

Let's Talk About...

Nasogastric (NG) Tube Placement and Gavage Feeding

Gavage (guh-VAHJ) feeding is a way to give your child nutrition or medicine directly into her stomach. To do this, a tube is placed 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?

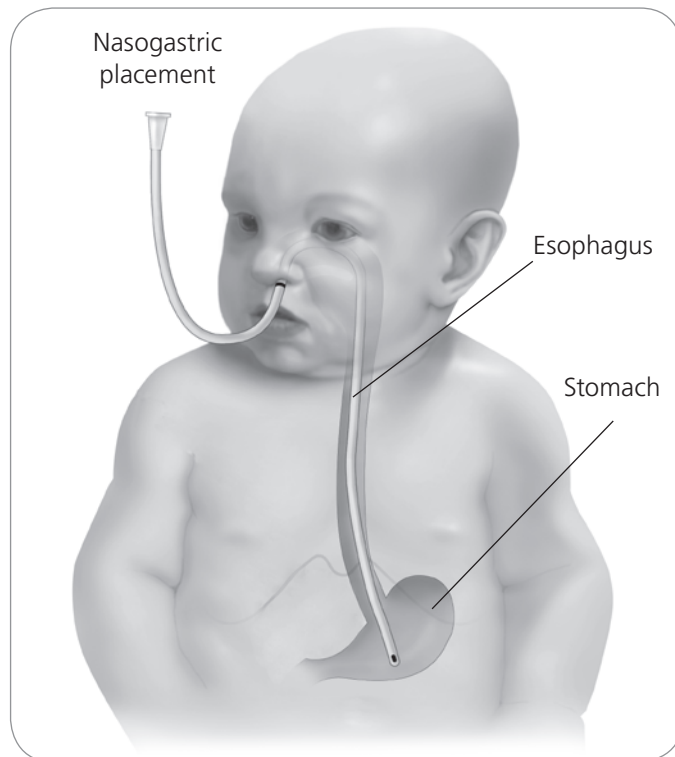
Gavage feedings are for infants and children who cannot get enough nutrition with bottle or breast feedings or when eating by mouth. Gavage feedings may supply all your child's nutrition needs, or be added to what she is able to eat on her own.

Gavage feedings may be used for:

- Babies who are premature and too small or weak to suck enough from the breast or bottle.
- Children who have a problem coordinating their suck and swallow or do not have a good "gag" reflex.
- Children who have a problem with their throat, esophagus, or bowel, or for other reasons cannot meet their nutritional needs on their own.
- Children who have lung problems and are breathing too hard or too fast to be able to suck or swallow safely.

What equipment do I need?

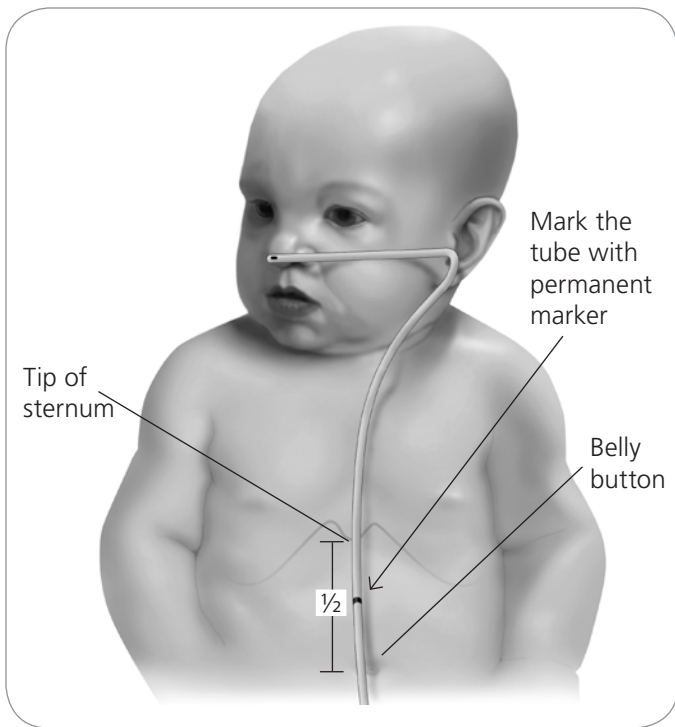
- Correct size feeding tube
- Syringe to check stomach contents
- Syringe for formula (30-50 mL)
- Tape
- Padding to place under tube
- Lubricating jelly or sterile water
- Suction bulb
- Permanent marker



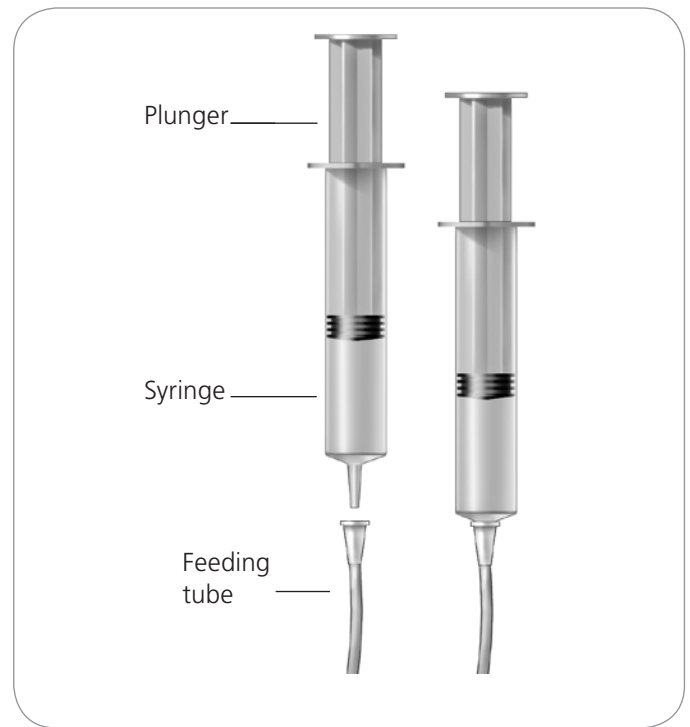
- Optional: pacifier for infants; glass of water with straw for older children
- Blanket or towel for propping infants
- Bowl in case your child feels she may throw up

How do I place (put in) a feeding tube?

- 1 Measure and mark the correct length of tubing:
 - 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 on the following page.*) Mark this spot on the tube with the permanent marker.
 - 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 illustration on the following page.*) Mark this spot on the tube with the permanent marker.



- 2 Place your child in a comfortable raised position. If needed, ask someone to help hold your child or swaddle your baby, toddler, or small child while you are putting in the NG tube. Prop her chest up with a blanket, towel, or firm pillow. Have older children 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.
 - Your child may cough or gag when the tube reaches the back of her throat.
 - Offer a pacifier or a glass of water with a straw to assist with swallowing as you are inserting the tube if needed.
 - 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 her throat.
 - 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 placing the tube again.
- 5 Place 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:
 - Attach a 20-30 mL syringe to the end of the feeding tube.
 - 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.
 - If you do not 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, you will need to remove the tube and try again.
- 7 Measure the tube:
 - Once you have pulled back stomach fluids and you are sure the tube is in the right place, measure the part of the tube that you can see. Measure the tube from where it exits your child's nose or mouth to the capped end of the tube (called the "hub") and make note of this length.
 - Permanent marker will disappear over time, so measuring the tube is the best way to ensure placement. You may also want to make note of any manufacturer's measurement markings on the tube where it exits your child's nose or mouth.

Make sure this measurement is the same (re-measure the tube) before each feeding and before medicines are given.

- This length will change as your child grows, so re-measure every time you put in a new tube.

How do I give my child a bolus feeding?

A bolus feeding is a feeding that is given over a short period of time. First make sure the tube is in the stomach (see above).

- 1 Position your child comfortably for the feeding. Whenever possible, hold your child during the feeding. If this is not possible, place her on her right side with her side propped up a little. Never leave your child alone while bolus feeding!
- 2 Flush the tube with 3 to 5 mL of water.
- 3 Remove the plunger from the 30-50 mL syringe and attach the syringe to the end of the tube. Everything should be as warm as room temperature or warmer. It should not be hot. If you give your child cold liquid, she 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.) Now remove the plunger.
- 5 Let the feeding go in to the stomach using gravity by raising the syringe. The height of the syringe controls how quickly the formula flows. The feeding should take about 15 to 20 minutes to flow in.
- 6 When the feeding is finished, clear the tube by putting 3 to 5 mL of water in the syringe and letting the water run in to the stomach. Try not to put extra air into the stomach.
- 7 If your child is an infant burp her after the feeding. Then for all children, right side lying or sitting upright for at least 30 minutes after the feeding is best.

How do I give a continuous feeding?

A continuous feeding is one that is flowing in all the time. First make sure the tube is in the stomach (see above.)

- 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 to 5 mL of water every four hours during the day. Do this by pushing the water through the tube with a syringe.
- 3 Change the feeding bag every 24 hours and add no more than eight hours of formula in the bag at a time.

How long can the feeding tube stay in my child?

- The feeding tube may be left in place for one month.
- If the tube comes out before one month, check the end of the tube:
 - If the end is soft, rinse the tube and put the tube back in.
 - If the end is hard, put a new tube in.
- If home care will be coming to replace the tube, please keep the old tube until they come, as the nurse may want to see it.

How do I give medicine through the feeding tube?

Your child's medicine can be given through the NG tube. When you get a prescription for medicine, request the liquid form of the medicine. Some liquid medicine may need to be thinned with water. If the medicine does not come in a liquid, ask for a pill without any coating. Pills that don't have a coating can be crushed into a fine powder and dissolved in water. Be sure to ask your pharmacist if the medicine can be crushed.

Important: Do not mix your child's medicine with her formula. If your child is getting more than one medicine at a time, do not mix the medicines together. Give each medicine one at a time.

Ask your doctor or pharmacist if any of your child's medicines cannot be given through the tube.

Before you start, gather all the supplies you need.

- The medicine
- An empty medicine syringe, and

- A small syringe with warm water

Wash or sanitize your hands.

Make sure the tube is in the stomach (see above)

Attach the syringe with medicine to the end of the feeding tube and gently push in the medicine. Flush the tube with 3 to 5 mL of water. Continue these steps until all medicines have been given.

Replace the plug on the feeding tube or restart the continuous feeding.

Are there any possible problems with gavage feedings?

The most common problem with gavage feeding is a tube that is not placed properly. The tube may be coiled in the back of the throat. It may not be all the way into the stomach (*see the illustrations to the right*), or of most concern, it may be in the lungs.

The following are signs that the feeding tube is not in the right place:

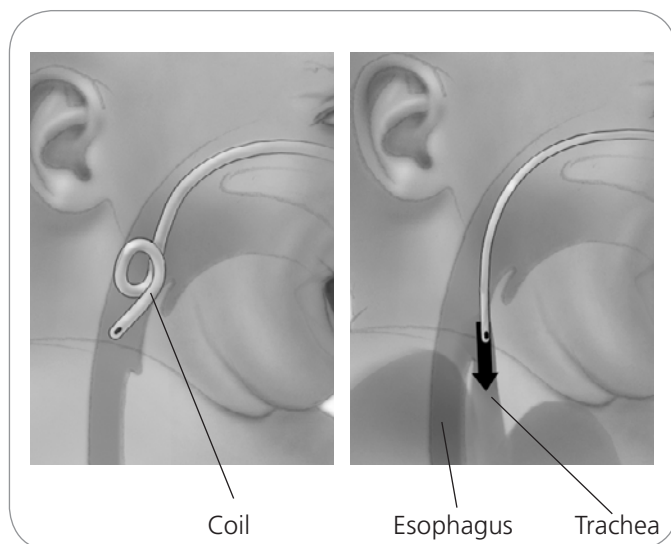
- Cough
- Skin has a blue tint
- Stops breathing

If you are not able to flush the tube it may be clogged. Replace it.

What do I do if my child has a problem?

If your child begins to vomit, stops breathing, or turns blue during the feeding, do the following:

- 1 Stop the feeding.
- 2 Remove the feeding tube, pinch the tube closed while you remove the tube to prevent formula from flowing into the lungs.
- 3 Suction your child's nose and mouth with the suction bulb.
- 4 Help your child cry by tapping her.
- 5 If your child does not breathe, call 911.



Helpful hints

If your child is an infant, use a pacifier for her to suck on during feedings. This will help satisfy her need to suck and help her connect feeding with sucking.

If your child cries hard during the feeding, the formula may not go down the tube. Stop the feeding and calm your child then continue feeding.

When you feed your child formula through the gavage tube, do not apply pressure with the plunger to make it go faster. If you feed your child thicker formula, the flow will be slower and may need slight pressure to get all of the feeding in. Hold the syringe higher to increase the flow.

Touch and talk to your child during the feeding. If your child is an infant, hold her during the feeding and then burp and cuddle her when the feeding is complete.

If you have further questions or problems, contact your doctor.

Home Care Company: _____

Phone Number: _____

NG Tube Type/Size: _____

Date last changed: _____

Length from nose to hub: inches _____ cm _____