Your Nutrition Partner™

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Columbus, OH 43219-3034 USA

Abbott Nutrition

Tube Feeding at Home

Abbott
A Promise for Life

Feeding Plan

Name _____

In case of an emergency, dial 911 or call _____

If you have a question or problem, call your health care professional.

Doctor _____ Phone _____

Doctor _____ Phone _____

Nurse _____ Phone _____

Supply Source _____ Phone _____

Tube Type

_____ G (gastrostomy) or PEG

_____ J (jejunostomy) or PEJ

_____ NG (nasogastric)

_____ NJ (nasojejunal)

Tube Information

French Size _____

Length _____

Balloon Volume (if a balloon G-tube) _____

Record Number _____

Feeding Method

_____ Gravity Drip _____ Pump _____ Syringe (bolus)

Feeding Schedule

Formula Name _____

Amount of Formula/Day _____

Feeding Schedule _____

Amount of Each Feeding _____

Additional Water _____

Hourly Feeding Rate _____ mL/hour or Gravity Drip Rate _____ Drops/Minute

Flush Amount *Use a 30-mL or larger syringe*

Before a Feeding _____ mL _____

After a Feeding _____ mL

During Continuous Feeding _____ mL

Every _____ Hours

Before Medications _____ mL

After Medications _____ mL

Between Medications _____ mL

Introduction

Receiving nutrition through a **feeding tube** will take some time to get used to, but it's important to remember that you can still enjoy many of the things you've always enjoyed. With time and patience, your tube-feeding regimen will become as ordinary to your day as reading the paper or collecting the mail. This book will help teach you the basics of tube feeding as you transition into your new lifestyle change.

Models are for illustrative purposes only.

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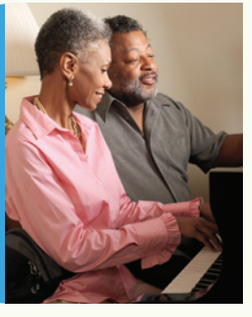


Adjusting to Tube Feeding

It will take time for you to get used to tube feeding at home, but be patient. With the help of your health care professionals, this booklet, and some practice, you will soon learn to set up feedings and care for your feeding tube.

Eating is a social experience. You can take tube feedings almost anywhere you want. Some people like to take their tube feeding at the table with the family, while others like to take them alone. Try different ways, and talk to your family and friends to decide what works best for you.

For feedings away from home, ask your supplier about the various feeding equipments available.

To help you adjust to tube feeding, contact an organization that offers educational materials and the chance to meet others who tube feed at home. The Oley Foundation is a nonprofit organization for those who depend on home enteral (tube-fed) or parenteral (intravenous) nutrition. All services are offered free of charge for patients and their families.

➤ Call **1-800-776 OLEY**, or visit **www.oley.org** for more information.

What is Tube Feeding?

For some people, eating, drinking, and swallowing become impossible. Because they cannot eat enough – or at all – they get nutrition through a feeding tube. During tube feeding, formula goes directly into the stomach or the small intestine through a feeding tube.

Tube feeding through the stomach is accomplished by using a **gastrostomy (G) tube** or a **nasogastric (NG) tube**. G-tubes go directly into the stomach through a hole in the **abdominal wall** called a **stoma**. A type of G-tube placed nonsurgically is known as a **PEG** tube. On the other hand, NG-tubes go into the nose and down to the stomach. G-tubes and NG-tubes come in different lengths.

Tube feeding can also be done through the **jejunum** (a section of the small intestine), using a **jejunostomy (J) tube**, or a **nasojejunal (NJ) tube**. J-tubes go directly into the jejunum through a stoma or through a gastrostomy tube and into the jejunum. They are sometimes called **PEJ** tubes. NJ-tubes go into the nose and down to the jejunum. The feeding tube stays in the stomach or the jejunum all the time.

➤ Important words you should know are shown in **bold** the first time they appear in this booklet. Look in the Glossary on pages 26-27 to find out what these words mean.

Formulas for Tube Feeding

As you know, a well-balanced diet is needed to maintain your health. With tube feeding, you can get the nutrition you need when you can't eat or are unable to eat enough.

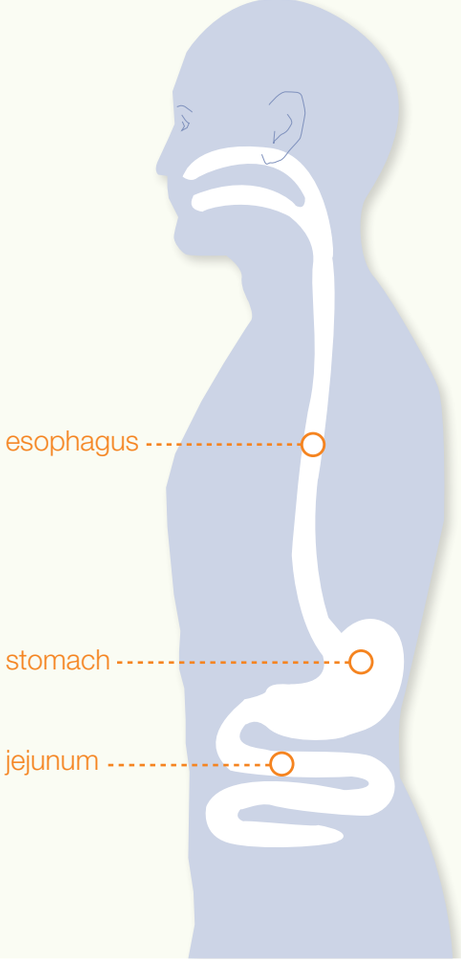
The special medical nutritional product that is given through the tube is called a **formula**. It contains all of the **nutrients** you need—just like a well-balanced diet. A wide variety of formulas are available. Some are specially designed for particular diet needs, such as diabetes, lung disease, or kidney disease. Your health care professional will select the formula that will best meet your nutritional needs.

Weigh yourself at least once a week to help determine if you are meeting your weight goals. You should also track the medications and extra water you take each day. Write this information down so that you can share it with your health care provider at your next visit. It is important for your health care provider to evaluate you regularly to monitor your tube-feeding program. Follow your health care provider's instructions. Ask him or her any questions you have about tube feeding at home.

What Types of Formula Are Available?

Formulas come in two types:

- Powder, which you mix with water to make a liquid feeding, and
- Ready-to-use, which is the most commonly used formula because it is already a liquid and it comes in cans or pre-filled ready-to-hang containers.



Where to Take Your Feedings

Find a place in your home that is comfortable for you (for example, the living room). Several positions are safe and comfortable for tube feeding:

- sitting up in a chair
- propped up in bed or on a couch in a half-sitting position
- standing or even walking around

Your head should be raised 30° or more.

➤ *If you start to cough or choke during a feeding or have difficulty breathing, stop the feeding at once! Then, call your health care professional.*

How Do I Make Sure the Tube Is in the Right Place?

Before you begin feeding, be sure the **feeding tube** is positioned correctly:

1. Using a ruler, measure the distance from the tube site or stoma (the opening in your skin where the tube is inserted) to the end of the G-tube or J-tube.
2. Keep a record of your tube placement by writing the measurements in a tablet or journal.
3. Compare the figure with previous measurements. If the measurements are different, call your health care provider.

Ask your health care professional how often you should check the tube position.

G-TUBE ONLY:

Your G-tube may have a skin disk to keep it in place. The skin disk should not be tight against the skin – to allow for slight in-and-out movement of the tube. Every day, you should check the disk against the markings on the tube. If it has changed, call your health care provider.

The Process of Tube Feeding

Rick Davis of Fernandina Beach, FL

Rick had a stroke in his brain stem, which made it impossible for him to swallow.

"Although my 'search for a swallow' ended in failure, I accepted the diagnosis and that was when I resolved that I would become one of the world's best tube feeders."

Checking Residual

If you have a G- or NG-tube, your health care professional may tell you to check the **residual** before feedings and show you how to do it.

Checking residual is a way to make sure that the **stomach** is emptying formula. Residual is the formula that remains in the stomach from the last feeding.

If you have an upset stomach or feel full, wait 30-60 minutes before starting a feeding.

Flushing Your Tube

Flushing your feeding tube regularly with water helps to prevent it from clogging. Use a 30 mL or larger **syringe** to flush the feeding tube.

Ask your health care professional how much water to flush into the tube.

Tube Feeding Methods

Your health care provider will determine the delivery method for your tube feeding along with your feeding schedule. This information can be found on your personalized Feeding Plan in the front of this book.

There are three ways to deliver a tube feeding: **syringe feeding**, **gravity feeding**, and **pump feeding**.

Syringe (bolus) feeding

- In syringe (bolus) feeding, formula is placed in a syringe and flows slowly into the feeding tube. The height of the syringe controls the feeding rate.
- In push syringe feeding, the formula can be injected gently into the tube.

Gravity feeding

- In gravity feeding, formula is placed in a container suspended above the patient. Formula flows through the tubing into the patient. A clamp on the feeding set and the height of the bag control the feeding rate.

Pump feeding

- In pump feeding, formula is placed in a feeding container and is pumped through the tubing into the patient. This is the only acceptable method for feeding into the **small intestine** (J- and NJ-tube).

Tube feedings are given on two types of schedules:

- **Continuous feeding**–the formula slowly drips through the feeding tube all day or night (or both).
- **Intermittent feeding**–larger amounts of the formula are given 3 to 8 times a day.

Preparing Your Feedings

Follow these steps to prepare the tube feeding:

1. Wash your hands.
2. Gather all the equipment you need:
   a. The formula
   b. A feeding container (A gravity-drip set or pump and pump set)
   c. An IV pole or wall hook
   d. A 30-mL to 60-mL syringe
   e. A clean cloth
   f. A cup of water.
3. Prepare the formula (refer to your personalized Feeding Plan in the front of this book).
4. Write the date and time on the feeding container.

5. Attach the gravity drip or pump set to the container (if it is not already attached) and close the clamp.
6. Pour the formula into the feeding container.
7. Hang the container on an IV pole or a wall hook.

DO NOT lie flat during your feeding, and wait for 1 hour after your feeding before you lie down (lying down can cause you to vomit or cough). Vomiting or coughing up small amounts of liquid can be dangerous, causing you to inhale fluid into your lungs.

➤ *Always refer to the Feeding Plan recommended by your health care professional.*

Hang Time and Storage

Cover any unused formula and write the date on it. Store it in the refrigerator.

For formula that has been hung for a feeding, follow the guidelines below:

- Hang reconstituted powdered formula up to 4 hours.
- Hang ready-to-use formula 8 to 12 hours.

Throw away any open, unused ready-to-use formula that has been stored in the refrigerator after 48 hours. Throw away any open, unused **reconstituted** powdered formula after 24 hours.

Syringe Feeding

In syringe feeding, formula flows slowly into the feeding tube, or it can be injected gently into the tube. Follow the syringe feeding method recommended by your health care professional. You can also use a syringe to give extra water or fluids.

Before each syringe feeding:

1. Wash your hands.

2. Ask your health care professional how often you should check the tube position.
3. Check the residual if recommended by your health care professional.
4. Flush the feeding tube.

Gravity Syringe Method:

1. Remove the plunger from the barrel of the syringe.
2. Place the syringe tip into the feeding tube.
3. Hold the syringe above your stomach.
4. Pour measured formula into the syringe.
5. Slow the flow by lowering the syringe, or speed the flow by raising the syringe.
6. Allow the formula to flow into the feeding tube until gone (about 10 to 15 minutes).
7. If your health care professional has told you to take extra water after feedings, pour the prescribed amount into the syringe.
8. Allow the water to flow into the feeding tube until gone.

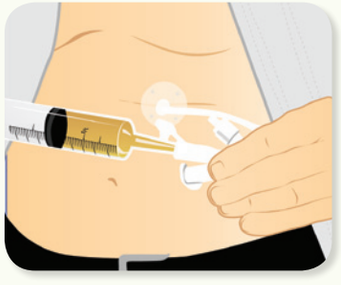
Push Syringe Method:

1. Use the plunger of the syringe to draw the formula from the measuring cup into the syringe.
2. Place the syringe tip into the feeding tube.
3. Inject the formula into the feeding tube slowly and gently until gone (about 10 to 15 minutes).
4. If your health care professional has told you to give extra water after feedings, use the plunger of the syringe to draw the prescribed amount into the syringe.
5. Inject the water into the feeding tube slowly and gently.

After each syringe feeding:

1. Flush the feeding tube.
2. Close the cap on the feeding tube until the next feeding.

Ask your health care professional about care of the container and syringe, and how often the syringe should be replaced.



Gravity Feeding

In gravity feeding, formula flows down the tubing. A clamp on gravity feeding sets helps control the feeding rate.

Before each gravity feeding:

1. Prepare feeding (see page 10).
2. Ask your health care professional how often you should check the tube position.
3. Check the residual if recommended by your health care professional.
4. Flush the feeding tube.

Follow these steps:

1. Hang the feeding container about 2 feet above and to the side of your feeding tube.
2. Remove the cover from the end of the feeding set.
3. Prime the feeding set. Let formula flow until it comes out the end of the tube.
4. Insert the tip of the feeding set into the feeding tube.
5. Slowly open the clamp on the tubing.
6. Set the flow to the gravity drip rate written on your Feeding Plan. Use the clamp to control the flow until you achieve your desired rate. Make the flow faster by slowly opening the clamp. Make the flow slower by partially closing the clamp.
7. When the feeding is complete, close the clamp.
8. If your health care professional has told you to take extra water after feedings, pour the prescribed amount into the container.
9. Open the clamp and let the water drip until gone.
10. Close the clamp and disconnect the feeding set.

After each gravity feeding:

1. Flush the feeding tube.
2. Close the cap on the feeding tube until the next feeding.

For intermittent and continuous feeding, throw away container and feeding set every 24 hours. Ask your health care professional about care of the container and feeding set between feedings.

Pump Feeding

In pump feeding, a pump moves the formula through the feeding tube and into the stomach or small intestine. If you have a feeding tube that goes into the small intestine (NJ or J), you must use a pump to deliver formula at a slow, continuous feeding rate. This is because the small intestine cannot hold as much formula as the stomach.

Before each pump feeding:

1. Prepare feeding (see page 10).
2. Ask your health care professional how often you should check the tube position.
3. Check the residual if recommended by your health care professional.
4. Flush the feeding tube.

Follow these steps:

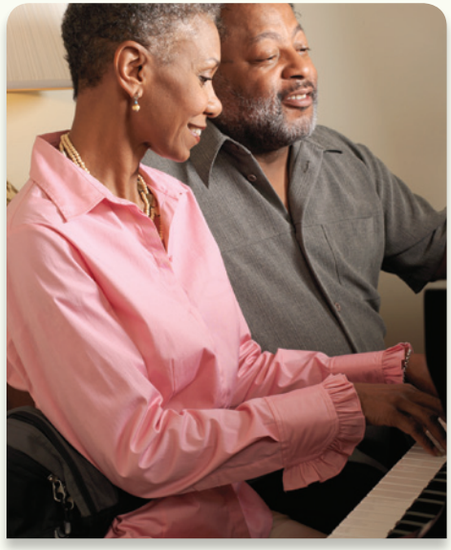
1. Hang the filled feeding container or place it in an ambulatory carrier.
2. Connect the feeding set to the pump.
3. Remove the cap from the end of the feeding set.
4. If your feeding set has a clamp, open it completely.
5. Prime the feeding set.
6. Insert the tip of the feeding set into the feeding tube.
7. Turn on the pump and set the flow rate.
8. Start the pump.
9. After the feeding container is empty or dose has been fed, stop the pump and flush the feeding tube.
10. If your health care professional has told you to take extra water after the feedings, pour the prescribed amount into container. Start the pump.
11. When the water is gone, stop the pump.

For intermittent and continuous feeding, throw away container and feeding set every 24 hours. Ask your health care professional about care of the container and feeding set between feedings.

Medicating Through Your Tube

Most medications can be taken safely through your feeding tube by following some simple rules:

- Use liquid medication whenever possible.
- If a tablet must be crushed, be sure to crush it into a fine powder and mix it well in warm water.
- Clear the feeding tube by flushing it with 20-30 mL of warm water both before and after taking medication.
- If more than one medication is to be taken, take each separately and flush the tube with 5 mL of warm water between medications.



➤ CAUTION:

Be sure to check with your pharmacist or health care professional before administering medication. Find out if:

- the medication comes in liquid form
- the tablet can be crushed
- the medication should be taken on an empty or full stomach

Infection Prevention and Problem Management

Preventing Infection

To help prevent infection, keep the skin around your feeding tube clean and dry and avoid pressure.

G- and J-Tubes, Care of the Stoma:

Follow these steps at least once each day:

1. Wash your hands.
2. Gather the materials you need to clean the tube site:
   - soap
   - cotton-tipped swabs
   - warm water
3. Clean skin with a clean cloth and soap and water. Start at the tube and work outward in circles.
4. Clean under the skin disk or external hub with cotton swab and soap and water.
5. Rinse with warm water and allow to dry completely.
6. If your health care professional told you to use a dressing, they will show you how to apply it. It is important to change it every day or right away if it becomes wet or soiled.
7. **For G-Tubes Only:** The external hub or skin disk should not be tight against your skin. Make sure the tube turns all the way around freely and moves up and down slightly. The tube should have in and out play of about 1/4 inch.
8. **For J-Tubes Only:** Your J-tube skin anchor will be secured with sutures to your skin. The J-tube site should be inspected and cleaned at least daily to make sure that the skin anchor is secure and the area is clean.

Call your health care professional if there are signs of infection or skin problems:

- Redness or rash
- Swelling
- Pain or soreness
- Unusual drainage.

If you have a gastrostomy tube with a balloon bumper, check the balloon every 7 to 10 days to make sure that it has enough water in it. This will help prevent leakage of stomach contents and accidental tube removal.

To check balloon volume:

1. Wash your hands.
2. Place a luer tip syringe in the balloon inflation valve.
3. Hold the tube in place and remove the water from the balloon.
4. Refill balloon with amount of water recommended for your tube (See Feeding Plan).

NG- and NJ-Tubes, Care of the Nose:

Follow these steps at least once each day:

1. Wash your hands.
2. Moisten a cotton swab with warm water and clean the edges of both nostrils.
3. Apply a water-based lubricant, such as K-Y® Jelly, to the nostril around the tube if you wish.

Call your health care professional if the nostril is red or bleeding or if it feels numb.

Change the tape on the tube as directed by your health care professional. Use only tape marked “hypoallergenic” and “easy to remove.”

To change tape:

1. Wash your hands.
2. Hold the tube in place and gently remove the old tape.
3. Wash the skin with soap and warm water.
4. Rinse and dry thoroughly.
5. Cut or tear a long piece of tape halfway down the center.

6. Place the wide part of the tape on the bridge of the nose.
7. Wrap one end of the tape and then the other around the tube until all the tape is used.
8. Place another piece of tape on top of the tape on the nose.
9. Place the tube on the side of the face that the tube enters the nose. Be sure the tube doesn’t rub against the nose or pull on the nostril.
10. Tape the tube to the cheek. Tape it to a different place each time.
11. After taping, put the tube over the ear to keep it out of the way.

Out-of-Place Tube

If your feeding tube comes out, stop the feeding and go to the hospital emergency room to get it replaced right away. It is very important to get G- or J-tubes replaced within 24 hours, before the stoma starts to close. Do not try to replace the tube yourself unless you have been taught how by your health care professional.

If the feeding tube comes out completely:

- Go to your hospital emergency room.
- Take the feeding tube with you.

If the feeding tube is partially out of place:

- Do not use the feeding tube.
- Check how much the tube is out of place; compare its markings to your records.
- Tape your feeding tube to your skin to prevent further movement.
- Call your health care professional and get help as soon as possible.

Unclogging Your Feeding Tube

Attempt to unclog your feeding tube by flushing it with 30 mL of warm water.

If you still cannot clear the clog, call your health care professional.

Oral Hygiene

You might not be able to eat or drink, but good mouth care is still important.

- Brush your teeth, gums, and tongue with a toothbrush and a small amount of toothpaste at least twice a day.
- Rinse with mouthwash or water as needed to freshen the mouth.
- If your mouth or lips are dry, ask your health care professional to recommend a lip balm or moisturizer.
- Call your health care professional if you notice bleeding or mouth problems.

Preventing and Managing Constipation

Tube feeding may result in fewer, harder stools. If you have hard stools that are difficult to pass, you may have **constipation**. Constipation can make you feel full and uncomfortable, and it can cause a loss of appetite.

To help prevent constipation:

- Use the bathroom as soon as you feel the need to go.
- Exercise and be as active as possible.
- Write down the time of your bowel movements.

If you have a problem with constipation, talk to your health care professional to see if you are getting enough fluids, need a formula with fiber, or need a change of medications.

Preventing and Managing Diarrhea

Diarrhea can cause **dehydration**. See page 24 to find out when to call your health care professional. If you have stomach cramps or a feeling of fullness, wait 30 to 60 minutes before starting a feeding.

Diarrhea can be caused by:

- medications
- feeding formula too fast
- nutrients that do not get absorbed well into the intestines
- feeding formula that is not mixed correctly
- feeding too much formula volume
- feeding formula too cold
- spoiled or contaminated formula
- contaminated tube-feeding equipment.

To stop **diarrhea**, your health care professional might suggest:

- changing medications
- feeding formula more slowly
- changing to a formula with fiber or to a different formula
- replacing the formula with water or an **electrolyte** solution for a short time
- reviewing formula preparation
- administering only the prescribed volume of formula
- allowing formula to reach room temperature prior to feeding
- ensuring proper formula storage
- reviewing care of tube-feeding equipment.

Signs and Prevention of Dehydration

Dehydration means that the body needs more water. Diarrhea, vomiting, fever, certain medications, or simply not getting enough water can cause dehydration.

Some signs of dehydration are:

- increased thirst
- dry lips
- dry and warm skin
- rapid weight loss
- weakness
- fever
- small amounts of dark, strong smelling urine.

To prevent dehydration:

- Give extra water after or between feedings as prescribed by your health care professional.
- Ask your health care professional if your medications can cause dehydration.
- Call your health care professional if you have a fever or diarrhea. Ask if you should have more water, or if you should change the feeding schedule or formula. If fever or diarrhea continues, call your health care professional.

When to Call a Health Care Professional

Call your health care professional if you have:

- Feeding tube out of place, either completely or partially
- Choking or difficulty breathing
- Upset stomach that lasts 24 hours
- Vomiting
- Signs of dehydration
- Unusual weakness
- Fever
- Blood in or around the feeding tube
- Creamy, bad-smelling drainage from the stoma
- Formula or stomach contents leaking around the tube site
- Red, sore, or swollen tube site
- Tube clog that you can't flush out with warm water
- Weight loss or gain of more than 2 pounds a week.

The following information will come from your health care provider:

- Diarrhea that lasts ____ days
- Constipation that lasts ____ days
- Residual more than ____ mL
- Anything that makes you stop feeding for more than ____ hours
- Other

Carol Pelissier

Carol Pelissier of Manchester, New Hampshire didn't want to give in to her health issues, so she developed a healthy attitude about her tube-feeding situation.

"The thing I want to project to other people is that you can do the things that you have done before, you just have to do it in moderation. You might not be able to do everything you did before, so you learn to do different things. I taught myself to sew. I never sewed before."

Glossary

Abdominal Wall: the abdominal wall represents the boundaries of the abdominal cavity. The abdominal wall is split into the posterior (back), lateral (sides) and anterior (front) walls.

Constipation: bowel movements that do not happen very often or hard stools that are painful or difficult to pass

Continuous Feeding: tube feeding where the formula drips slowly, all day or all night (or both)

Dehydration: condition in which the body does not have enough water

Diarrhea: frequent loose, watery bowel movements

Electrolyte: a nutrient (such as sodium, potassium, or chloride) that helps regulate cell and organ function

Esophagus: muscular tube leading from the mouth to the stomach

Feeding Tube: a tube into the stomach or small intestine through which formula is given

Formula: a liquid nutritional product that has the same nutrients as regular food

Gastrostomy Tube (G-tube): a feeding tube that goes into the stomach through a stoma

Gravity Feeding: feeding method in which formula drips down through the feeding tube from a container placed above the patient

Intermittent Feeding: feeding method in which formula is given 3 to 8 times a day

Jejunostomy Tube (J-tube): a feeding tube that goes into the small intestine

Jejunum: the second part of the small intestine

Nasogastric (NG) Tube: a feeding tube that goes from the nose to the stomach

Nasojejunal (NJ) Tube: a feeding tube that goes from the nose to the jejunum

Nutrients: parts of food that nourish the body (protein, carbohydrate, fat, vitamins, minerals, and water)

PEG (percutaneous endoscopic gastrotomy): a nonsurgical way to place a feeding tube into the stomach through the abdominal wall

PEJ (percutaneous endoscopic jejunostomy): a nonsurgical way to place a feeding tube into the jejunum through a gastrostomy tube

Pump Feeding: feeding method in which a mechanical pump moves formula through the feeding tube

Reconstitute: to restore to a former condition by adding water

Residual: the formula that remains in the stomach from the last feeding

Small Intestine: the part of the digestive tract between the stomach and large intestine that digests and absorbs nutrients

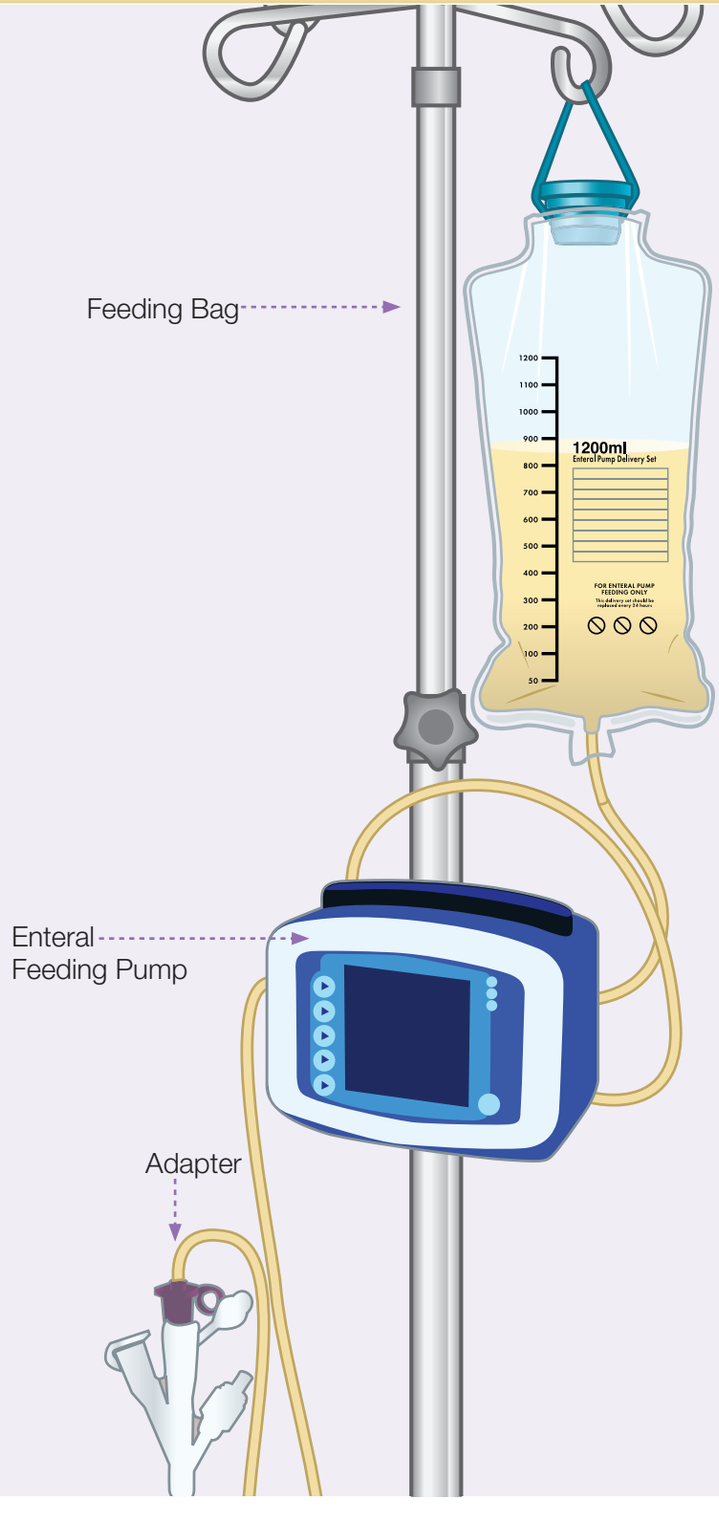
Stoma: opening in the abdominal wall through which a gastrostomy tube or jejunostomy tube enters the body

Stomach: organ between the esophagus and small intestine that holds food during the early part of digestion

Syringe: a hollow, plastic tube with a plunger used to draw fluid out of or inject fluid into a feeding tube

Syringe Feeding: feeding method in which formula flows from a syringe into the feeding tube or is injected into the feeding tube with a syringe

Notes


Feeding Bag
1200ml
Enteral Pump Delivery Set
FOR ENTERAL PUMP FEEDING ONLY
Enteral Feeding Pump
Adapter