Gavage feeding and nasogastric (NG) tube placement

Gavage (guh-VAHJ) feeding is a way to give your child nutrition or medicine directly into their stomach. To do this, a healthcare provider puts a tube through your child’s nose or mouth and into the stomach. A tube in the nose is a nasogastric (nay-zow-GAS-trick) or NG tube. A tube in the mouth is an orogastric (or-oh-GAS-trick) or OG tube.

Why does my child need gavage feeding?

Your child may need gavage feedings if they:
• Are premature and too small or weak to suck enough from the breast or bottle
• Have a problem coordinating their sucking and swallowing or don’t have a good gag reflex
• Have throat, esophagus, or bowel problems
• Have lung problems and are breathing too hard or too fast to be able to suck or swallow safely
• Can’t get enough nutrition eating by mouth because of another health problem

Gavage feedings may supply all your child’s nutrition needs or be added to what they can eat on their own.

What equipment do I need to give my child a feeding tube?

To insert an NG or OG tube, you’ll need:
• The correct size of feeding tube
• A syringe to check stomach contents
• A syringe for formula (30–60 mL)
• Tape
• Padding to put under the tube (to protect your baby’s skin)
• Lubricating jelly or sterile water
• A permanent marker

[Home care company information]

Phone number: ____________________________

NG/OG tube type and size: ____________________________

Date last changed: ____________________________

Length from the nose to hub:
Inches: ______ cm ______

• A blanket or towel for propping an infant up
• A bowl in case your child feels they might vomit

You may also want a pacifier for a baby or a glass of water with a straw for an older child.

How do I put in a feeding tube?

1 Measure and mark the correct length of tubing:
   a If you put the tube through your child’s nose, use the tube to measure the distance from the nose to the earlobe. Then measure from the earlobe to the area halfway between the lower tip of the breast bone and the belly button (see illustration). Mark this spot on the tube with the permanent marker.
   b If you put the tube through your child’s mouth, measure the tube distance from the mouth to the earlobe. Then measure from the earlobe to the lower tip of the breast bone (see figure 1). Mark this spot on the tube with the permanent marker.

2 Put your child in a comfortable raised position. You may want to swaddle a baby or ask someone to help hold your child while you are putting in the NG or OG tube. Prop their chest up with a
blanket or towel. An older child can lie back on the arm of a sofa or sit in a chair.

3 Wash or sanitize your hands.

4 Moisten the end of the tube with lubricating jelly or water. Slowly insert the tube through the nose or mouth until the mark you put on the tube is at the nose or mouth.

a Your child may cough or gag when the tube reaches the back of their throat.

b Offer a pacifier or a glass of water with a straw to help with swallowing as you are inserting the tube. Having a baby suck on a pacifier often makes it easier to insert the tube.

c If your child continues to cough or choke, pull the tube out a little and try again. The tube may have curled in the back of their throat.

d Watch your child for any signs of trouble breathing. If the tube is in the lungs instead of the stomach, your child may keep coughing, start gasping for air, or begin to look blue. Pull the tube out and let your child recover before inserting the tube again.

5 Put a pad under the tube and gently tape the tube to your child’s cheek.

6 Check that the tube is in the right place:

a Attach a 20–30 mL syringe to the end of the feeding tube.

b Pull the plunger back to check for stomach fluids. Return the stomach fluids into the stomach. Note: If you withdraw stomach fluids (such as old formula), it is very likely that the tube is in the stomach.

c If you don’t see stomach fluids when you pull the plunger back, the tube may be up against your child’s stomach wall. Change your child’s position and push a small amount of air through the tube. Then pull the syringe plunger back again and check for stomach fluids. If you still don’t see any stomach fluids, remove the tube and try again.

7 Measure the tube:

a Once you have pulled back stomach fluids and you’re sure the tube is in the right place, measure the tube from where it leaves your child’s nose or mouth to the capped end (called the hub). Write this length down.

b Permanent marker will disappear over time, so measuring the tube is the best way to make sure you put it in the right place.
How do I give my child a continuous feeding?
A continuous feeding flows into your child’s stomach all the time. After the NG or OG tube is in your child’s stomach:

1. Set up the feeding pump using the pump’s directions and give the feeding as you were instructed.
2. Flush the feeding tube with 3–5 mL of water every 4 hours during the day by pushing the water through the tube with a syringe.
3. Change the feeding bag every 24 hours, and add no more than 8 hours of formula in the bag at a time.

How can I help my child during feedings?
To help your child be more comfortable during feedings:

• Give a baby a pacifier to suck on. This helps satisfy their need to suck and helps them connect feeding with sucking.
• Stop the feed and calm your child if they’re crying. The formula may not go down the tube if your child is crying too hard.
• Don’t apply pressure with the plunger to make it go faster when you feed your child formula through the tube. Instead, hold the syringe higher to increase the flow. Note: If you feed your child thicker formula, the flow will be slower and may need slight pressure to get all of the feeding in.
• Touch and talk to your child during the feeding. Hold a baby during the feeding and then burp and cuddle them when the feeding is complete.

How long can my child’s feeding tube stay in?
• You can leave your child’s feeding tube in place for 1 month.
• If the tube comes out before 1 month, check the end of the tube:
  – If the end is soft, rinse the tube and put it back in.
  – If the end is hard, put a new tube in.
• If home care will be coming to replace the tube, keep the old tube until they come. The nurse may want to see it.

How do I give my child a bolus feeding?
A bolus feeding is a feeding given over a short period of time. After the NG or OG tube is in your child’s stomach:

1. Hold your child whenever possible. If this is not possible, put your child on their right side with their side propped up a little. Never leave your child alone during a bolus feeding.
2. Flush the tube with 3–5 mL of water.
3. Remove the plunger from the 30–60 mL syringe and attach the syringe to the end of the tube. Everything should be room-temperature or warmer, not hot or cold. If you give your child cold liquid, they may have stomach cramps.
4. Add formula to the syringe and apply slight pressure with the plunger (just to start the fluid moving down the tube.) Remove the plunger.
5. Use gravity to let the feeding go into the stomach by raising the syringe. The height of the syringe controls how quickly the formula flows. The feeding should take 15–20 minutes.
6. When the feeding is finished, clear the tube by putting 3–5 mL of water in the syringe and letting the water run into the stomach. Try not to put extra air into your child’s stomach.
7. Burp a baby after the feeding. Your child should also lie on their right side or sit upright for at least 30 minutes after the feeding.

You may also want to notice any manufacturer measurement markings on the tube where it leaves your child’s nose or mouth. Make sure this measurement is the same (re-measure the tube) before each feeding and before giving your child medicine.

This length will change as your child grows, so re-measure every time you put in a new tube.
What if my child needs medicine?
You can give your child medicine through their NG or OG tube. Before doing this:

- Request the liquid form of the medicine when you get a prescription. Some liquid medicine may need to be thinned with water.
- Talk to the pharmacist about other options if the medicine doesn’t come in a liquid. Pills with no coating can sometimes be crushed into a fine powder and dissolved in water. Ask if the medicine can be crushed before doing this.
- Ask your child’s doctor or pharmacist if any of your child’s medicines can’t be given through the feeding tube.

How do I give my child medicine through the feeding tube?
To give your child medicine through an NG or OG tube:

- Get the medicine, an empty syringe, and a small syringe filled with warm water.
- Wash or sanitize your hands.
- Make sure the tube is in your child’s stomach.
- Attach the syringe with medicine to the end of the feeding tube and gently push in the medicine. Flush the tube with 3-5 mL of water. Continue these steps until you’ve given your child all the medicines.
- Replace the plug on the feeding tube or restart the continuous feeding.

Remember to always give your child one medicine at a time. Never mix medicines together or mix medicine with formula.

What are possible problems with gavage feedings?
The most common problem with gavage feeding is a tube that isn’t placed properly. The tube may:

- Be coiled in the back of the throat
- Not reach all the way to the stomach (see the illustrations)
- Be in the lungs (most serious)

Signs that the feeding tube is not in the right place may include:

- Cough
- Bluish tint
- Trouble breathing

If you can’t flush the tube, it may be clogged. Replace the tube immediately.

What do I do if my child has a problem with the feeding tube?
If your child begins to vomit, stops breathing, or turns blue during the feeding:

1. Stop the feeding.
2. Remove the feeding tube. Pinch it closed while removing it to prevent formula from flowing into the lungs.
3. Suction your child’s nose and mouth with a suction bulb.
4. Help your child cry by patting their back.
5. If your child isn’t breathing, call 911.