



NG Tube Feeding

Helping your child with NG (nasogastric) tube feedings at home

Why does my child need a feeding tube?

Your child needs to get food through a tube placed through the nose into the stomach. This is called a nasogastric (NG) tube. Children may need an NG tube when they have a medical condition, are born premature, have trouble sucking or because they get tired when eating. The thought of putting in the tube may be hard on you. Your nurse will teach you how to place the tube and you will have time to practice before going home. Remember that you are doing this so your child can get enough food to grow.

When you feed your child with an NG tube, treat them like you would if you were feeding them by breast or bottle. Smile and talk to your child during the feedings. Include your child in regular family meals when possible.

How do I put in the tube and feed my child?

Placing an NG tube can be hard, especially the first few times. It is important to prepare yourself emotionally before you place the tube. Take a deep breath, smile and speak calmly to your child. Then, follow these steps for putting in the tube and feeding:

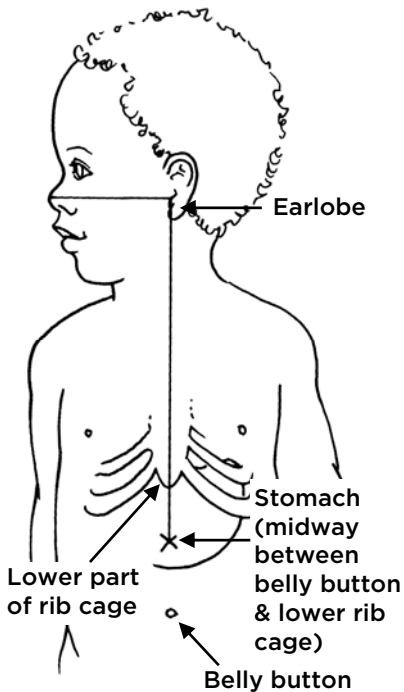
Step 1. Get ready

Gather all the things you need next to where you will be doing the feeding:

- Formula at room temperature
- Plain tap water in a cup
- Feeding tube
- ½ inch tape or permanent ink felt pen to mark the feeding tube
- Small piece of Tegaderm
- Tan-colored second skin dressing (like Replicare)
- Lubricant jelly that is water-soluble and can be rinsed away with water — avoid Vaseline because it cannot be rinsed away with water
- Syringes (sizes 60 mL and 5 or 10 mL)
- Stethoscope

Step 2. Secure your child

- Wrap your baby snugly in a blanket with their hands tucked in. This will help them to not pull out the tube.
- It might be helpful for another person to hold your child's hands and give comfort.



Tube Placement

Step 3. Measure the feeding tube

1. Wash your hands well with soap and warm water. Tell your child what you will be doing, even if they are a baby.
2. Position your child with their head higher than their chest. Use an infant seat or feeding wedge to position a baby. Use a comfortable chair or pillows to position an older child.
3. Measure how far in to put the tube. To measure it:
 - a) Hold the stomach end of the tube on top of your child's bare stomach area midway between the belly button and where the lower part of the rib cage meets in the center. (See the picture on the left.)
 - b) Bring the other end of the tube up to the ear lobe and then out to the nose or mouth. (See the picture on the left.)
 - c) Mark that spot on the tube either with a permanent marker pen, or by placing a small piece of $\frac{1}{2}$ inch tape on the tube. You will need to see this mark on the tube every day.

Step 4. Insert tube

1. Put water-soluble lubricant on the tip of the tube that goes into the nose.
2. Slide the lubricated tube into one nostril, along the base of the nostril, to the back of the nose. If it does not go in easily, try the other nostril.
3. If your child can, have them swallow. If your child can safely swallow liquid, taking sips of water will help the tube slide down. If your child is an infant, give them a pacifier to help them suck and swallow the tube.
4. Quickly insert the tube all the way to the tape or pen mark on the tube. If your child begins coughing, choking and turning blue, remove the tube at once. If your child is upset and crying, but not choking or turning blue, comfort your child and give them a moment to settle down. A pacifier might help. If your child is still fussy and uncomfortable after a few minutes, take out the tube and start again a little later.
5. When the tube is in, tape it to the skin near the nostril. This will stop it from sliding out while you check if it is in the right place in the stomach.

Step 5. Check placement of tube

There are two ways to make sure the tube is in the stomach. **It is important to do both of these to be safe.**

1. Listening method

- a) Pull 2 to 5 mL of air into the empty small syringe. Connect the syringe to the tube.
- b) Place the stethoscope over your child's stomach.
- c) Push the air into the tube quickly while listening for the sound of gurgling through the stethoscope.
- d) Remove the air by gently pulling back the plunger.

2. Seeing stomach contents method

- a) Connect the empty small syringe to the tube, and gently pull back on the plunger until you see stomach contents in the syringe. Stomach contents are yellowish, greenish or the color of formula, food or medicine recently given.
- b) Return the stomach contents by gently pushing them back into the tube.
- c) If it has been a while since your child's last feeding, it might be a little harder to see stomach contents. If this happens, turn your child on their left side and pull back on the syringe again.

If you heard the air enter the stomach and saw the stomach contents, the tube is in the stomach. If not, gently push the tube $\frac{1}{2}$ to 1 inch further, roll your child to their left side and check for placement again. **Do not put food or water in the tube if you are not sure it is in the stomach.**

Step 6. Secure the tube

1. Make sure the cheek is clean and dry.
2. Put Replicare or other second skin dressing on the cheek near the nostril. Be careful not to get too close to the eye.
3. Lay the tube across the Replicare and then stick the Tegaderm over the tube onto the Replicare. This will keep the tube on the face. If your child is a baby, tape as close to the nose as possible. This will keep your child from putting their finger in between the nose and the tape and accidentally pulling out the tube.
4. Once the tube is secure, take off the other piece of tape near the nostril.
5. Replace the Replicare and Tegaderm as needed when it gets loose or dirty.
6. You can put mittens on your baby's hands to help them not pull out the tube.

Step 7. Feed your child with a syringe by gravity

1. Take out the top part, or the plunger, from a 60 mL syringe. Connect the syringe to the end of the feeding tube.
2. Measure the amount of formula that your child's doctor ordered. If it is less than 60 mL, you can pour all of it into the syringe. If it is more than 60 mL, pour the measured amount into a cup or bottle, and pour some of it into the syringe.
3. Gravity should help the formula flow through the tube. You may need to push gently with the plunger to start the flow. Then, take out the plunger and let the formula flow into the tube. The formula will go into your child's stomach faster if you hold the syringe up higher. It will go slower if you hold it lower. You can feed faster or slower based on what works best for your child. You may want to pin the syringe to your shoulder so the formula will not tip and spill. Do this by wrapping a piece of tape all the way around the syringe, making a tab where the ends of the tape meet. It is very important to watch your baby the entire time the formula is flowing in.

4. Keep adding formula until the measured amount has been fed. Add formula before the syringe gets empty, so no air gets into the tubing.
5. After the feeding, take the feeding syringe off the tube and clamp or close the end of the tube. Unclamp or open and use the small syringe to flush the tube with 2 to 3 mL of water to prevent clogging. Clamp or close the cap of the tube again.
6. Hold, cuddle and burp your child.

If you are using gravity bags or a pump to feed your child, give the feeding as instructed using the Home Care printed information as a guide. If you have questions about your child's feeding method, contact your home care company.

How do I clean the syringes and the tubing?

1. Take out the plunger and wash both parts of the syringe with warm water. Rinse well with clear water.
2. Allow both pieces to air dry well before putting them back together.

Things to remember

- Always check to make sure the tube is in the right place before each feeding and before giving medicine through the tube (go back to Step 5, "Check placement of the tube").
- If the tube falls out or accidentally gets pulled out, you can use a spare tube or reuse the one that fell out. NG tubes are good for 6 weeks, and can be put back in as often as a young child pulls them out. To do this, wash the outside with soap and water. Rinse well to remove all soap, and flush the inside of the tube with plain water. Avoid putting soapy water through the tube. Soap residue can cause diarrhea. Most home care companies provide 2 or 3 spare NG tubes each month.

To Learn More

- Home Care Services
425-482-4000,
toll-free 800-888-4429
- Ask your child's
healthcare provider
- www.seattlechildrens.org

**Free Interpreter
Services**

- In the hospital, ask
your child's nurse.
- From outside the
hospital, call the
toll-free Family
Interpreting Line
1-866-583-1527.
Tell the interpreter
the name or extension
you need.
- For Deaf and hard of
hearing callers
206-987-2280 (TTY)

Feeding your child through an NG tube might sound hard, but it gets much easier with a little practice. You will probably have questions. If you do, please call your child's doctor or your home care provider.

Doctor's number

Emergency room number

Size of tube (diameter)

Some passages adapted from L. Whaley, and D. Wong, *Clinical Handbook of Pediatric Nursing*, 5th Edition, (St. Louis: C.V. Mosby Co., 2000).