



ENTERAL NUTRITION THERAPY

Parents'  
**Welcome Guide**

**Bolus, Gravity and Pump Feeding  
for Children**

 APRIA®

# Apria Enteral Nutrition Therapy Caregiver Acknowledgement

An Apria Representative will review the items on this checklist with you. After you have reviewed each item, please check the appropriate box. Then sign and date at the bottom, remove the checklist from this guide, and return it to Apria.

## Parents' Welcome Guide

- Welcome to Apria's Enteral Nutrition Therapy Program
- Managing Your Child's Supplies
- Safe Practices for Home Tube Feeding
- How to Administer Your Child's Feedings

## Apria Safety Guidelines Brochure

- Fire Safety and Tips to Avoid Falling
- Patient's Rights and Responsibilities
- HIPAA Notice of Privacy Practices
- Interpretation Service Available

## Forms and Flyers

- ENFit Transition Checklist Flyer
- Opt-In Enteral Refill Program Enrollment Form — Enrollment is optional and may not be available to all patients (dependent on insurance).

## Additional Resources

If your delivery includes an Enteralite Infinity feeding pump, see these additional resources provided to you:

- Infinity Feeding Pump Operator's Manual
- Infinity Quick Reference Card
- More resources are listed on our website [Apria.com/services/enteral](https://www.Apria.com/services/enteral)

If your delivery includes a Kangaroo Joey feeding pump, see these additional resources provided to you:

- Loading and Rinsing Feeding Pump Flyer
- EZ Mode Instructions with Troubleshooting Guide Quick Reference Card
- More resources are listed on our website at <https://www.Apria.com/services/enteral>

By signing below, the caregiver acknowledges that he/she has received, been instructed in, and understands items on the checklist above. In addition, the listed Additional Resources have been provided.

\_\_\_\_\_  
Caregiver Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Apria Representative

\_\_\_\_\_  
Date

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Please PRINT Name

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# Welcome to Apria's Enteral Nutrition Therapy Program

We want to give you and your child a warm welcome to Apria's enteral nutrition therapy program.

In this program you will be provided with tube feeding formula, supplies, and equipment prescribed by your child's physician. You will also be provided the top level of service.

## Enteral Nutrition Staff and Services

As our customer, you have access to our staff and services, including:

- **Enteral Nutrition Specialists:** Our enteral nutrition support team is here to help coordinate your child's transition to home tube feeding and assist you with supply orders throughout the duration of your child's therapy.
- **Around the Clock Support:** Apria's support staff is available 24 hours a day, 7 days a week to address any supply questions.
- **Additional Resources:** Educational materials and resources that can help you with your child's home tube feeding.

Please accept our personal welcome to Apria and our enteral nutrition therapy program. We look forward to serving you and your child.

Kindest Regards,

*Your Apria Enteral Nutrition Therapy Team*

Continental U.S. (844) 260-1788

Hawaii (800) 454-5672

## Language Interpreter Services

Language interpreter services are available. If language interpreter services are needed, please let us know.

## Feedback on Our Services

Apria is among America's most experienced and respected homecare providers, and our patient satisfaction scores are consistently high. It is possible, however, that you may have a concern and we always welcome feedback. To voice a concern, call us, email us, or visit our website.

- Call our specialists at (844) 260-1788 in the Continental U.S. or (800) 454-5672 in Hawaii.
- Email us at [Patient\\_Satisfaction@Apria.com](mailto:Patient_Satisfaction@Apria.com)
- Visit our website at [Apria.com](http://Apria.com). Select the reason for contacting us from the menu under Contact Us.



# Managing Your Child's Supplies

## Initial Delivery

A member of the Apria team will most likely provide your initial delivery of supplies to your home or to your child's hospital room before discharge. This initial delivery will vary depending on your child's specific needs and will include enough supplies to last 5 days. The rest of your child's first month's supplies (25 days) will be shipped to your home. Shipped deliveries will arrive by UPS or a similar carrier.

## Recurring Orders

You will receive a monthly reminder call from us approximately 10 days prior to your next refill date. We encourage you to contact us when you have 7 days of supplies remaining.

During your refill conversation, our specialists will ask you questions about how things are going with your child's home tube feedings. These questions may take a few minutes to answer, but please remember, they are very important for the proper management of your child's supplies.

## Ordering Supplies

**Don't run out of supplies.** You will receive a monthly reminder call from us approximately 10 days prior to your next refill date. **We encourage you to contact us when you have only 7 days of supplies remaining.**

Once your order is placed, you will receive a 30-day supply of formula and supplies shipped to your home. Shipped deliveries will arrive by UPS or a similar carrier.

If you have any concerns about a delivery you have received, please call us immediately. You can also contact us toll-free with any questions regarding supplies or service at **(844) 260-1788** in the Continental U.S. or **(800) 454-5672** in Hawaii.

**Please call us immediately if there is a change in your child's tube feeding regimen.** It may take up to 7 days to obtain a new prescription from your child's physician and receive insurance authorization to provide the new product. Notify us as soon as possible to ensure that you have an adequate supply of formula.

## Pumps

Your child's therapy may require the use of an electronic enteral feeding pump.

**IMPORTANT: Please return your child's pump at the completion of therapy.** Contact your local branch to make arrangements.

### Some Things to Keep in Mind

- This pump is a delicate medical device, so it's important that you take good care of it, clean it, and store it, according to the manufacturer's instructions.
- If the equipment is damaged or malfunctions at any time, please contact Apria to arrange for a replacement.
- If at any time you have a question or concern related to the feeding pump, please contact Apria's enteral nutrition support team at **(844) 260-1788** in the Continental U.S. or **(800) 454-5672** in Hawaii.

### Returning Your Child's Pump to Apria

- **This is medical equipment you are renting from Apria, which you'll need to return to Apria at the end of the therapy.** Upon completion of the therapy, please call the enteral nutrition support team at **(844) 260-1788** in the Continental U.S. or **(800) 454-5672** in Hawaii to arrange a pickup of the pump by our local Apria branch representative.

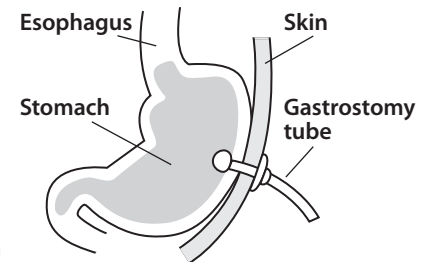
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## Getting Started with Home Tube Feeding

### Types of Feeding Tubes

When your child is unable to eat by mouth, a feeding tube provides a way to receive the nutrition and water that is required.

Feeding tubes are soft and flexible and can be placed directly through the abdominal wall into the stomach or intestinal tract through a surgical incision.



*Placement of a gastrostomy tube*

- **G-tube:** A tube placed in the stomach is called a gastrostomy tube, or G-tube for short.
- **J-tube:** A tube placed in the intestinal track, below the stomach, is called a jejunostomy tube, or J-tube.

### Types of Feeding Methods

There are three types of feeding methods to administer formula and water into feeding tubes.

- 1. Syringe Bolus Feeding:** Formula is given into the stomach using a syringe.
- 2. Gravity Feeding:** Formula is poured into a feeding bag, which is hung from a pole. The force of gravity pulls the formula from the bag, through the tube.
- 3. Pump Feeding:** An infusion pump allows a controlled flow of formula, based on a preset rate.

### Formulas and Feeding Plans

There are many brands and types of formulas available. The word "formula" is also used to refer to infant formula, breast milk, and special additives. Your child's physician and/or dietitian will decide on the formula that will be best for your child.

Some children need to get all their nutrition through tube feedings while others get tube fed to supplement oral intake. Your healthcare team will inform you if your child can eat by mouth and/or any limitations.

You and your healthcare team will need to determine the type of tube feeding schedule that works best for your child's nutrition needs. Finding the right schedule may take some time and include some trial and error. Be patient, as you will eventually arrive at a schedule that is best for your child and family.

### Types of Formula and Additives

- Ready-to-feed formula: Does not need to be mixed with water.
- Infant formula concentrate: Prepare by adding equal parts of water to concentrated liquid.
- Powdered infant formula: Mix a specific amount of formula powder to a specific amount of water.
- Fortified human breast milk: Mix breast milk with powdered formula.
- Modularity are specific nutrients or ingredients added to a formula to meet special nutrient goals. Examples are MCT oil or protein powder.
- Thickening agents: Can be added to formula to thicken the liquid.

### Resources and Adjusting to Home Tube Feeding

The transition to home tube feeding does require some adjustment — for both you and your child. But you can do this and it gets easier as you both get familiar with the process.

Whether the feeding tube is needed only for a short time during medical treatment, or for a longer period based on a specific medical condition, Apria is dedicated to providing you and your family compassionate service. We are a good place to start to help answer supply questions. And you can find more resources listed here and on our website.

#### Apria Enteral Nutrition Therapy

<https://www.Apria.com/services/enteral>  
Continental U.S. (844) 260-1788 | Hawaii (800) 454-5672  
Apria's website provides tube feeding resources for patients and caregivers.

#### The Oley Foundation

[www.oley.org](http://www.oley.org) | (800) 776-6539  
A national non-profit support group that has a variety of resources to help patients and families adjust to home tube feeding.

#### Feeding Tube Awareness Foundation

[www.feedingtubeawareness.com](http://www.feedingtubeawareness.com)

A national non-profit support group for parents and caregivers of children who are tube fed.

#### Complex Child

[www.complexchild.com](http://www.complexchild.com)

Complex Child is a free monthly online newsletter written by parents of children with special healthcare needs and disabilities.

#### GEDSA Stay Connected

[www.stayconnected.org](http://www.stayconnected.org)

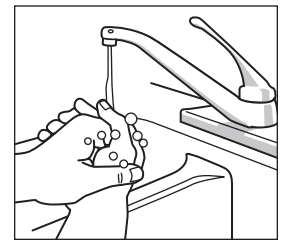
A non-profit trade association formed to help transition to the new ISO 80369-3 standard for enteral feeding connectors known as ENFit®.

## Safe Practices for Home Tube Feeding

Just like food, tube feeding formula needs to be handled carefully to prevent spoilage and foodborne illness. Follow the tips below to help make your child's tube feeding safe.

### Hand Washing

- Wash your hands vigorously with soap and warm water for at least 20 seconds before preparing or giving any tube feeding formula or touching any tube feeding equipment. Simple hand washing is the easiest way to prevent the spread of bacteria.
- If you do not thoroughly wash your hands before touching the tube feeding equipment or formula, the bacteria on your hands can cause food-borne illness. People with food-borne illness often experience stomach upset, nausea, vomiting, diarrhea, and/or infection. If your child experiences any of these symptoms, it is important to contact your healthcare professional.



### Formula Storage and Use

- Unopened formula should be stored in a cool, dry place.

- Prior to opening, take a damp paper towel and wipe off the top of the formula carton. This will prevent any dust or debris from getting into the formula.
  - Once a container of liquid formula has been opened, it needs to be refrigerated. Discard any refrigerated formula that has not been used within 24 hours.
  - Once powder formula is mixed, store in refrigerator and use or discard within 24 hours. Once a container of powder formula has been opened, store at room temperature and use content within 1 month.
  - Do not mix new formula with old formula that has been hanging.
  - If sterile water is required, boil the water and let it cool to room temperature. You can also purchase sterile water from your local pharmacy.
  - Be aware that like any food, tube feeding formula may become contaminated with bacteria if left at room temperature for too long. To reduce the risk of foodborne illness, fill the feeding bag with only enough formula for 12 hours. If using breast milk or powdered formula that is mixed with water, fill the feeding bag with just enough formula for 4 hours.
  - When the max hang time has expired (4 or 12 hours, depending on your formula), rinse the feeding bag with water before adding more formula.
- Never add fresh or new formula to a bag of existing formula.**

## Positioning Your Child

Never tube feed while your child is lying flat. Proper positioning of your child during tube feeding can help with the following:

- Reduces the risk of breathing formula into the lungs (aspiration)
- Promotes digestion
- Prevents reflux
- Aids in sucking and swallowing

## Feeding Position Tips

- Make sure your child is comfortable and content.
- Infants should be held as if you are feeding them with a bottle. Maintain eye contact and offer the pacifier to help your child learn feeding skills and connect the sucking with the feeling of food in the stomach. If holding your baby is not possible, place your baby on his or her right side during the feeding.

- Older infants or toddlers who can sit up by themselves can be placed in a highchair for the feeding.
- For night feedings or feedings in bed, keep the head of your child's bed raised 6 to 8 inches. You can place a pillow under the mattress or buy a wedge pillow. Place your child on his or her right side during the feeding.
- If you put your child to bed after a feeding, keep the head of your child's bed raised 6 to 8 inches for 30 to 60 minutes after the feeding.

If your child has poor motor control, check with your healthcare team about safe positioning for your child during feeding.

## How to Administer Your Child's Feedings

The information provided in this booklet should not replace any medical advice from your child's healthcare professional or the manufacturer's product information, directions for use, and instructions. If you have questions about your child's specific therapy, contact your child's physician.

## Syringe or Bolus Feeding

When you are new to bolus feeding, it is good to start with a half carton of formula to let your child's body adjust. If your child doesn't experience any problems, increase to three-fourths of a carton, and then increase to a full carton.

Most people find that it is easier to digest the formula when sitting upright during feeding sessions, and then remain sitting upright for at least 30 minutes after.

1. Wash your hands thoroughly with soap and water. Clean the top of the formula carton with a damp paper towel. Shake the carton and then open it.
2. Flush the tube with the prescribed amount of water. If none prescribed, flush with 5 to 10 mL of water.
3. Pull the plunger out of the syringe.
4. Connect the syringe to your child's feeding tube.
5. Position the syringe upright so formula will not spill out as the syringe acts as a funnel.

6. Slowly pour a small amount of formula into the syringe. The formula will then go through the tube into the stomach. Let the formula run through the tube by gravity.
7. You can also put the plunger back into the syringe, and then slowly push down to force formula into the feeding tube.
8. Repeat until the prescribed amount of formula has been given.
9. Flush the tube with the prescribed amount of water. If none prescribed, flush with 5 to 10 mL of water.

## Gravity Feeding

With gravity feeding, the formula is placed in a feeding bag hung from an IV pole. A roller clamp can be adjusted to allow formula to flow faster or slower. Gravity feedings generally take 20 to 30 minutes per 8 ounce carton.

1. Wash your hands thoroughly with soap and water. Clean the top of the formula carton with a damp paper towel. Shake the carton and then open it.
2. Flush the tube with the prescribed amount of water. If none prescribed, flush with 5 to 10 mL of water.
3. Close the roller clamp on the feeding bag (roll down).
4. Fill the gravity feeding bag with the prescribed amount of formula. Next, close top of feeding bag.
5. Hang the feeding bag on the IV pole at least 18 inches above the level of your child's stomach.
6. Remove the cover from the end of the tubing attached to the feeding bag.
7. Hold the tubing tip over a container or a clean sink.
8. Open the clamp (roll up) to let formula flow to the end of the tubing. Then close the clamp.
9. Connect the gravity bag end to the feeding tube.
10. Open the clamp and adjust the flow of formula up or down.
11. After the feeding is complete, you should rinse out the feeding bag and tubing with warm water between feedings. It is also recommended that you use a new gravity feeding bag each day to avoid bacteria contamination.
12. Flush the tube with the prescribed amount of water. If none prescribed, flush with 5 to 10 mL of water.

## Pump Feeding

For formula to be infused over a longer period of time, an electronic feeding pump can be used, which is programmed to deliver a prescribed volume of formula per hour. Feeding pumps will come with instructions on how to operate them, and you will also be shown how to operate it by Apria. **Please read the additional resources provided.**

1. Wash your hands thoroughly with soap and water. Clean the top of the formula carton with a damp paper towel. Shake the carton and then open it.
2. Flush the tube with the prescribed amount of water. If none prescribed, flush with 5 to 10 mL of water.
3. To reduce the risk of food-borne illness, fill the feeding bag with just enough carton liquid formula for up to 12 hours of infusion. If you are using breast milk or powdered formula, fill the feeding bag with enough carton liquid formula for up to 4 hours of infusion.
4. Turn on the pump.
5. Insert the tubing that is attached to the feeding bag into the feeding pump.
6. Remove the cover from the end of the tubing attached to the feeding bag.
7. Follow the directions to "prime the pump," or in other words, get the formula to flow to the tip of the tubing.
8. If needed, program the pump with the prescribed dose or VTBD (volume to be delivered).
9. Set the prescribed infusion rate on the pump.
10. Connect the feeding bag adaptor to the tube.
11. Begin infusing the formula.
12. When feeding is complete, turn the pump off.
13. If needed, rinse out the feeding bag with lukewarm water between feedings. Throw away the feeding bag after 24 hours of use.
14. Flush the tube with the prescribed amount of water. If none prescribed, flush with 5 to 10 mL of water.



## Pump Resources

### EnteraLite Infinity Enteral Feeding Pump

The manufacturer's website training videos will walk you through proper operation, pump functions, and pump features.

<http://Infinityfeedingpump.com/learning-center/>

If your delivery included an EnteraLite Infinity feeding pump, see these additional resources provided to you:

- Infinity Feeding Pump Operator's Manual
- Infinity Quick Reference Card
- And you can find more resources listed on our website [www.Apria.com/services/enteral](http://www.Apria.com/services/enteral).

### Kangaroo Joey Enteral Feeding Pump

The manufacturer's website education module will walk you through proper operation, pump functions, and pump features. See their website [www.cardinalhealth.com/prtraining/kangaroopumptraining/covidien.html](http://www.cardinalhealth.com/prtraining/kangaroopumptraining/covidien.html)

If your delivery included a Kangaroo Joey feeding pump, see these additional resources provided to you:

- Loading and Rinsing Feeding Pump Flyer
- EZ Mode Instructions with Troubleshooting Guide Quick Reference Card

Additional enteral patient resources as well as manufacturer user manuals and educational resources are available on the Apria website at <https://www.Apria.com/services/enteral>.

## Venting the Tube

Children sometimes have difficulty with burping after tube placement. Decompression (also known as venting) provides relief by letting excess air and/or fluids out of the stomach. Venting can be done when your child shows signs of needing gas release:

- Discomfort
- A hard or swollen stomach
- Continuous crying
- Vomiting

To prevent gas from being pushed into your child's stomach, before you start the feed, run the formula to the end of the feeding set before you attach it to the feeding tube.

## How to Vent

- **G-tube:** Attach a syringe with the plunger removed to the feeding tube and hold above the child's stomach for a few minutes to let air escape.
- **Button:** If your child has a button, easily vent by attaching an extension set and unclamping the tube, if a clamp is present. Also, a special decompression tube set with a one-way valve is available that allows excess gas or stomach contents to flow out of the stomach.
- While venting, you should hear gas bubble up through the tube or see stomach contents come up into the syringe or tube. **Note: Return any liquids them back into the stomach, because it contains important body fluids.**
- Remove the venting tube or adapter set as soon as the gas is released to avoid ruining the one-way valve.
- Clean the equipment and adapter sets.

## Checking Residuals

"Residuals" are the amount of formula left in your child's stomach from the last feeding before you start the new feeding.

You may be told to check residuals if your child:

- Has problems with an upset stomach
- Feels full
- Has problems with bloating, nausea, and/or vomiting

Sometimes the stomach is not emptying the formula properly. If more than half of the volume of the last feeding remains in the stomach, delay the next feeding for 30 to 60 minutes before starting the next feeding.

## How to Check Residuals

1. Attach a 60 mL syringe to the feeding tube or adapter set.
2. Unclamp the tube, if clamped.
3. Gently pull up the plunger. Note the amount of formula and slowly replace back into the stomach.
4. Clamp the tube.
5. Remove the syringe.

# Daily Care and Maintenance

## How to Care for Your Child's Nasogastric Tube

Nasogastric (NG) tubes all have a similar design. At one end of the tube is an opening where a feeding bag or syringe can be attached, and the other end of the tube goes into the stomach. To help placement of the tube, some tubes are weighted. Other tubes are equipped with a thin hospital-grade metal wire, also known as a stylet.

**Prior to leaving the hospital, a qualified member of the healthcare team will teach you correct technique for placing your child's NG tube.** They will also teach you how to confirm that the tube is in the stomach. You will be provided detailed instructions, and your healthcare team will go over everything as many times as you need until you feel comfortable. Your child will not be sent home with a feeding tube until he or she can be safely cared for at home with the feeding tube.

It is of great importance that you follow the instructions provided by your healthcare team. The information below is provided to supplement the instruction you have received from your healthcare team.

### When to Call Your Healthcare Team

- If your child has difficulty breathing or speaking, has a distended stomach, or experiences pain.
- If you cannot unclog an NG tube.
- If you cannot tell if the NG tube is in the stomach or if you feel you cannot get it back into place safely.
- If, in the nostril where the tube is placed, there is swelling, redness, or bleeding.

### NG Tube Care Tips

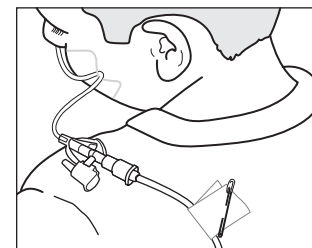
Following these tips will help ensure your child will be safe and comfortable with the NG tube.

- Before touching the NG tube, always wash your hands. Wash your hands vigorously with soap and warm water for at least 20 seconds. Dry your hands well with a paper towel. Turn off the faucet using the same paper towel, so you don't pick up germs from the faucet knob.
- Remove the tape that holds the tube in place when it becomes dirty. Try to alternate the location of the tape on the child's face so it does not irritate the skin.

- When the tube is in place, clean around the edges of the nose with a soft, clean cloth.
- Changing the placement of the NG tube from one nostril to the other every week or two will help reduce irritation.
- After removing the tube, clean it with warm, soapy water and rinse with water between uses. Most NG tubes are reusable for up to a month.

### Securing the NG tube

- Different tape or dressing products are available for use in securing an NG tube to help keep the tube securely in place. Please ask your child's physician for assistance in finding a device that will work for your child.
- If the tube is extremely long, using paper tape and a safety pin can help secure the NG tube to the back of your child's clothing.



## How to Care for Your Child's G-Tube or J-Tube

If your child has a G-tube or J-tube, you'll need to care for the skin area surrounding it. Care for a G-tube and J-tube are similar.

Proper care of your child's feeding tube site is very important — especially during the first 72 hours after the tube was placed, because it is at higher risk of infection. It is normal to see some minor drainage around the tube site.

Always remember to wash your hands. Good care starts with thorough hand washing.

### Daily cleaning

- 1. Prep:** Wash your hands vigorously with soap and warm water for at least 20 seconds. Dry your hands well with a paper towel. Turn off the faucet using the same paper towel, so you don't pick up germs from the faucet knob.
- 2. Remove dressings:** Carefully remove the old gauze and tape from around the tube.
- 3. Sutures:** Gently clean around any sutures, the skin around the tube, daily.
- 4. Tube and bolster:** Daily, gently clean around any sutures, the skin around the tube, and under the bolster with warm, soapy water. Dip a cotton swab in the soapy water, and gently clean under the

bolster by gently lifting the bolster up just enough to place a cotton swab underneath it. Be careful not to pull on the feeding tube. Gently push the bolster back into place against the skin, making sure there is enough space between the skin and bolster for air flow. Having the bolster too tight against the skin may cause skin irritation.



If your child has a G-tube or PEG, turn the tube and external bolster  $\frac{1}{4}$  turn each day when cleaning the site. However, please note you cannot do this if the tube is sutured in place.

- 5. Feeding port:** Open the feeding port cover, dip a damp cotton swab in the opening, and swirl it around a few times to clean the inside of the port to remove any dried formula or medication. For ENFit feeding ports, a clean/unused toothbrush or specifically-designed ENFit brush may be used to remove any dried formula or medication. Learn more about ENFit cleaning procedures at [stayconnected.org](http://stayconnected.org).
- 6. Crusting:** A small amount of clear or tan drainage is normal. If the tube or tube site develops any crusting around it, gently clean the area with a cotton swab and half-strength hydrogen peroxide diluted with water.
- 7. Watch for symptoms:** Check the tube site daily and contact your child's physician or nurse if you see any of these symptoms: swelling, redness, soreness, or unusual drainage.
- 8. Dry:** Dry skin with a clean soft cloth.
- 9. No ointment:** Do not apply ointment to the tube site unless you were told to by your child's healthcare team.
- 10. Bathing and showering:** It's generally okay for children to bathe or shower 2 weeks after surgery.

## Giving Medication Through Your Child's Feeding Tube

Medication can be taken through your child's feeding tube. If possible, it is best to get the medications in liquid form. But if the medication is only available as tablets or capsules, they will need to be crushed and mixed with water before you can give them through the feeding tube. **Always check with your**

**pharmacist, as there are certain medications that should not be crushed.**

## General Information

1. Always use a clean syringe.
2. Do not mix medications together before putting them through your child's tube. Give each medication separately.
3. Do not add medication directly to your child's tube feeding formula, because it can lump up and block the tube.
4. Before giving a medication, stop the tube feeding and flush the tube with at least 5 mL of water. Confirm amount with your healthcare team.
5. After the medication has been given, flush the tube with at least 5 mL of water. Confirm amount with your healthcare team.
6. Repeat the above steps for each medication.
7. After about 30 minutes, restart the tube feeding after all medications have been administered.
8. Check with your child's physician or pharmacist to find out if the tube feeding needs to be held for a longer period of time after taking medication, or if the medications should be given on a full or empty stomach.

## Liquid Medication

With feeding tubes, liquid medications are easier to deliver.

1. Administer thinner liquids first and thicker liquids last.
2. If your child has an NG tube, check that the placement is correct before giving medication.
3. Flush the tube with 5 mL of lukewarm water (or the amount prescribed).
4. Pull the syringe plunger to draw up the exact amount of medication into the syringe.
5. Attach the syringe to the feeding tube or extension set. Slowly push the plunger to administer the medication.
6. Flush the tube with 5 mL of lukewarm water (or the amount prescribed) after giving the medication.

## Tablet Medication

To help make crushing medications easier, look for med-crushing syringes, mortar and pestle, or a pill crusher tool from your pharmacy.

1. After you have crushed the pills finely, let the pieces dissolve in 5 mL of lukewarm water (never hot water).
2. If your child has an NG tube, check that the placement is correct before giving medication.
3. Flush the tube with the prescribed amount of water. If none prescribed, flush with 5 to 10 mL of water.
4. Draw the medication into the syringe, attach the syringe to the end of the feeding tube, and administer the medication.
5. After giving the medication, flush the tube with the prescribed amount of water. If none prescribed, flush with 5 to 10 mL of water.

### Capsule Medication

For medication that comes in capsules, consult with your child's physician or pharmacist before administering it.

**Be sure to flush the tube with water after giving the medication.** This is very important — medication can easily clog a feeding tube if care is not taken to flush properly and consistently.

## Monitoring Your Child's Response to Therapy

### Daily Diary

See page 15 to record information regarding your child's tolerance of home tube feeding therapy.

### Home Tube Feeding Problem-Solving

Most children do very well on tube feedings, but sometimes there can be issues that arise. Below are some tips for avoiding some of the more common tube feeding problems and some simple solutions. Please note, however, that these are just general guidelines, and you should always contact your child's physician or healthcare team for specific instructions.

#### ■ If the Feeding Tube Comes Out

It sometimes happens that children pull out their feeding tubes. Or sometimes they get pulled out accidentally in other ways. If this happens, it's okay and there is no need to panic, but you do need to act fast.

G-tubes will need to be replaced without delay, since the stoma (or stomach opening) closes within just a few hours. Do not try to replace it yourself, unless you have

been taught by a healthcare professional. If you have received medical instruction, replace the feeding tube with the back-up tube you have and precisely follow the instructions provided to you by your child's physician or healthcare team. Then cover the site with clean gauze or cloth, as the site may bleed or stomach contents may leak. Call your child's physician or healthcare provider immediately, even if it is after business hours. If you live far from your child's physician, you may need to go to your local emergency room. Be sure to take the feeding tube with you so the team knows the kind and tube size your child has.

#### ■ Constipation

This is one of the most common tube feeding complications. Make sure to tell your child's physician about your child's constipation. Don't be shy — it needs to be known to help resolve the issue.

#### Causes

- Lack of physical activity.
- Too little water is being given with the feedings.
- Medication, especially for pain.
- Lack of fiber in the tube feeding formula.
- Formula intolerance.

#### Prevention

- If permitted, increase your child's activity.
- There is a need for water each day in addition to the formula. Make sure to give your child's prescribed amount daily. If you are not sure how much water is needed, contact your child's physician for help.
- Talk to your child's physician about the amount of fiber in your child's tube feeding formula.
- Talk to your child's physician about changing formulas.
- Adjust or change medications (check with physician or pharmacist).

#### ■ Abdominal Distention

#### Causes

- Constipation.
- Gas.
- Large feeding volume.

#### Prevention

- Run the formula to the end of the feeding set before you start the feed, then attach it to the feeding tube.
- Vent the tube to relieve gas.

## ■ Aspiration/Reflux

### Causes

- Incorrect positioning while feeding.
- Feeding too quickly.
- Medications.

### Prevention

- Ensure proper posture/positioning.
- Ensure proper feeding tube placement.
- Check residuals.

## ■ Clogged Feeding Tubes

Feeding tubes can become clogged, which causes a delay in feeding and may result in a visit to your child's physician.

- If your child's tube becomes clogged, attempt to loosen the clog by gently flushing 10 to 20 mL of warm water into the tube with your syringe. Pull back and forth on the syringe plunger to help dislodge the clog.
- If the clog remains, call your child's physician, or go to the nearest emergency room for assistance.

### Causes

- The most common cause is inconsistent/inadequate flushing of the feeding tube.
- A bent or kinked feeding tube.
- Thick formulas.
- Medications.

### Prevention

- Prevent clogged tubes by flushing your child's tube before and after each feeding, and before and after administering medication.
- Be sure the tube is not kinked.
- Follow directions in this booklet for administering medications through feeding tubes.

## ■ Diarrhea

Diarrhea refers to frequent loose stools. After starting your child's tube feedings, your child's stools may become softer or looser. This may not necessarily be diarrhea.

### Causes

- Medications.
- The feeding rate is too fast.
- The tube feeding formula is too cold, which can cause cramping.
- The formula is contaminated by bacteria.
- Malabsorption in your child's intestines.
- Formula is too concentrated.

### Prevention

- Infuse formula that is at room temperature.

- Do not exceed the recommended time formula is at room temperature.
- Adjust feeding schedule and formula. Talk to your child's physician about this first.
- Adjust or change medications (check with physician or pharmacist).
- If using a gravity bag, slow down the infusion rate by adjusting the roller clamp.
- If using a syringe feeding, reduce the amount of formula given at one time, or give the amount of formula more slowly.

## ■ Dehydration

### Causes

- Too little water.
- Formula is too concentrated.
- Frequent diarrhea.
- Prolonged fever.
- A wound that is draining a large amount of fluid.

### Prevention

- Give your child the prescribed amount of water each day. If you are not sure how much water is needed, contact your child's physician for help.
- Consult your child's physician and take additional water if your child has prolonged diarrhea, fever, or a draining wound.

## ■ Stomach Upset/Nausea/Vomiting

It is possible to experience symptoms of nausea, vomiting, bloating, belching, and/or general stomach upset when tube feeding.

### Causes

- The feeding rate is too high (feeding too fast).
- The formula is too concentrated.
- The tube feeding formula is too cold, which can cause cramping.
- Medications.
- Incorrect positioning.
- Tube dislodged.

### Prevention

- If your child's feeding rate is too high, try reducing the rate to the last comfortably tolerated rate.
- For syringe feeding, if your child feels bloated at the time of feeding, wait an hour before giving your next feeding.
- If gravity feeding, use the roller clamp on the feeding bag to slow down the feeding rate.

- Try having your child rest an hour or so after the feedings, and avoid exercise after the feeding session.
- Try having your child sit upright in a chair or on the couch when feeding; do not lie flat. Always make sure your child's head is raised 30 degrees, even if in bed.
- Adjust or change medications (check with physician or pharmacist).

- Examine to see if bumper or external disc is too tight.
- Apply skin barrier cream or ointment, but only if directed by your child's physician.

## ■ **Infection**

### **Causes**

- Not using a new gravity feeding bag each day.
- The feeding tube site has not been cleaned.
- Failure to wash hands before mixing the formula or touching the tubing.
- Formula was opened and sitting at room temperature or in feeding bag for greater than 8 hours for carton liquid formula, or greater than 4 hours for powdered formula.
- Formula was opened and in the refrigerator for more than 24 hours.

### **Prevention**

- Use a new gravity feeding bag each day.
- Wash your hands with soap and water before preparing formula or coming into contact with the tubing.
- Clean your child's tube site daily as directed by your child's physician.
- Make sure any unused open formula is discarded after 24 hours in the refrigerator.
- Do not allow the tube feeding formula to be at room temperature for more than the recommended time.
- If using a gravity feeding bag, infuse all of the formula in the feeding bag before adding more formula; rinse the bag with lukewarm water once all formula is infused; then add the fresh formula.

## ■ **Skin Irritation or Bleeding Around the Tube**

### **Causes**

- Infrequent/inadequate cleaning.
- Irritation from tape or type of soap used for cleaning.
- Leakage of stomach liquids.
- Unhealed tissue where the tube enters the body.
- Infection.
- Pressure.

### **Prevention**

- Clean around the tube and dry every day.
- Change type of soap used.

## **When to Call Your Child's Physician**

### **Call your healthcare team when your child has:**

- Nausea, vomiting, or heartburn.
- Pain or unusual abdominal distention.
- Diarrhea.
- Constipation.
- Coughing or choking during tube feeding.
- Trouble breathing.
- Unintended weight loss.
- Decreased urine, mouth dryness, fever (100.4° F or higher), which could be signs of dehydration.
- Swelling, unusual drainage, soreness, or redness from the feeding tube site.
- Signs that the feeding tube is not in the right place.
- Frequent tube blockage. Also, call the physician if you cannot clear a clogged feeding tube.

### **In a medical emergency, call 911.**

The information provided in this booklet should not replace any medical advice from your healthcare professional or the manufacturer's product information, directions for use, and instructions.

## **Mouth Care**

Even though your child is eating less or in some cases not consuming any foods by mouth, it is critical to maintain good mouth and dental care. Mouth bacteria are still present and will cause dental caries and tooth loss. Also, even if your child is very young and has his or her baby teeth, losing teeth prematurely can cause the permanent teeth to come in crooked. Proper care will help prevent damage to the teeth and gums and also establishes healthy brushing and oral hygiene habits for the future.

### **Follow these steps for a healthy mouth and teeth:**

- Brush teeth 2 times a day with a soft toothbrush.
- Generally, the best position for brushing your child's teeth is from behind while facing a mirror.
- Wipe the inside of the mouth with a damp washcloth, if your child does not have teeth yet.
- If your child's lips get dry, try using lip balm.

Ask your dentist or dental hygienist what toothpaste or product he or she recommends.



## Tube Feeding at School

### Information for School

If your child requires feeding during the day while at school, the school will need some basic information about your child's feeding tube and feeding schedule. The school will need instruction forms that will need to be signed by either your primary care physician or your surgeon. Contact your school district to discuss if your child's feeding tube information is required to be documented as an IEP (Individualized Education Plan) or a 504 Plan, and how to develop the plan together. Learn more about these plans online at [feedingtubeawareness.org](http://feedingtubeawareness.org).



## Tube Feeding Traveling and Emergency Kits

Preparing kits in the event of an emergency or for traveling is highly recommended. Use the information below as a guide.

- Plan on enough for 2 to 3 days' worth of supplies for emergencies.
- If traveling, ensure enough supplies to last the length of your trip, including the time to get to and from your destination.

When traveling to another country, please contact TSA and if necessary, a U.S. embassy in regards to customs and any special procedures and/or forms required for your child's tube feeding and medical health supplies (especially if your child requires a product that is not available in the country you are traveling to). Learn more online at [TSA.gov](http://TSA.gov).

The list that follows includes general guidelines and recommendations to help you get started. However, it is not all-inclusive, so talk to your healthcare team about anything else you may need.

## Supplies for Your Traveling and/or Emergency Kit

- Formula.
- Water for tube flushing and overall hydration, medication, stoma care.
- Syringes for flushing/medication.
- Feeding supplies (tubing set, etc.).
- Container with cap for mixing and storing extra formula.
- Stoma care supplies you normally use.
- Hand sanitizer. (NOTE: do not use on stoma site or near nose of your child.)
- Backup tubes and accessory devices.
- Any other supplies you normally use.
- Remember to bring a letter from your child's physician if you are carrying greater than 3 ounces of formula or have medical equipment, such as a feeding pump.

### For pump feeding:

- Keep your pump running on its charger whenever you are home, so it will be more likely to be partially or fully charged during a power outage.
- To prepare in case of emergency, ensure you will have electric power or backup power available. If you will not have power, contact Apria's enteral nutrition support team and your healthcare provider to discuss an alternative method of feeding.

## Additional Resources for Preparedness

Here are some resources about emergency preparedness and what to include in a tube feeding emergency kit:

### The Oley Foundation

[www.oley.org/page/emergencyprepared](http://www.oley.org/page/emergencyprepared)

### Feeding Tube Awareness Foundation

[www.feedingtubeawareness.org/troubleshooting/emergencies/preparedness/](http://www.feedingtubeawareness.org/troubleshooting/emergencies/preparedness/)

### CDC Personal Health Preparedness

[www.emergency.cdc.gov/preparedness/index.asp](http://www.emergency.cdc.gov/preparedness/index.asp)

### Department of Homeland Security

[www.ready.gov](http://www.ready.gov)

## Patient Information

This section can be used to record information that may be helpful for future reference by you and your healthcare team.

Patient's Name \_\_\_\_\_ Date of Birth \_\_\_\_\_

## Important Contacts and Phone Numbers

Physician \_\_\_\_\_ Phone \_\_\_\_\_

Emergency Contact \_\_\_\_\_ Phone \_\_\_\_\_

Home Health Agency \_\_\_\_\_ Phone \_\_\_\_\_

Supplies/Equipment Company Apria Phone Continental U.S. (844) 260-1788

Phone Hawaii (800) 454-5672

## Home Tube Feeding Orders

The prescription provided by your child's physician may be recorded in the section below.

Formula name \_\_\_\_\_

Amount of formula per day (number of cartons or mL volume): \_\_\_\_\_

Formula provides per day: Calories \_\_\_\_\_ Protein \_\_\_\_\_ Fiber \_\_\_\_\_ Water \_\_\_\_\_

Feeding Method:  Syringe Bolus Feeding  Gravity Feeding  Pump Feeding

Feeding Schedule:

If Syringe Bolus or Gravity Feeding:

Volume \_\_\_\_\_ per feeding (total mL or # cartons), \_\_\_\_\_ times per day, at the following times:

\_\_\_\_\_

If Pump Feeding:

Pump rate \_\_\_\_\_ mL/hr for \_\_\_\_\_ hours per day Water Flushes \_\_\_\_\_

Start time and end time (if applicable) \_\_\_\_\_

Advancement Schedule \_\_\_\_\_

Water Flush Schedule:

Flush feeding tube with \_\_\_\_\_ mL water every \_\_\_\_\_ hours, at the following times:

\_\_\_\_\_

Water flush before feedings \_\_\_\_\_ mL Water flush before medications \_\_\_\_\_ mL

Water flush after feedings \_\_\_\_\_ mL Water flush after medications \_\_\_\_\_ mL

Special Instructions \_\_\_\_\_

## Supply Information

Feeding Method Container:

Type \_\_\_\_\_ Manufacturer \_\_\_\_\_ Changed every \_\_\_\_\_ (hours or days)

Feeding Tube:

Type \_\_\_\_\_ Manufacturer \_\_\_\_\_ French Size (Fr) \_\_\_\_\_

Length (cm) \_\_\_\_\_ (if button/low-profile G-tube or NG-tube) Balloon volume (mL) \_\_\_\_\_ (if a balloon G-tube)

Feeding Tube Extension Set (if button/low-profile feeding tube):

Type \_\_\_\_\_ Manufacturer \_\_\_\_\_ Changed every \_\_\_\_\_ (days)



## Daily Diary

You can use the Daily Diary for monitoring your child's weight, formula and water intake, tube site condition and other information regarding your child's tolerance to home tube feeding therapy.

### Daily Diary

Month \_\_\_\_\_

Formula Name \_\_\_\_\_

#### Metric Conversion Table (Liquids)

STANDARD: 1 tablespoon 1 fluid ounce 1 cup 1 quart  
 METRIC: 15 mL 30 mL 240 mL 960 mL  
 (1 cc = 1 mL)

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
Date							
Weight							
Amount of Formula Taken							
Water Taken							
Other Food or Fluid							
Stool Frequency							
Stool Consistency							
Condition of Tube Site (Clean, Leaking, Red, Sore)							
Temperature							
Residual Check							
Physical Activity							

### Daily Diary

Month \_\_\_\_\_

Formula Name \_\_\_\_\_

#### Metric Conversion Table (Liquids)

STANDARD: 1 tablespoon 1 fluid ounce 1 cup 1 quart  
 METRIC: 15 mL 30 mL 240 mL 960 mL  
 (1 cc = 1 mL)

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
Date							
Weight							
Amount of Formula Taken							
Water Taken							
Other Food or Fluid							
Stool Frequency							
Stool Consistency							
Condition of Tube Site (Clean, Leaking, Red, Sore)							
Temperature							
Residual Check							
Physical Activity							



If you have questions about your child's enteral nutrition therapy,  
please contact one of Apria's Enteral Nutrition Specialists

**Continental U.S. (844) 260-1788**  
**Hawaii (800) 454-5672**

Visit us at **Apria.com**

To find enteral nutrition therapy  
patient educational materials and product manuals, go to:

**<https://www.Apria.com/services/enteral>**