

## Let's Talk About...

# Nissen fundoplication: A surgery to treat GERD

A Nissen fundoplication (niss-en fun-doe-ply-KAY-shun) is a surgery to help control gastroesophageal (GAS-troh-eh-soff-uh-GEE-ul) reflux disease, or GERD. This disease is a disorder that results from stomach acid moving backward from the stomach into the esophagus. GERD usually happens because the lower esophageal sphincter—the muscular valve where the esophagus joins the stomach—opens at the wrong time or does not close properly.



## How is Nissen fundoplication used to treat GERD?

Treatment for GERD depends on how severe symptoms are. For some people, treatment may just include lifestyle changes, such as changing what they eat or drink. Others will need to take medicines. In very rare cases, when GERD is particularly severe, a doctor may recommend the Nissen fundoplication surgery.

During the surgery, the upper part of the stomach (fundus) is wrapped around the lower esophageal sphincter (bottom of the esophagus) to strengthen the sphincter and prevent reflux.

## Why does my child need Nissen fundoplication?

Your child may need a Nissen fundoplication if they have severe acid reflux, or GERD.

If your child has severe GERD, they may:

- Develop problems with their esophagus
- Have a sore throat
- Have lung problems
- Have trouble eating
- Not be able to gain weight

If medicines do not help with the problems caused by GERD, your child may need a Nissen fundoplication.

## How does a Nissen fundoplication work?

As your child's stomach fills with food and liquid after surgery, the wrap also fills. This puts pressure on the esophagus so that liquid and food cannot flow back into the esophagus. Liquids and small pieces of well-chewed food can still enter the stomach when your child swallows. Children who have eating problems may need a gastrostomy (GT) feeding tube as well.

## What happens during a Nissen fundoplication?

Your child will receive general anesthesia (medicine to help them sleep during the surgery). A doctor, called an anesthesiologist, will talk with you before the surgery about what to expect and any possible side effects.

There are two ways your child's surgeon will do the Nissen fundoplication. They are:

- **Open surgery:** The surgeon makes a 3–4-inch long opening through the skin and muscle of the belly to wrap the fundus around the bottom of the esophagus. After surgery, the surgeon closes the opening with stitches and paper tape. The stitches are usually absorbed by the body, so they don't need to be removed later.
- **Laparoscopic (lap-ah-ruh-SCOPP-ick) surgery:** The surgeon makes 5 small openings about ¼-inch long to wrap the fundus around the bottom of the esophagus. After surgery, the surgeon covers the openings with paper tape or a waterproof skin glue.

### What happens after a Nissen fundoplication?

- Your child may have a tube in their nose that goes down into their stomach, called a nasogastric or NG tube, after surgery. This tube keeps the stomach empty. Your child may need this tube for a few days until their stomach is emptying properly.
- Your child can have small amounts of clear liquids and then soft foods when their stomach recovers. Once your child is eating well, they can go home.
- If your child has a gastrostomy tube (g-tube) and does not eat by mouth, they will get food and liquids through their g-tube usually 6–12 hours after surgery.

### What problems may happen after a Nissen fundoplication?

Your child may have some problems after Nissen fundoplication, including:

- Not being able to burp or vomit
- Stomach swelling after surgery, which makes the wrap feel tight
- Trouble swallowing while the stomach swells
- Pressure that may cause gagging if the stomach becomes too full, even after swelling is gone
- Bleeding and infection

### What should I do when my child comes home?

- Your child may shower 2 days after going home unless your healthcare provider has specific bathing instructions. They should not soak in a bathtub or swim for 7 days.
- Do not remove your child's bandages. The tape will fall off in 10–14 days. If the surgical site is covered with waterproof glue, it will fall off on its own in 1–2 weeks.
- Give your child soft, easily chewable foods for a few weeks. Do not give your child carbonated drinks, tough pieces of meat, bread, or pills during this time.
- Limit your child's activity to walking until they see their surgeon scheduled for 2 weeks after surgery.



