Nasogastric Tube Feedings at Home

What is a nasogastric (feeding) tube?
A nasogastric tube is a thin, flexible, soft tube that is passed through your child’s nose (nostril), down the back of the throat, through the swallowing tube (esophagus), and into the stomach. It is taped under the nose to stay in place. A nasogastric tube is sometimes called an NG or feeding tube.

How is the NG used?
If the tube is needed for giving medicine, this is done using a syringe. For scheduled feedings, a syringe or pump may be used. For continuous feeding, formula is given using a pump. The pump controls the rate of fluid flow.

What is the feeding schedule?

Feeding method:
_____________________________________
_____________________________________

Formula name:
_____________________________________
_____________________________________

Total amount of formula per day:
_____________________________________

Total amount of water per day:
_____________________________________

Amount of each feeding:
_____________________________________

Feeding Schedule:
_____________________________________
_____________________________________

Flush the tube with _____ mL of water before and after each feeding

Other Instructions:
_____________________________________
_____________________________________
_____________________________________
_____________________________________
_____________________________________

Why does my child need a NG (feeding) tube?
A nasogastric feeding tube is used to give fluids, food, and medicine when a child cannot take them by mouth. Reasons a child may need an NG include:

- Problems with sucking, chewing, or swallowing.
- Unable to get enough nutrition with a normal diet.
- Unable to swallow needed medicines.
- To remove fluids and gas from the stomach.
- To prevent nausea and vomiting.
- To prevent pressure on stitches after surgery.
Do not make changes in the type or amount of formula without talking to your child’s provider first. Provider to call:

Provider:________________________________________
________________________________________

Phone:________________________________________
________________________________________

After Hours Instructions:________________________________________
________________________________________

**How do I give formula with a feeding bag?**

1. Wash your hands with soap and water for 30 seconds.
2. Position your child sitting up if possible, or on the right side with the head of bed raised 30-45 degrees.
3. Be sure the NG tube is in the stomach by looking at the placement of the tape, and measuring the distance from the nose to the tip of the tube. The tape should be in the same place as the last feeding. The measurement should be the same as the last feeding.
4. Clamp the feeding bag tubing.
5. Fill the feeding bag with formula.
6. Close the cover tightly. Hang the bag at least 2 feet above your child’s head.
7. Open the clamp. Let the tubing fill until you see no air. Air in the tubing will not hurt your child, but will make your child’s stomach feel full.
8. Clamp the tubing.
9. Connect the bag to the feeding tube.
10. Open the clamp.
11. Watch your child for any signs of nausea, vomiting, diarrhea, stomach swelling, or increased fussiness. Any one of these signs may mean that your child is not able to digest the formula at the rate it is running.

If these symptoms occur, stop the feeding and contact your provider for instructions.

12. When the feeding is done, fill the bag with the prescribed amount of water. If it isn’t time to take extra water, be sure to flush the tube after each feeding with at least 10 mL of tap water so that it doesn’t clog.
13. Clamp or cap the tube. Disconnect the tube from your child.
14. Clean the supplies by rinsing the bag and tubing with cold water. Then, swish them in warm water and a drop of liquid dishwashing soap. Rinse thoroughly so that all of the soap is removed. Hang to dry.

**How do I give formula with a syringe?**

1. Wash your hands with soap and water for 30 seconds.
2. Position your child in a sitting position, or on the right side with the head raised 30° - 45°.
3. Check placement of the NG tube using the method described in step 3 above.
4. Remove the plunger from a 60 mL syringe. Connect the syringe to the feeding tube.
5. Hold the syringe upright and pour the formula into it.
6. Hold the syringe 10-12 inches above your child’s head. Allow formula to be delivered by gravity over 20-30 minutes.
7. Keep filling the syringe as it empties until the entire amount of formula is given.
8. If the feeding should stop, you may use the plunger of the syringe to give a gentle push to get the feeding going again.
9. Give the prescribed amount of water to flush the tube.
10. Clean supplies as above (#14).
Can I give medicines through the NG tube?

- Medicine can be given with a syringe through the feeding tube.
- It is best to use medicine in a liquid form. If you must give pills, be sure to thoroughly crush and dissolve pills in warm water so they do not clog the tube.
- Give each medicine separately. Do not mix medicines together or mix with formula.
- Never crush enteric-coated or time-release capsules. If you have questions about which medicines can be crushed, please talk to your pharmacist or health care provider.
- Flush the feeding tube with 5 mL of water after each medicine is given, and 10-20 mL of water after all medicines are given to be sure they get into the stomach.
- Do not add any medicines to formula in the feeding container.

How do I check the placement of the feeding tube?

The most important part of caring for an NG at home is checking that it is in the correct position (i.e. sitting in the stomach) before you put anything down it. The feeding tube should be marked where it exits the nose after the first placement. This mark should not change over time. Use a tape measure to measure the distance from where your child’s tube exits the nostril to the end cap of the tube. Record this measurement every time you use the tube, or every 4-6 hours during a continuous feeding. If the mark moves, and the tube has slipped, call your provider before using the tube. Another way to tell if the NG tube is in the stomach is to attach a syringe to the end of the feeding tube and gently pull back. There may be fluid in the syringe and/or tubing that looks like formula, or clear green to yellow fluid. Return this fluid to the stomach. If you do not obtain fluid, it may be a sign that the tube is not in the stomach. Contact your provider before using the tube.

The securing tape should be changed every other day, or when it is loose, so that the NG tube stays secure.

Babies and children who need the tube for a long time at home will need to have the tube replaced at times. This normally means your child will need to return to a provider to have the tube replaced. Do not try to reinsert an NG tube if you have not been trained to do so. If you are going home with an NG tube, you need to have a clear plan in place before leaving the hospital. This plan should include who to contact and what to do if the tube moves or comes out. Any adult caring for your child will need education on how to care for the tube and how to feed your child. Please ask your nurse for more information.

If your child’s nose is sore, move the tape to a different place on the nose. The tape may also need to be changed if it is coming loose. This is a good time to clean the skin under the tape. Be careful not to let the tube slip out.

1. Wrap or swaddle your child in a blanket, or have another person hold your child’s arms so the tube cannot be pulled while you are caring for the site.
2. Wash your hands with soap and water. Dry well.
3. Prepare your supplies – tape, cotton-tipped swabs, water, soap, and lotion.
4. While carefully holding the tube, remove the old tape.
5. Use a cotton-tipped swab moistened with water and soap to clean the edges of both nostrils. Rinse thoroughly. Pat dry.
6. Look inside the nostril where the tube is to check for any redness, pain, or sores. You may put a small amount of lotion or Vaseline® in the nostril to prevent irritation.
7. Secure the tube to the nose by wrapping a narrow piece of tape around the tube in each direction. Secure the other end of the tube to the cheek on the same side of the face where the tube exits.

8. If you feel your child is having pain, you note a sore area, or the tube has come out, tape the tube down. Do not use the tube. Contact the provider who is ordering the feedings to get further instruction.

What is a residual, and how do I check for it
The “residual” is the amount of contents remaining in your child’s stomach from the previous feeding. The residual is checked before a feeding to make sure your child is not too full before another feeding is given. To check for a residual:

1. Place an empty syringe on the end of the feeding tube.
2. Pull the plunger back to withdraw stomach contents.
3. Measure the amount of residual on the syringe. Your provider will discuss with you how much residual is appropriate for your child.
4. Return the stomach contents to your child.
5. Flush the tube with 5-10 mL of warm water to prevent clogging.
6. If the residual is more than recommended for your child, delay the feeding for 30 minutes, and then check the residual again.

What can I do while my child is being fed?
Feeding time is a special time for babies. Babies enjoy being held closely, cuddled, rocked, or talked to during tube feedings just as if they were being fed by mouth. Hold your baby, and encourage the baby to use a pacifier during feeding to practice sucking and swallowing.

Toddlers will need to stay in one place, so playing a game or doing a quiet activity may be useful. Older children can sit at the table with the family and receive a tube feeding while the family eats a meal.

More information about feeding tubes
1. What should I do if the tube is blocked?
   If the tube won’t flush, try using warm water. Gently flush 10-15 mL of fluid through the tube. Do not use carbonated beverages, juice, or vigorous pressure to unclog the tube. If the tube still will not flush, call your nurse or doctor. Flushing the tube before and after giving medicines, after intermittent feedings, and every 4-6 hours during continuous feedings will prevent this problem.

2. What should I do if the tube is leaking?
   If the tube is cracked or leaking, the tube will need to be replaced.

3. What should I do if my child is vomiting?
   • Call your doctor if vomiting persists after 1 day. Vomiting causes a loss of body fluids, salts and nutrients.
   • Do not give a feeding if your child is vomiting.
   • Check the residual. If the residual is higher than recommended, delay the feeding. Recheck the residual every 30-60 minutes until the residual is low enough to start the feeding.
   • Give feedings in an upright position to decrease the chances of vomiting.
   • Try smaller, more frequent feedings, being sure that the total amount of feeding for the day is the same as what is ordered.
   • Try to slow the rate of the feeding.
• Have your child rest after each feeding. But, do not let him or her lie down flat during the feeding and for 1 hour after a feeding.
• If your child develops difficulty breathing during or immediately after a feeding, stop the feeding and call your provider. It is possible your child may have inhaled formula or stomach contents into the lungs.
• Infection may cause vomiting. Clean and rinse equipment well between feedings.
• Do not let formula in the feeding bag hang longer than 8 hours.
• After the formula can is opened, the can should be stored in the refrigerator until used.
• If your child has nausea and vomiting, your provider may recommend changing the feedings temporarily. Follow your provider’s instructions about feeding during illness.

4. **What should I do if my child has diarrhea?**
Diarrhea is frequent loose, watery stools. Diarrhea can be caused by giving too much feeding at once, running the feeding too quickly, unable to tolerate the type of formula, spoiled formula, or infection. Some medicines can cause diarrhea. Some children have loose stools with changes in formula, medicines, or feeding routines.
• Avoid hanging formula for longer than 8 hours.
• Keep opened formula in the refrigerator for no more than 24 hours.
• Slow the feeding rate or give smaller amounts of formula more often.

5. **What should I do if my child becomes dehydrated?**
Dehydration is a loss of water and fluids from the body. Dehydration may occur for a variety of reasons – diarrhea, vomiting, fever, or sweating for example.
• Signs of dehydration include decreased or dark urine, crying with no tears, dry skin, fatigue, irritability, dizziness, dry mouth, weight loss, and/or headache.
• Extra water may be given after each feeding to replace water lost.
• Call your provider if you notice signs of dehydration.

6. **What should I do if my child becomes constipated?**
Constipation may be caused by certain types of formula, changes in formula, medicines, or feeding patterns, or not enough water. Give more water flushes throughout the day, especially during hot weather. If constipation becomes chronic, contact your provider.

7. **How do I bathe my child with a NG in place?**
Bathe your child as is normal for the age and developmental level, as long as the NG tube is not submerged under water.

8. **What should I do if my child has gas, bloating or cramping?**
Be sure there is no air in the tubing before attaching the feeding tube.
9. **Why is oral care still important?**  
   Good mouth care is essential for overall health. Your child should have their teeth, gums and mouth brushed at least twice a day using a soft toothbrush or sponge brush even if he/she is not eating by mouth.

10. **What to do if the tube is out of place**  
    If the tube is longer in the stomach, call your provider or Home Health Nurse. Do not use the tube. You will need to have a new tube placed. If the tube is pulled out during a feeding, stop the feeding right away, and contact your Provider to have the tube replaced.

11. **When should I call my child’s provider?**  
    - Your child has trouble breathing.  
    - Your child turns blue.  
    - You see blood around the tube, in your child’s stool, or in stomach contents.  
    - Your child coughs, chokes, or vomits while feeding (stop the feeding if this occurs during feeding).  
    - Your child has a bloated or rigid belly (belly feels hard when it is gently pressed).  
    - Your child has diarrhea or constipation.  
    - Your child has a fever of 100.4° F or higher.

The Spanish version of this *Health Facts for You* is # 7232

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person’s health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911.  
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