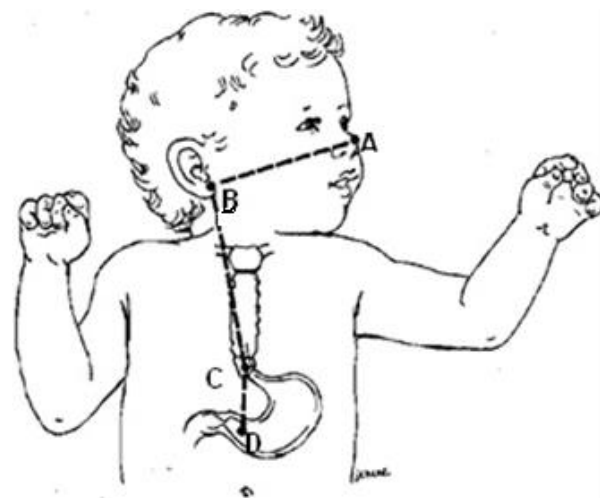


## Nasogastric Tubes (Insertion and Feeding)

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).

After the tube is placed, formula or a nutritional supplement is then put into the tube and flows through it into the stomach.



**Picture 1** Measure to find out how far the tube should go into the abdomen.  
(A+B+C+D = the total length the tube is inserted.)

### You will need

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Feeding tube     | <input type="checkbox"/> Enfit syringe - 60 mL                     | <input type="checkbox"/> Measuring container and spoon                            |
| <input type="checkbox"/> Scissors         | <input type="checkbox"/> Formula prescribed by your child's doctor | <input type="checkbox"/> Water soluble lubricant (Plain K-Y® Jelly or Surgilube®) |
| <input type="checkbox"/> Large safety pin | <input type="checkbox"/> Tape (Duoderm or Tegaderm)                |   |

### Preparing to place the tube

1. Wash your hands.
2. 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.
3. 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.

*Continued on page 2*

## Preparing to place the tube, continued

- Place the end of the NG tube with the several 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, page 1, A+B+C+D). The tape will let you know how far to insert the tube to reach the stomach.
- Place the child in a sitting position. An infant should be placed on his or her back with the head of the bed raised. You may need to wrap your baby in a blanket to keep his arms down so he does not grab the tube.

## Placing the Tube

- Put a small amount of water-soluble lubricant (K-Y<sup>®</sup> Jelly or Surgilube<sup>®</sup>) on the tip of the feeding tube. Never use Vaseline or any oil-based substance.
- 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 an infant sucks on a pacifier. An older child can drink small sips of water while you insert the tube.
- Keep the tube in place with the free end of the tape on the child's nose (Picture 2).
- 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. Do not 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.**

There are many ways to check placement of an NG tube. The easiest way is simply to look at the child. Is the child still gagging or coughing minutes after the tube has been placed? If so, the tube may **not** be in the correct spot and should be removed. Is the mark on the tube still at the child's nose? If it is not, the tube should be re-inserted to the correct position and the child should be checked again for gagging and coughing once the tube is in position. If you are still concerned, you may insert a syringe into the end of the tube and pull back gently. If you get stomach contents in the syringe, then the tube is in the correct position.

## 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).

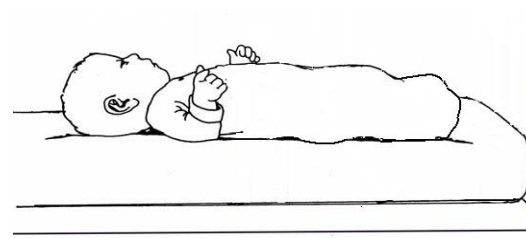
1. Test the temperature of the formula by dropping a few drops on the inside of your wrist. It should feel warm, not hot.
2. Remove the plunger from the syringe.
3. Put the tip of the syringe into the open end of the feeding tube. Hold the tip of the syringe no higher than 10 inches above the child's head. The height of the syringe affects how fast the formula goes in. Holding it higher than 10 inches may make the stomach puffy and your child may vomit.
4. Pinch the tube while you pour the formula into the syringe (Picture 3).
5. Release the tube and let the formula enter the stomach slowly. Add more formula as the syringe empties. Feed your child slowly over 15 to 20 minutes.
6. 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. Remove the plunger.
7. 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.)
8. If your child starts to vomit during the feeding, **stop feeding immediately. Wait until vomiting stops. If vomiting persists, take the NG tube out and call your pediatrician or call the nurse helpline at \_\_\_\_\_.**
9. Note: Some children cannot handle 20-minute feedings given by syringe. The formula goes in too fast and the child vomits. If your child has trouble with syringe feedings, your doctor may order continuous feedings using a special pump. The pump slows down the rate that the formula goes in. If your child needs a pump, a nurse from the equipment supply company will teach you how to use it.



Picture 3 The syringe pictured is lower than the baby's head.

## 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 of infection.
2. Remove the syringe. Place the cap on the tube. Infants should be burped after every 2 to 3 ounces and after feedings.



Picture 4 Place your baby on his back after feeding.

*Continued on page 4*

## After the feeding, continued

3. If you put your child to bed after the feeding, put him in bed on his **back** without stuffed animals, toys or a blanket (Picture 4). This is the safest sleep position for your baby.
4. If your child begins to vomit, turn his head to the side and unclamp the tube.

## 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.

## Removing the tube

1. If you need to remove the tube, loosen the tape. Pinch the tube to prevent aspiration (“breathing in”) stomach contents.
2. Gently remove the tube from the nostril (unless the tube will be left in place for several feedings). There is no need to remove the tube after every feed unless indicated.
3. Place the new tube in the other nostril when you replace it.
4. Change the tube once a month, unless it becomes clogged, dirty, or damaged.

## Other tips and advice

- If the doctor has ordered liquid vitamins, drop the correct dose into the tube along with the formula.
- **If oral feeds were recommended, then feed the infant after placing NG tube. Placing the NG tube after oral feeds may cause vomiting.**
- Never change the baby's formula or give more than your doctor ordered.
- If your child 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 child's doctor.
- Use the other nostril each time you change the tube.
- You can use the same tube for several days to 1 month unless it gets clogged, dirty or damaged.

Verify the reason for the nasogastric tube use with your child's physician or nurse practitioner. Ask if there are recommendations for your child's specific condition.

If you have questions, be sure to ask your doctor or nurse, or call \_\_\_\_\_.