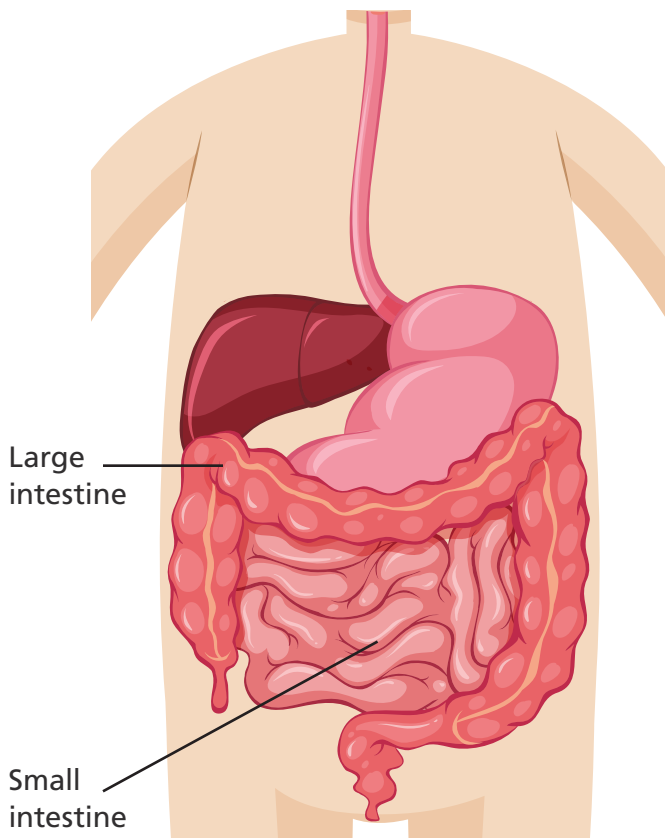
Your child's small intestine helps them digest food and absorb fluids and nutrients before waste moves to the large intestine. There are three main parts of the bowel:

**Duodenum:** This part of the small intestine, closest to the stomach, helps the body absorb minerals like calcium and iron.

- If your child has injured the duodenum, they may not be able to absorb:
  - Sodium
  - Water (if the duodenum is not able to absorb enough water your child's poop will look runnier, it may even look like milk or formula)
  - Fatty acids
  - Amino acids
  - Some water-soluble vitamins
  - Vitamins A, D, E and K (fat-soluble)
  - Zinc

**Jejunum:** The middle part of the small intestine helps the body digest and absorb carbohydrates, fats, and nitrogen.

- If your child has injured the jejunum, they may not be able to absorb:
  - Water
  - Sodium
  - Amino acids
  - Fatty acids
  - Vitamins A, D, E and K (fat-soluble)
  - Some water-soluble vitamins
  - Zinc



**Ileum and ileocecal valve:** The last part of the small intestine absorbs water-soluble vitamins, bile salts, vitamin B12, potassium, short-chain fatty acids, and vitamin K. The ileocecal valve, or ICV, helps the body empty digestive waste into the colon. It prevents bacteria that live in the large intestine from moving into the small intestine.

- If your child has injured the ileum, they may:
  - Have diarrhea
  - Need to take vitamin supplements
  - Lose a lot of fat in their stool
- If your child lost the ileocecal valve (ICV), they may:
  - Have diarrhea
  - Frequently have to poop

## What happens during large bowel loss?

Your child can lose part or all of their large intestine, also called the colon, by itself or along with some of the small bowel. Because the colon helps the body absorb water and carbohydrates and use vitamin K, a child with large bowel loss may:

- Have diarrhea
- Become dehydrated easily
- Need sodium, potassium, or magnesium supplements because they can't absorb these nutrients

## How are small and large bowel loss treated?

Your child will have surgery to help their bowels work better. They may need one of these procedures:

- **Primary anastomosis** (an-AST-oh-MOH-sis): have the intestines sewed back together.
- **Jejunostomy** (jeh-jun-OS-toh-me): a surgical opening from the abdomen to the jejunum.
- **Ileostomy** (ill-ee-OS-toh-me): a surgical opening from the abdomen to the ileum.
- **Colostomy** (co-LOS-toh-me): a surgical opening from the abdomen to the colon or large intestine..
- **Mucous fistula:** a connection between intestines that allows food to continue through the intestines to absorb more nutrients and water. It then passes as poop from your child's rectum.

## If my child has surgery how long is the recovery?

After surgery, your child will go through three phases of recovery:

- **The acute phase** (lasts 1–3 weeks): Your child will often lose a lot of fluids and electrolytes. They may become dehydrated from peeing too much. Their stomachs may also become bloated from extra fluid during surgery or not peeing enough. Your child's stomach muscles may not contract the way they should. Your child will receive fluids and food through IVs (small tube that goes into the vein) to keep them from becoming dehydrated. Healthcare providers will watch your child closely and decide when your child can have food, formula, and milk. Your child may develop reflux because their stomach may empty more slowly than before.
- **Intermediate phase** (lasts weeks up to several months): Your child will gradually use the ostomy (surgical opening for body waste) for pooping if they needed one during surgery. They can still become dehydrated because of the ostomy, but

