

NASOGASTRIC TUBES (Insertion and Feeding)

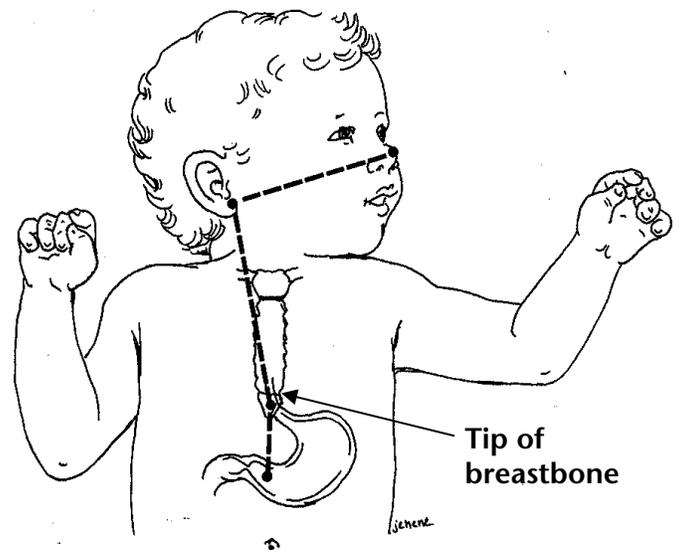
Feeding tubes are often used for babies and young children who are not able to take in enough calories by mouth. Tube feedings are also given to older children who cannot eat by mouth. The tube is inserted into the nose or mouth and goes into the stomach. If the tube is placed through the nose into the stomach, it is called a nasogastric tube (NG tube). A tube placed through the mouth to the stomach is called an oral gastric tube (OG tube). Formula or a nutritional supplement is then put into the tube and flows through it into the stomach.

YOU WILL NEED

- Feeding tube
- Luerlock® syringe - 60 mL.
- Water soluble lubricant (K-Y® Jelly or Surgilube®)
- Tape (1-inch cloth or paper tape)
- Formula prescribed by your doctor
- Stethoscope
- Measuring container and spoon
- Scissors
- Large safety pin

PREPARING TO PLACE THE TUBE

1. Before placing the tube, change your baby's diaper, if needed.
2. Wash your hands.
3. Pour prepared formula into the measuring container and stir. Place the container in a pan of hot water and let the formula reach room temperature.
4. Cut a 2-inch piece of tape. Then cut the tape lengthwise to the middle. Place the tape over the bridge of the child's nose, keeping the lower piece free to wrap around the tube after it is placed.
5. Place the end of the NG tube with the 2 small holes in it at the tip of the child's nose and measure to his ear lobe. Then from that point on the tube, measure down halfway between the tip of the breastbone and the navel (belly button). Mark the tube at this point with a piece of tape (Picture 1). The tape will let you know how far to insert the tube to reach the stomach.
6. Place the child in a sitting position. Place an infant on his back and raise the head of the bed. (You may need to wrap your baby in a blanket to keep his arms down so he does not grab the tube.)



Picture 1 Measure to determine how far in the tube should go.

PLACING THE TUBE

1. Put a small amount of water-soluble lubricant (K-Y® Jelly or Surgilube®) on the tip of the feeding tube. Never use Vaseline or any oil-based substance.
2. Aiming toward the ear lobe, put the tube slowly into the nose (or mouth, if it is an oral gastric tube). Using gentle pressure, keep inserting until the place on the tube marked with tape reaches the nose (or mouth, if it is an oral gastric tube). If the tube does not go in readily, remove it. *Never force the tube.* Change the child's position, lubricate the tip of the tube, and try again. The tube may go down easier if you have an infant suck on a pacifier. An older child can drink small sips of water while you insert the tube.
3. Keep the tube in place with the free end of the tape on the child's nose (Picture 2).
4. The tube may be coiled up and taped to the child's back. Or you may use a large safety pin or tape to secure the tubing to the child's clothing. Place the pin through a piece of tape on the tube; don't put the pin through the tube.



Picture 2 The NG tube in place.

HOW TO CHECK THE PLACEMENT OF THE TUBE

You must check to make sure the tube is in the stomach each time before a feeding. To do this:

1. Pull back on the plunger of the syringe to draw up 5mL of air.
2. Place the tip of the syringe into the open end of the tube.
3. Place the stethoscope over the child's stomach (upper left side of the abdomen).
4. Inject the air into the tube and listen for a "whoosh" sound. This sound will tell you the tube is in the right place. Withdraw the air you injected to check for placement. **If you do not hear this sound, remove the tube** and repeat the steps in **Placing the Tube** and steps 1 through 6 of **How to Check the Placement of the Tube**.
5. Pull back on the plunger of the syringe to check for stomach contents. Stop pulling on the plunger when you see the stomach contents in the syringe.
6. Slowly push the plunger to return the liquid to the stomach (the contents contain important liquid that should not be thrown away.)

FEEDING YOUR CHILD

After you check the placement of the tube, you may feed your child. Your doctor, nurse, or dietitian will tell you the feeding schedule (how much formula per feeding and how often to feed).

1. Test the temperature of the formula by dropping a few drops on the inside of your wrist. It should feel warm, not hot.
2. Remove the plunger from the syringe.
3. Put the tip of the syringe into the open end of the feeding tube.
4. Hold the tip of the syringe no higher than 10 inches above the child's head. (Holding it higher than 10 inches may make the stomach puffy and the child may vomit.) The height of the syringe affects how fast the formula goes into the stomach.
5. Pinch the tube while you pour the formula into the syringe.
6. Hold your child while feeding. You may give your child a pacifier to suck on during feedings. (This way your baby will continue to learn feeding skills and will connect the sucking with the feeling of being full.)

FEEDING YOUR CHILD (continued)

7. If your child begins to vomit during the feeding, **stop feeding immediately**. Wait until **vomiting stops**, then put the formula in more slowly.
8. You may need to push gently with the plunger to start the formula flowing. Release the tube and let the formula enter the stomach slowly. Keep adding more formula as the syringe empties (Picture 3, page 3). Feed your child slowly over 15 to 20 minutes.
9. If the formula does not flow, change your child's position. If the formula still does not flow, put the plunger into the syringe and gently push enough to start the formula flowing again, then remove the plunger.
10. Note: Some children cannot handle 20-minute feedings given by syringe. (The formula goes in too fast, causing the child to vomit.) If your child has trouble with syringe feedings, your doctor may order continuous feedings using a special pump. The pump slows down the rate the formula goes in. If your child needs a pump, a nurse from the equipment supply company will teach you how to use it.

AFTER THE FEEDING

1. Pour 5 to 10 mL of water into the syringe after the formula is gone. The water helps clear the tube to prevent clogging so there is less chance for bacteria to grow.
2. Remove the syringe. Place the cap on the tube.
3. Loosen the tape, pinch the tube to prevent aspiration ("breathing in") stomach contents, and gently remove the tube from the nostril (unless the tube will be left in place for several feedings).
4. Infants should be burped after every 2 to 3 ounces and after feedings.
5. If you put the child to bed after the feeding, put him in bed on his **right** side. This lets the formula follow the normal course of the intestinal tract.
6. Raise the head of the bed 30 degrees. This can be done by placing a pillow **under** the mattress.
7. If your child begins to vomit, turn your child's head to the side and unclamp the tube.



Picture 3 Hold your baby while feeding.

CLEANING THE EQUIPMENT

1. Place a clean paper towel on a tray.
2. Rinse the syringe, spoon, and measuring container with cold water. Then wash them in hot, soapy water. Rinse and dry.
3. Place the clean items on the tray.
4. Cover with a paper towel and store in a cupboard out of the reach of children.

OTHER INFORMATION

- If the doctor has ordered liquid vitamins, drop the correct dose into the tube along with the formula.
- Never change the baby's formula or give more than your doctor ordered.
- If your child's still seems hungry, ask your doctor for advice on increasing feedings.
- If the tube is in place and your child's abdomen becomes puffy, unclamp the tube. The unclamped tube can be attached to a 60-mL syringe. Wait 1 hour. If the abdomen is no longer puffy, re-clamp the tube. If the abdomen is still puffy, call your doctor.
- Use the other nostril each time you change the tube.
- You can use the same tube for several days to one month unless it becomes clogged, dirty, or damaged.

If you have any questions, be sure to ask your doctor or nurse, or call _____.