PROCEDURE

Feeding tube - infants

A feeding tube delivers milk, nutrition, fluids, or medicines to an infant's stomach or intestine.

PURPOSE
Deliver nutrition, fluids, or medicines when oral feeding is insufficient

PROCEDURE TYPE
Therapeutic; bedside, endoscopic, surgical, or radiologic placement

WHERE IT IS DONE
Bedside, outpatient clinic, radiology suite, or operating theatre

ANAESTHESIA
None for nasal tubes; usually general anaesthesia for gastrostomy

HOW LONG IT TAKES
Minutes for nasal tubes; about 30-60 minutes for gastrostomy

PREPARATION
Feeding pause and medication instructions based on placement method

RECOVERY
Same day or overnight; follow facility transport instructions after anaesthesia

MAIN RISKS
Misplacement, aspiration, blockage, leakage, or infection

RESULTS
Tube position confirmed before feeding begins

Overview

A feeding tube is a soft, flexible tube used to give an infant breast milk, formula, water, liquid nutrition, or medicine. It may provide all feeding or supplement what the baby can safely take by mouth.

A short-term tube usually passes through the nose into the stomach. This is called a nasogastric, or NG, tube. In some newborn units, the tube passes through the mouth and is called an orogastric, or OG, tube.

A tube may instead extend into the small intestine. These include nasojejunal, or NJ, tubes and gastrojejunal, or GJ, tubes. They may be considered when feeding into the stomach is not suitable.

For longer-term feeding, a gastrostomy tube passes through the skin of the abdomen directly into the stomach. It may be a longer tube or a low-profile "button." Gastrostomy placement can be performed with surgery, an endoscope-a flexible camera passed through the mouth-or imaging guidance.

Tube feeding does not always mean that oral feeding must stop. If swallowing is safe, an infant may continue breastfeeding, bottle-feeding, or practising oral skills as part of a feeding plan.

Why the procedure is performed

A feeding tube may be offered when an infant cannot take enough nutrition safely or efficiently by mouth. Reasons include:

An NG or OG tube is often used when support is expected to be temporary. A gastrostomy may be discussed when tube feeding is likely to continue for a longer period, when repeated nasal tube replacement is difficult, or when a nasal tube interferes with care.

A feeding tube can improve nutrition, but it does not treat the underlying reason for feeding difficulty. A gastrostomy also does not guarantee protection from reflux or aspiration, which means milk or stomach contents entering the airway.

- Prematurity or tiring before finishing feeds
- Difficulty coordinating sucking, swallowing, and breathing
- A condition affecting the mouth, throat, digestive tract, heart, lungs, nerves, or muscles
- Poor growth despite appropriate feeding support
- A need for reliable fluids or medicines
- Recovery from surgery or serious illness

Who should and should not have it

A feeding tube may be appropriate when its expected nutritional or medical benefit outweighs the burdens and risks. Before recommending one, the healthcare team should assess growth, feeding ability, swallowing safety, expected duration of support, and family goals.

NG or OG placement may need to be avoided or modified in an infant with certain facial injuries, nasal blockage, recent surgery, or an abnormal connection involving the nose, throat, or digestive tract. Another route may be safer.

Gastrostomy placement may be delayed if an infant is medically unstable, has an active

infection, or has a bleeding problem that has not been corrected. Previous abdominal surgery, unusual anatomy, severe breathing problems, or significant anaesthesia risk may change how the tube is placed rather than rule it out completely.

A feeding tube is not automatically the right response to slow weight gain. The cause should first be assessed, and less invasive feeding support may be reasonable when oral feeding remains safe.

How to prepare

The treating facility's own instructions take priority over general information in this article.

For a bedside NG or OG tube, little preparation may be needed. Your baby may need a brief pause in feeding, particularly if placement is planned around a procedure or imaging test.

Gastrostomy placement usually requires fasting because sedation or general anaesthesia may be used. The facility will tell you when to stop breast milk, formula, solid food, and clear fluids. Follow those times exactly rather than using general fasting advice.

Tell the team about all medicines and supplements your baby receives, as well as allergies, bleeding problems, previous operations, and reactions to anaesthesia. Do not stop a prescribed medicine unless the treating team instructs you to do so.

Before discharge with a tube, you should receive practical teaching. This may include giving feeds and medicines, flushing the tube, checking the skin, securing the tubing, and knowing what to do if it blocks or comes out.

What happens during the procedure

For an NG or OG tube, a clinician measures the expected insertion length. The lubricated tube is gently passed through the nose or mouth, down the food pipe, and into the stomach. It is then secured to the cheek or face.

The position must be checked before the tube is used. The method may include testing fluid drawn from the tube, reviewing the tube markings, or taking an X-ray when required. Placement must also be reassessed according to the care plan, especially after vomiting, coughing, pulling, or tube replacement.

For a gastrostomy, the infant usually receives general anaesthesia. The clinician makes a small opening through the abdominal wall into the stomach and places the tube. Endoscopic, laparoscopic, open surgical, or imaging-guided methods may be used. The safest approach is

chosen based on the infant's size, anatomy, health, and local expertise.

Some infants stay overnight for observation and feeding support. Others may go home the same day after an uncomplicated procedure.

Recovery and what to expect afterward

Pain: NG or OG insertion can cause brief discomfort, gagging, sneezing, or crying. After gastrostomy placement, soreness around the opening is expected. The team will provide an age-appropriate pain-control plan.

Eating: Tube feeds may begin soon after placement or after a planned waiting period. The amount is usually increased according to tolerance and the clinical plan. Oral feeding may continue if the swallowing and feeding team says it is safe.

Activity: Normal handling and gentle play are usually possible. Protect the tube from pulling and follow instructions about bathing, tummy time, wound care, and clothing after gastrostomy placement.

Driving and travel: Infants cannot drive, but a safe journey home still needs planning. Follow the facility's instructions about car-seat positioning, monitoring after anaesthesia, and whether another adult should travel with the baby.

Going back to work or childcare: Timing is shaped by the infant's recovery and the caregiver's confidence with tube feeding. Childcare staff need an agreed feeding plan and training before they give feeds or medicines through the tube.

Risks and possible complications

NG, OG, and NJ tubes can move out of position. A misplaced tube may deliver feed into the wrong place, including the airway. This is why position checks are essential.

Other possible problems include nasal or throat irritation, skin damage from tape, gagging, vomiting, reflux, aspiration, blockage, and accidental removal. Rarely, insertion can injure nearby tissue.

Gastrostomy risks include pain, bleeding, infection, leakage, irritated overgrown tissue around the opening, blockage, and tube displacement. Internal leakage into the abdomen or injury to another organ is uncommon but can be serious.

Sedation and general anaesthesia can affect breathing, heart rate, blood pressure, or cause nausea. The anaesthesia team monitors the infant during and after the procedure.

Results and follow up

The immediate result is confirmation that the tube is in the intended position and can be used safely. There is normally no laboratory or pathology result to wait for.

Follow-up focuses on whether the feeding plan meets the infant's needs. The team may monitor weight, length, head growth, hydration, vomiting, bowel habits, breathing symptoms, and comfort during feeds.

Routine appointments may also review the tube size, skin around a gastrostomy, feeding equipment, oral development, and whether tube support is still needed. A gastrostomy tube or button requires planned replacement according to the device and local service.

Alternatives

The realistic alternatives depend on why feeding support is being considered.

- Supported oral feeding: Positioning, pacing, different nipples, feeding therapy, or fortified milk avoids a tube, but may not provide enough nutrition if the infant tires or cannot swallow safely.
- Short-term NG or OG feeding: Avoids an operation and is easy to remove, but the tube is visible, can irritate the nose, and may be pulled out or need replacement.
- Gastrostomy feeding: More secure for longer use and leaves the face clear, but requires a procedure and creates an opening that needs daily care.
- NJ or GJ feeding: Delivers nutrition beyond the stomach and may help in selected cases, but tubes can block or move and feeds may need to run slowly for long periods.
- Intravenous nutrition: Delivers nutrients into a vein when the digestive tract cannot be used, but carries risks from the intravenous line and is not usually preferred when the gut can safely receive feeds.
- Comfort-focused care: In some serious conditions, families may choose care centred on comfort rather than an invasive long-term feeding procedure. This requires careful, individual discussion.

When to call your healthcare team

For routine advice, contact the feeding or surgical team if the tube repeatedly blocks, feeds become harder to give, the skin remains irritated, or your baby has ongoing vomiting,

discomfort, or poor tolerance. Also call if you are uncertain about tube position or equipment.

Seek urgent medical advice if a newly placed gastrostomy comes out, especially before the channel between the stomach and skin has healed. Do not replace it unless you have been specifically trained and instructed to do so.

Get emergency help if your baby has trouble breathing, becomes blue or unusually difficult to wake, has a swollen or very painful abdomen, vomits green fluid or significant blood, has heavy bleeding, or becomes suddenly unwell during a tube feed. Stop the feed while getting help.

Common questions

Will my baby be asleep?

Usually not for an NG or OG tube. Gastrostomy placement is commonly performed under general anaesthesia, so your baby is asleep and monitored throughout.

Can I drive my baby home?

Often, yes, if you have not received sedating medicine yourself. Follow the facility's discharge and transport rules. Some teams recommend another adult drive so someone can watch the baby after anaesthesia.

How painful is a feeding tube?

Passing a nasal or oral tube is uncomfortable but usually brief. A gastrostomy causes short-term soreness at the abdominal opening, which is treated with infant-safe pain relief.

When will I know it is working?

Position is confirmed before feeding starts. Whether the feeding plan is meeting your baby's needs becomes clearer through feed tolerance, hydration, and growth over follow-up.

Can my baby still feed by mouth?

Possibly. Oral feeding can continue when it is safe and appropriate. A feeding or swallowing assessment may guide how much your baby can breastfeed, bottle-feed, or practise by mouth.

Is a feeding tube permanent?

Not always. NG and OG tubes are usually temporary. A gastrostomy may remain for months or longer, but it can be removed when the infant can safely meet nutritional and medicine needs another way.

Sources

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