

**UNIVERSITY OF MICHIGAN
HOSPITALS AND HEALTH CENTERS
HomeMed**

**HOME ENTERAL NUTRITION
MANUAL**

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Home Care Services

HomeMed ▪ MedEQUIP ▪ Wheelchair Seating Service

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Prepared for: _____

Date: _____

Resource People and Phone Numbers



Please contact the following people for your concerns:

| Question About: | Person To Call: | Phone Number: |
|------------------------|--|---|
| Supplies/Deliveries | HomeMed Pharmacy Tech _____ x _____ | 800-862-2731 Monday-Friday 8:00AM- 5:00PM |
| Pump or Feeding Tube | HomeMed Dietitian: _____ x _____ or _____ x _____ | 800-862-2731 Monday-Friday 8:30AM- 4:30PM |
| Nutrition or Formula | _____ | _____ |
| Visiting Nurse | _____ | _____ |

If you have urgent questions **after hours, on weekends or holidays** please call HomeMed at **800-862-2731** and you will be contacted by one of our nurses or pharmacists.

INTRODUCTION

This manual will provide you with information on how to take care of your tube feedings at home. You and your family members will learn the correct way to manage your tube feedings, so you receive enough nutrition and know how to prevent problems.

Members of the health care team will teach you how to manage your tube feedings to make sure you are at ease with it.

A nutritionist has chosen a formula to provide enough calories, protein and fluid based upon your nutritional needs.

Your **HomeMed Nutritionist** will order the formula and the tube feeding supplies (bags, syringes, pump) you will need at home.

Your **Practice Management Coordinator** (discharge planner) will contact a home nursing agency to arrange for a nurse to come to your home if needed.

- ◆ HomeMed business hours are Monday - Friday 8:00 AM – 5:30 PM.
- ◆ A nurse or pharmacist can be reached 24 hours a day by contacting:

1-800-UMCARE1 (1-800-862-2731)

- ◆ The patient information folder received with your supplies contains the following information:
 - HomeMed Overview
 - Patient Rights and Responsibilities
 - Advanced Directives
 - Home Safety
 - Infection Control
 - Disposal of Needles and Hazardous Waste
 - Emergency Preparedness
 - Inventory of Supplies

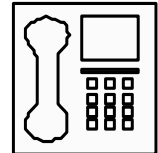
Please review this information and keep it available for use as a reference.

- ◆ Call HomeMed as soon as possible if:
 - You have any questions or experience any problems concerning your medication, equipment or supplies
 - Your therapy, medication or supply needs change
 - You are admitted to the hospital
 - You do not have enough supplies to last until your next delivery
 - You are unclear about any of your instructions
- ◆ To insure you have an uninterrupted supply of products for your therapy, notify HomeMed at least 3 days prior to any anticipated needs. The office may be contacted during normal business hours.
- ◆ Due to regulations and standards related to the dispensing of medications and supplies, HomeMed is unable to accept any products for return or credit. However, if you receive any supplies in error please contact HomeMed.

Shipment of Formula & Tube Feeding Supplies

When you become a HomeMed patient, we will establish a standard order of supplies needed to give your tube feedings at home. Your account will be handled by one of our Pharmacy Team Technicians. Our pharmacy technician will contact you prior to each scheduled delivery of supplies to see if there are any changes to your standard order. You may request to speak with one of our Registered Dietitians at any time.

****If our pharmacy technician does not speak with you, they will send your next delivery based on your standard order. NO additional deliveries thereafter will be sent to you until you contact our office and speak with your team technician.****



First 2 months:
Shipment every 2 weeks

The quantity of formula / supplies in your first shipment will be determined by our dietitian. The first shipment you receive when you begin services with us will provide enough items for 2 weeks of therapy.

After the first 2 months:
Enough for 28 days

You will continue to get a shipment every 2 weeks for the first 2 months then will change to one delivery every 28 days after that.

If you are buying supplies because your insurance will not pay for them, you may have the option of shipments more frequently providing smaller quantities of items.

My Pick Ticket
(see page 7)
➤ Items Shipped
➤ Next Delivery Date

With every shipment, you will receive a yellow copy of a “pick ticket” which is similar to a packing slip or shipping receipt. This pick ticket will indicate your next scheduled delivery date. Please use this pick ticket to verify items shipped to you with your delivery.

You may contact our office 24 hours a day / 7 days a week using our toll free number 1-800-862-2731. Our office receptionist answers calls from 8am to 7pm Monday through Friday. After 7pm on weekdays, and on weekends & holidays, you may leave a voicemail message regarding your supply needs.

Our standard delivery response time to your delivery request is 3 business days, so be sure to order your supplies in advance of needing them. Rush deliveries may result in additional shipping charges to you.



Please inform your pharmacy technician of any hospital admissions or discharges to avoid an overstock of supplies. After your discharge, your service will be restarted and supply quantities will be adjusted based on the number of days you were in the hospital.

PICK TICKET

This is a sample of what you will get in each of your deliveries from HomeMed.
It tells you what is being delivered and when your next delivery is due.

PATIENT ORDER
 Pat . . : HOM33333 734/222-2222 Ther: TEN Ordered :x/xx/xx Pickup Time: x/x/xx
 Name: DOE, JOHN Locn: HMED Exp Ship:x/xx/xx Pickup Date: x/x/xx
 Addr : 4545 JANE DOE LANE Exp Dliv:x/xx/xx Pickup Locn: x/x/xx
 ROSEVILLE MI 48106 Sts : 0 **Nxt Dliv:x/xx/xx** Home Invnty: x/xx/xx
 HSR. . : LANCE P RSpC: 9 Shipping Info. : NDA
 Order : 100200300444 Delivery Agent:
 #Days: xx Date Shipped : _____

Delivery Directions: 11143333; PURPLE TEAM

| Item Code | Description | Quantity | Stock |
|-----------|------------------|----------|-------|
| C15 | 00251401 example | 28 | _____ |
| O03 | 00262607 example | 72 | _____ |
| Q02 | 00252402 example | 4 | _____ |
| R02 | 00350101 example | 8 | _____ |
| R03 | 00350301 example | 8 | _____ |
| X45 | 00830202 example | 1 | _____ |

This date tells you when your next delivery is due.

This is the number of days worth of supplies you are being sent.

Here is where each of the items you need for this delivery will be listed. The number to the right of the description tells you how many you need for this delivery.

Here we will hand write the quantity of that item that was actually sent.

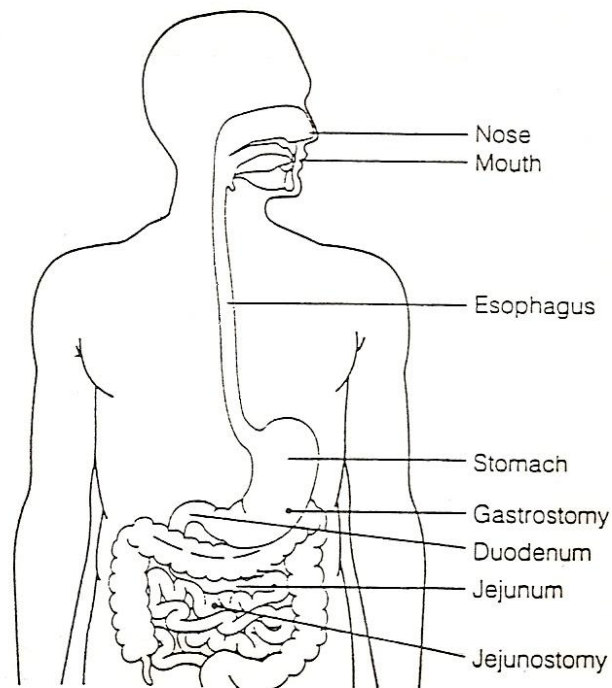
| | | | | |
|--------------|--------------|-------------|-------|--------------|
| PICKED BY | DATE DATE | CHECKED BY | DATE | PACKED BY |
| _____ | _____ | _____ | _____ | _____ |
| DELIVERED BY | DATE DATE | RECEIVED BY | DATE | CONFIRMED BY |
| _____ | _____ | _____ | _____ | _____ |

TUBE FEEDING PLACEMENT

Your feeding tube is called a:

- nasogastric*
- nasoduodenal/jejunal*
- gastrostomy/PEG*
- jejunostomy*
- gastrojejunostomy*
- TEP*
- Other*

The tip of your feeding tube is in your _____.



Important Note: If you have more than one catheter (example: feeding tube and I.V.), always double check to make sure that you are infusing your formula into the feeding tube and not into the I.V. line.

CHECKING THE PLACEMENT OF YOUR FEEDING TUBE

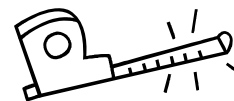
Checking the proper placement of your feeding tube should be done before each feeding and before putting any liquids down the tube. If, for any reason, your feeding tube has fallen out, call your doctor or be seen in your local emergency room immediately. A surgically placed tube **must be replaced within 2-3 hours** or the opening to your stomach or small intestine may close.

There are two simple methods used to check the placement of your tube.

1. You may use a permanent ink to make a mark on the tube where it enters the body. Watch to make sure the mark stays at that same point. You do not want the tube to go further inside or outside of the body more than 1 inch. If there is any question about the tube being in its correct place, call your doctor before using the tube. If your tube has numbered markings on it, note the one that is the closest to your skin.



2. Measure the number of inches from the point where the tube enters the body to the end of the tube where you connect the feeding. Use a non-stretchable tape measure. Compare measurements over time. If there is more than a 1 inch difference, call your doctor before using your tube.



BEFORE GIVING YOUR TUBE FEEDING

Formula Preparation:

- Use room temperature formula or bring cold formula to room temperature before using it by placing the can in a bowl of hot water.
- Wash your hands with soap and water.
- Rinse off the top of the formula can.
- Shake can well for 30 seconds.
- See the sample schedule provided in the front pocket of this manual to decide how much formula to pour into the feeding bag at once.

Formula Storage:

- Your canned formula may be stored at room temperature as long as it has not been opened.
- Do not store formula near heating vents or other sources of heat.
- Do not store formula where it may freeze.
- Cover and refrigerate all unused, open cans or prepared formula.
- Throw away open cans or prepared formula that has been in the refrigerator longer than 24 hours.

TUBE FEEDING BAG, SYRINGE AND EXTENSION USAGE:



Feeding bags:

- Use a new feeding bag **everyday** (if you give more than one feeding in a day, use the same bag all day).
- Rinse out bag with warm water after each feeding and store in a sealed container in the refrigerator. Do **not** rinse out with soap or vinegar.
- Never throw away your last feeding bag in case you do not receive your new shipment before your next scheduled feeding.
- Add **only** formula and/or water to the bag.

Syringes:

- Syringes can be reused for **3-4 days**. After each use, clean your syringe by pulling the plunger out of the barrel, rinse with warm water and allow to air dry.



Extension pieces:

- Feeding tube extension pieces should be changed once per week or as directed by your nutritionist.

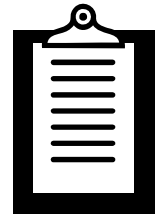
NUTRITIONAL GOAL: FORMULA AND WATER NEEDS

_____ is the formula(s) you will be using. You will need to use _____cc's or _____ cans per day.

You will need to use at least an extra _____cc's or _____ cups (_____ oz) of water each day to prevent dehydration. If fluids cannot be taken by mouth, then fluid needs must be met with water through the feeding tube.

Tube Feeding Schedule Administration:

A sample feeding schedule is being provided to you and will be placed in the front pocket of this folder.



Flushing The Feeding Tube:

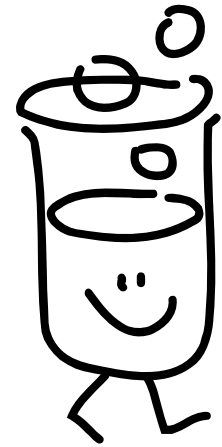
Flushing the feeding tube is done by filling a syringe with water and pushing it through the feeding tube. The reason this is important to do is to:

- Keep the feeding tube from getting clogged
- Provide you with water so you don't get dehydrated
(see page 13)

It is recommended that you flush your feeding tube with water before and after you put formula or medications through your feeding tube. If you run your feedings on a pump, you should flush your tube every 4-8 hours.

Hydration

As part of your nutrition goal, you will be given a water intake goal for the day. Your formula alone may not give you enough water to keep you from getting dehydrated. This water goal is the amount of water you need to take each day in **ADDITION** to your formula. If you are able to drink the water, you would only need to flush the feeding tube to keep it from clogging. If you are not able to drink, you will need to put all of the additional water through your feeding tube.



Dehydration

If your body is not getting enough water each day or you are losing fluid through vomiting, diarrhea or G-tube drainage, you may get dehydrated. Dehydration can be life-threatening if not recognized. Some signs to watch for include:

- decrease in urination or very dark colored urine
- dry mouth
- muscle cramps
- feeling faint
- lethargy/weakness

If you suspect you are dehydrated, call your doctor immediately for medical advice.

ADMINISTERING TUBE FEEDING USING THE PUMP METHOD

Gather the following supplies:

Feeding pump and feeding bag

Formula

Room temperature water

Syringe

Setting up:

1. Wash your hands with soap and water.
2. If you have gastrostomy or a nasogastric tube, administer tube feedings while sitting upright with your head and chest raised higher than your stomach. Remain upright for 30 minutes to one hour after feedings are complete.
3. Check placement of your tube (see page 9).
4. Prepare your formula by rinsing off the top of the cans and shaking the cans well for 30 seconds.
5. Flush your feeding tube with water using the syringe.

You will be provided with a feeding pump for home. Refer to the pump handout located in the front pocket of this folder to complete the following steps: filling the feeding bag, priming, setting the rate/dose and getting the pump started.

After the Feeding:

1. Turn the pump off and detach the feeding bag from your feeding tube.
2. Flush your feeding tube with water and cap the end.
 - If the feeding is **not** complete, take the tubing out of the pump and rinse the bag out with tap water. Refill your feeding bag according to your feeding schedule and restart the feedings.

If you are having problems with the pump alarming, see your pump handout located in the front pocket of this folder.

ADMINISTERING THE TUBE FEEDING BY GRAVITY DRIP METHOD

Gather the following supplies:

Tube feeding bag

Formula

Room temperature water

Syringe

Pole or hook

Setting up:

1. Wash your hands with soap and water.
2. Sit upright or have your head and chest higher than your stomach. Remain in this position during and 30-60 minutes after feeding.
3. Check placement of your tube (see pages 9).
4. Prepare your formula by washing off the top of the can and shaking the can well.
5. Be sure the roller clamp on the tube feeding bag is closed (down).
6. Pour prescribed amount of formula into the feeding bag (**see sample feeding schedule**).
7. Place the feeding bag on a pole or hook so that it is above your head by at least 1 foot.
8. To prime the tubing, squeeze and release the drip chamber until the formula fills to the line etched in the chamber. Open the roller clamp to allow the formula to flow to the end of the tubing. Close the clamp.
9. Use a syringe to flush the feeding tube with water.
10. Insert the end of the feeding bag into the feeding tube, unroll the roller clamp and allow formula to flow until the feeding bag is empty.
11. Pour the prescribed amount of water into the feeding bag and allow it to flow in (this step may be done 1-2 hours after the feeding if you are too full).
12. Use a syringe to flush the feeding tube with water.
13. Rinse out the tube feeding bag with water and store in the refrigerator until the next feeding (refer to page 11).

ADMINISTERING THE TUBE FEEDING BY SYRINGE-PUSH METHOD

This type of administration should only be used with a gastrostomy or nasogastric tube and only after feedings are well established. Consult your clinician before using this method.

Gather the following supplies:

Formula

Room temperature water

60cc syringe

Setting up:

1. Wash your hands with soap and water.
2. Sit upright or have your head and chest higher than your stomach.
Remain in this position during and 30-60 minutes after feeding.
3. Check placement of your tube (see page 9).
4. Prepare formula by rinsing off the top of the can, shaking can well and pouring it into a cup or bowl.
5. Using a 60cc syringe, flush the feeding tube with water and remove the syringe from the feeding tube.
6. Draw the syringe full of formula.
7. Place the tip of the syringe into the feeding tube.
8. Slowly push the formula into the feeding tube over several minutes.
Repeat until the entire volume of formula is administered.
9. Flush with the prescribed amount of water (at least 60 cc).
10. Cap or clamp the feeding tube.

ADMINISTERING THE TUBE FEEDING BY SYRINGE-GRAVITY METHOD

Gather the following supplies:

Formula

Room temperature water

Syringe

Setting up:

1. Wash your hands with soap and water.
2. Sit upright or have your head and chest higher than your stomach.
Remain in this position during and 30-60 minutes after feeding.
3. Check placement of your tube (see page 9).
4. Prepare formula by rinsing off the top of the can and shaking can well.
5. Flush the feeding tube with water using your syringe. Remove the syringe from the feeding tube.
6. Remove the plunger from the syringe.
7. Place the tip of the syringe into the feeding tube.
8. Pour formula into the syringe barrel and allow it to flow in slowly.
Continue refilling the syringe until your prescribed amount is given.
9. Pour in the prescribed amount of water and allow it to flow in slowly.
10. Remove the syringe. Cap or clamp the feeding tube.

TAKING MEDICATIONS

If you need to take medications through your feeding tube:

- Check with your doctor or local pharmacist to see if your current medications interact with your tube feedings. You may also call HomeMed if you have any concerns.
- Ask your doctor to prescribe your medications in a **liquid** form.
- If any of your medications are not in a liquid form, ask your pharmacist or doctor if the pills can be crushed or the capsules opened. **Do not crush pills or open capsules without your pharmacist's or doctor's consent.** This could be harmful.
- Do not take any medication (prescription or over-the-counter) without your doctor's consent.
- **Do not mix medications** with your tube feeding formula or with each other.
- **Do not place medications in the feeding bag.**
- **If more than one medication is needed, always flush the feeding tube with water between each medication.**

Supplies Needed:

Medications

Syringe

Pill crusher, if needed

A small cup for crushed meds

A cup with warm water



Procedure:

1. Wash hands with soap and water before starting.
2. Using the syringe, flush your feeding tube with at least 10-20 cc of water.
3. Prepare your medications as follows:
 - Liquid:* draw the prescribed amount into the syringe.
 - Pills:* crush pills into a fine powder. Then mix the contents with 15-20 cc of warm water and draw the medication into a syringe.
3. Inject one medication into your feeding tube.
4. Flush the feeding tube with 10-20 cc of water after each medication (each medication should be given separately).
5. After all the medications are given, flush the feeding tube with water. [**Do not flush with soda or cranberry juice.**]
6. Re-clamp the feeding tube. Rinse and store supplies.

CARE OF SKIN AROUND G and J TUBES

- A gauze dressing will be placed around the tube at the time it is inserted. Remove dressing 24-48 hours after surgery. Inspect skin for redness, tenderness, swelling, drainage or gastric leakage. Replace with new dressing as needed. Most tubes do not require a dressing. Keep skin clean, dry and free of drainage. If dressing is used, be sure it is changed immediately when wet or soiled.
- Clean the skin around the tube daily with mild soap and water using a washcloth or gauze. If your tube has a crossbar or disc that lies against your skin, you will need to clean underneath it. Rinse with water and dry thoroughly.
- Gentle movement of tube is not harmful.
- It is important to keep your skin around the tube clean and dry.
- Some drainage around the tube site is normal. If the drainage looks like pus or the skin is red, swollen or very painful, call your doctor.
- You may shower 24 hours after tube placement. Do not take tub baths or swim for one week.
- You may secure the tube underneath clothing with adhesive tape or with “stretch netting” to conceal it and prevent unnecessary motion of the tube.
- If your tube is accidentally pulled out, call your doctor immediately or go to your local emergency room. The tube must be replaced within 2-3 hours or the opening leading to your stomach or small intestines may close.

CARE OF THE TUBE AND NOSE

Care of the nose around the tube should be done everyday. Wash your hands with soap and water before starting.

Supplies Needed:

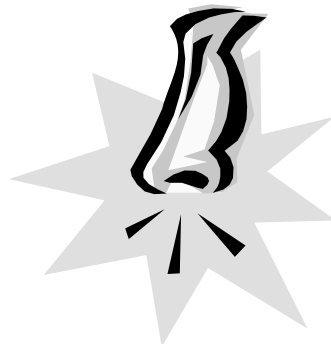
Damp washcloth or gauze

Tape

Permanent marker

Procedure:

1. Use a permanent ink marker to place a dot on the feeding tube above the lip area to note tube position.
2. Remove the old piece of tape using one hand while holding the tube in place with the other.
3. Clean area around the nose making sure you clean well where the tube enters the nose.
4. Use a mirror or have someone else check the site where the tube enters the nose. Be sure redness or an open sore is not present.
5. Place the new tape lengthwise down the nose and wrap the rest of the tape around the tube. Place another piece of tape across the top of the nose to fully secure the first piece of tape. Do not tape the tube tightly against the front of the nostril. (Do not split the tape to wrap around the tube. This can cause too much pressure to the front of the nostril.)
6. To secure the tube or for your own comfort, you may loop the tube around your ear and tape it to the side of your face. You may also place a piece of tape around the tube and use a safety pin to secure the tape to your clothing. Never put a pin through the tube itself.

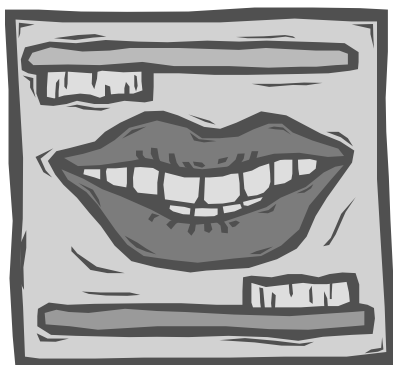


MOUTH CARE

If you are unable to eat or drink anything by mouth, you may experience some mouth dryness, bad taste or bad breath.

To prevent this:

- Brush your gums and teeth twice a day with a soft bristled brush.
- Avoid licking your lips. This could cause further drying and chapping of lips. Use a balm for dry lips.
- Rinse your mouth with an alcohol-free mouthwash or use a mild salt and/or baking soda solution to rinse your mouth 3-5 times a day. Listed below are three ways you can prepare a salt and/or soda solution. If you have had surgery or radiation treatment to your head and/or neck, please contact your doctor prior to starting mouth care.
 - Add one (1) teaspoon of salt to two (2) cups of warm water.
 - Add one (1) teaspoon of baking soda to two (2) cups of warm water.
 - Add one (1) teaspoon of salt and one (1) teaspoon of baking soda to four (4) cups of warm water.



SUPPORT ORGANIZATION

If Tube or IV Feedings Are Part of Your Life, The Oley Foundation Is Here to Help You!

Since 1983, the Oley Foundation has provided FREE information and support to consumers dependent on home parenteral and enteral nutrition (homePEN). We encourage you to learn more about the Oley Foundation by contacting them today.

Who Should Be Interested

All consumers (patients) who receive home nutrition support and their caregivers. This includes:

- **enteral nutrition** (HEN) where formula is delivered by tube into the stomach or intestinal tract; AND
- **parenteral nutrition** (HPN) where solutions are infused directly into the bloodstream (intravenously)

Consumers have lived fully productive lives on these therapies for more than 25 years.

Diagnoses that can lead to dependence upon homePEN are highly varied and include:

- Cancer forms that limit nutrient absorption or impair the ability to eat
- Radiation enteritis
- Crohn's disease
- Pseudo-obstruction and other Motility Disorders (gastroparesis, gastrectomy)
- Congenital bowel disease
- Ischemic bowel disease
- Intestinal tract injuries or traumas that impair the ability to eat
- AIDS
- Cerebral vascular accident (stroke)
- Chronic adhesive obstructions
- Cystic fibrosis

Call Toll-Free (800) 776-OLEY

— or —

Visit www.oley.org



How the Oley Foundation Can Help

Oley is a national, independent, 501(c)(3) non-profit organization that provides information and support for consumers of homePEN, their caregivers and clinicians.

All Oley services and educational materials are FREE for consumers and their caregivers.

Oley programs:

- **LifelineLetter**: a bi-monthly newsletter with articles about medical advances and personal experiences, written for homePEN consumers,
- **Regional Coordinator Network**: a national grassroots network of 70 volunteers — all homePEN consumers or caregivers — who run support groups and provide outreach and education at the local level
- **National and Regional Conferences**: opportunities for homePEN consumers, clinicians, providers and industry representatives to share support and information
- **Information Clearinghouse**: a resource designed to answer questions about homePEN through a toll-free hotline, world wide web page and video tape library
- **Toll-Free Consumer Network**: a networking tool that provides free access to different experienced homePEN consumers around the country, each month

214 Hun Memorial, MC-28 • Albany Medical Center
Albany, NY 12208-3478

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www.oley.org • BishopJ@mail.amc.edu

PROBLEM SOLVING

These problems may happen while you are on tube feeding. Keep in mind some of the problems may have other causes and may not be related to your tube feeding. **If problems persist, contact your doctor, nutritionist or nurse.**

| Problem | Possible Cause | Actions/Solutions |
|---------------------------------|------------------------------------|--|
| Diarrhea and/or cramping | Side effect of your medication | Discuss medications with your doctor or pharmacist. |
| | Formula is too cold | Make sure your formula is at room temperature before using. |
| | Feeding is being given too quickly | Decrease the rate of your feeding 10-20cc per hour if using a pump. Slow down your gravity feeding so that it is given over a longer period of time. |
| | Not enough fiber intake | May require gradual addition of formula with dietary fiber. Check with your nutritionist. |
| | Tube out of position | Contact your doctor. You may need an x-ray to check the position of the tube. |

continues on next page

| Problem | Possible Cause | Actions/Solutions |
|---------------------------------------|---|--|
| Diarrhea/ cramping (cont.) | Bacteria in the formula | Make sure you wash your hands and use clean supplies when handling your formula. Rinse and replace feeding bags as instructed. Make sure you do not let the formula hang too long in the bag. Check the expiration date on the formula package. Make sure all open bottles, cans, or mixed feedings are refrigerated and thrown away after 24 hours. |
| | Incorrect cleaning of tube feeding supplies | Clean supplies only with warm water. Do not use soap. |
| Nausea | Side effect of your medication | Discuss medications with your doctor or pharmacist. |
| | Stomach emptying too slowly | Discuss decreased usage of fiber-containing formulas with your nutritionist. Ask your doctor about a medication to relieve symptoms. |
| | Formula is being given too quickly | Decrease the rate of your feeding 10-20cc per hour if using a pump. Slow down gravity feeding so that it is given over a longer period of time. |

| Problem | Possible Cause | Actions/Solutions |
|---|------------------------------------|---|
| Gas, or feeling of fullness (bloating) | Formula is being given too quickly | If using a pump, decrease rate of your feeding so that it is given over a longer period of time, or stop feeding for 2 hours. Slow down gravity feeding so that it is given over a longer period of time. |
| | Stomach emptying too slowly | Call your nutritionist or ask your doctor about a medication to relieve symptoms. May be caused by too much fiber (see below). |
| | Lack of exercise | If you can, increase your exercise. Relax and breathe slowly. Try sitting up or raise the head of your bed during feedings. |
| | Too much fiber | Decrease usage of fiber-containing formula or supplements. Call your nutritionist. |
| Constipation (call your doctor if you have not had a bowel movement in 3 days) | Not enough fluid intake | Increase your water intake as directed by your nutritionist or doctor. |
| | Not enough exercise | If you can, increase your exercise. |
| continues on next page | | |

| Problem | Possible Cause | Actions/Solutions |
|--|---|--|
| Constipation (cont.) | Not enough fiber intake | May require gradual addition of formula with dietary fiber. Check with your nutritionist. |
| | Possible blockage of the bowel | Call your doctor. |
| | Side effect of your medication | Discuss medications with your doctor or pharmacist. |
| Inability to get prescribed amount of formula in | Away from home, very busy home schedule, or intolerance | To prevent dehydration, increase water intake by 8 ounces for each can of formula you are unable to infuse. Call your nutritionist to discuss an alternate feeding schedule. |
| Dehydration NOTE: Symptoms are weakness, thirst, light headedness, dry skin, less urine output, or dark colored urine (see page 13). | Prolonged fever | Call your doctor. |
| | Persistent diarrhea | Call your doctor. |
| | Not enough fluid intake | Make sure you are taking the amount of water as informed by your nutritionist. Then increase your water intake by 8 ounces per day. |
| Thirst | Not enough fluid intake | Increase amount of water given with your formula. Call your nutritionist with questions. |

| Problem | Possible Cause | Actions/Solutions |
|---|--|---|
| Fever | Possible aspiration | Call your home care nurse or doctor. |
| | Possible infection | Call your home care nurse or doctor. |
| Choking, coughing, gagging | Nasogastric feeding tube out of place | STOP the feeding. Contact your doctor or home care nurse. |
| | Possible aspiration | Call your doctor or home care nurse. |
| Feeding tube clog NOTE: Do NOT try to clear blockage by inserting an object. This could result in damage to the tube or injury to the stomach lining. Do NOT use cranberry juice, meat tenderizer, or carbonated beverages to unplug tube. Acidic products cause the protein in the feeding formula to form more clogs. | Inadequate flushing of tube before and after administering feedings and/or medications | Attempt to flush tube with a 10 or 20cc syringe of warm water. If unsuccessful, fill half of syringe with water and connect it to the feeding tube. Move syringe plunger back and forth several times until tube clears. Avoid excessive force when flushing tube. If not successful, call your nutritionist, home care nurse or doctor or see below. Obtain declogging kit from HomeMed and follow directions on kit. Call your clinician if you need assistance. |

| Problem | Possible Cause | Actions/Solutions |
|--|--|---|
| Leakage around the tube | Improper positioning | Sit at least 45 ° upright during feeding and for 1 hour after feeding. |
| | Too rapid feeding rate | Slow down the pump rate by 10-20 cc per hour or give gravity feedings over a longer period of time. |
| | Blocked tube | See section on “ <i>Feeding tube clog</i> ” above. |
| | Tube out of position | Measure length of tube or look for mark. If tube is longer or the mark has moved farther out, stop feeding and contact your doctor. The tube may need to be replaced. |
| Skin redness or irritation around tube site: NOTE: Keep skin clean, dry and free of drainage. Most tubes do not require a dressing. If dressing is used, be sure it is changed immediately when wet or soiled. Use a waterproof ointment such as zinc oxide around site to protect skin from gastric leakage. If problems continue, contact your nurse or physician. See “ <i>Leakage around the tube</i> ” above. | Minor infection | If slightly red, apply antibacterial (Bacitracin) ointment twice a day. Notify your doctor if not improved in one to two days. |
| | Allergic reaction to antibacterial ointment/soap | Try water alone for cleansing or switch to a different soap or ointment. |
| | Allergic reaction to tube material | Possible latex allergy. Call doctor immediately. |
| | Tube movement outward | See section on “ <i>Leakage around the tube</i> ” above. |

| Problem | Possible Cause | Actions/Solutions |
|---|--|---|
| Sudden weight loss of 1-2 pounds per day | Not enough fluid intake | Increase amount of water you take with your formula. Call your doctor if weight loss persists. |
| Sudden weight gain of 1-2 pounds per day | Retaining fluid | Call your doctor if rapid weight gain persists. |
| Accidental removal of gastrostomy or jejunostomy tube. | | Clean the site and cover with a clean gauze. Call your doctor immediately or go to the emergency room. The tube must be replaced within 2-3 hours or the opening leading to your stomach may close. |
| Continuous or unusual discomfort. | Throat irritation from nasogastric feeding tube. | Call your doctor or nurse. |

SPECIAL CONSIDERATIONS FOR SMALL BOWEL OR INTESTINAL FEEDINGS

Putting well water through a feeding tube in your small intestines may cause problems. Well water may contain certain bacteria. The bacteria can cause an infection in your intestine. If your home has well water, there are two ways you can help prevent this.

1. **Use bottled water** for any liquid going into your feeding tube. (This includes formula, medications, extra water and flushing.) This could become costly.

OR

2. **Boil the well water for ten minutes.** Then let the water cool for one hour, making sure the pot is covered during this time. **Boil the water again for another ten minutes.** Cool and pour it into a container that has a lid. (Example: large glass jars, containers with cap.) Be sure the container and lid has been washed and rinsed well. The water can be stored at room temperature for three to five days as long as the container is kept closed between uses and feeding supplies are not put directly into the clean water (example: pour water into a cup then fill syringe from the cup).



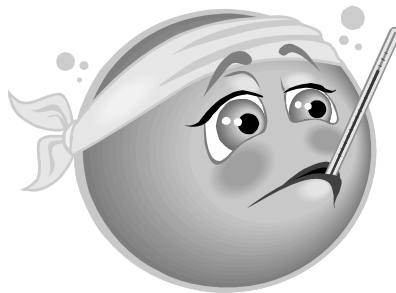
SICK DAYS

On the days that you are not feeling well, you still need to be kept well nourished.

- Take your normal feedings and water if able.
- Hold the feeding if you have nausea or vomiting.
- Take small amounts of water as often as you can to replace the amount of formula normally given.

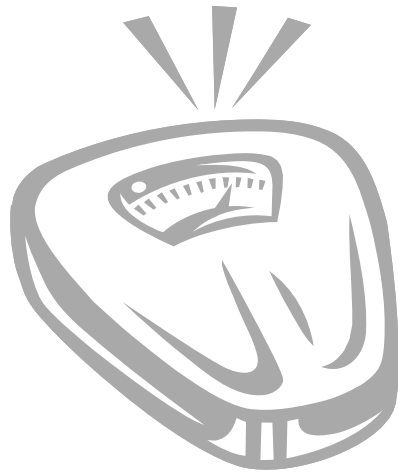
When to Call Your Physician

- Signs and symptoms of infection:
 - chills or temperature over 100.5
 - redness, swelling, increased pain, or foul smelling drainage around the tube.
- Feeding tube falls out (see page 30).
- Abdominal bloating, nausea, cramps, vomiting or diarrhea for more than 24 hours.
- Unable to do feedings of formula and/or water for longer than 24 hours.
- Increasing size of the hole into your stomach.
- The cross piece where the feeding tube exits the body is making a sore at the skin.
- Change in overall health: significant weight change, weakness, less urine.
- Any new, unexplained symptoms



KEEP RECORD OF NUTRITION AND WEIGHT

- Complete the daily diary on page 34. This diary provides your doctor and nutritionist with useful data.
- Record your weight at least 3 times a week. Weights should be taken at the same time of day while wearing the same weight of clothing. For concerns, see weight changes listed in the problem solving section on page 30.
- If you are unable to get out of bed, ask your doctor to weigh you during office visits.



DAILY DIARY

GOAL WEIGHT: _____

| | SUN | MON | TUES | WED | THURS | FRI | SAT |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| DATE | | | | | | | |
| WEIGHT | | | | | | | |
| FORMULA TAKEN: (Record time & amount taken at each feeding.) | Time/amount | Time/amount | Time/amount | Time/amount | Time/amount | Time/amount | Time/amount |
| TOTAL | | | | | | | |
| WATER TAKEN: (cups or cc's) | Time/amount | Time/amount | Time/amount | Time/amount | Time/amount | Time/amount | Time/amount |
| TOTAL | | | | | | | |
| OTHER FLUIDS TAKEN | Time/amount | Time/amount | Time/amount | Time/amount | Time/amount | Time/amount | Time/amount |
| STOOLS* | | | | | | | |
| OTHER Nausea/ Vomiting | | | | | | | |

*List number of stools and consistency (hard, soft, watery, etc.)

DEFINITIONS

ASPIRATION: When saliva or formula is inhaled into your lungs.

BACTERIA: A microorganism which multiplies and can only be seen by a microscope. Some bacteria can cause diseases and infections.

CONSTIPATION: Having no bowel movement in two days or having hard, painful stool.

DEHYDRATION: Results from inadequate water intake. Symptoms include thirst, rapid weight loss, weakness, less urine and dark colored urine.

DIARRHEA: Six or more watery bowel movements per day.

ENTERAL: Feeding of the appropriate formula using a tube that goes into the stomach or small intestine.

FEEDING TUBE: A small tube made of soft plastic that is positioned in the digestive system. Liquid nutrition is given through this tube.

FLUSHING: The process of pushing water through the feeding tube using a syringe. Flushing is used to prevent the tube from clogging and to prevent dehydration.

FORMULA: Liquid nutrition designed to provide your body with daily calorie, protein, vitamin and mineral requirements.

GASTROSTOMY TUBE: A feeding tube that passes through the skin, with the tip of the tube placed in the stomach.

GASTROJEJUNOSTOMY: A feeding tube that passes through the skin, into the stomach, with the end of the tube in the part of the small intestine called the jejunum.

GRAVITY DRIP METHOD: A method of feeding in which a tube feeding bag is used to hold the formula and a roller clamp controls the flow of formula. No pump is used.

JEJUNOSTOMY TUBE: A feeding tube that passes through the skin, with the tip of the tube placed in the small intestine.

NASOGASTRIC TUBE: A feeding tube that passes through the nose, with the tip of the tube placed in the stomach.

NASOJEJUNAL TUBE: A feeding tube that passes through the nose, with the tip of the tube ending in the part of the small intestine called the jejunum.

NAUSEA/NAUSEATED: Stomach distress with an urge to vomit.

PEG TUBE: Percutaneous Endoscopic Gastrostomy tube. A procedure for placing a feeding tube into the stomach using local anesthesia. Not a surgical procedure.

PRIME: The process of allowing the formula to flow from the feeding bag to the very end of the tubing prior to connecting the bag to the feeding tube. This pushes the air out of the feeding bag tubing prior to starting the feeding.

PUMP METHOD: A method of feeding in which a feeding bag and an electrical pump are used to deliver a set amount of formula each hour.

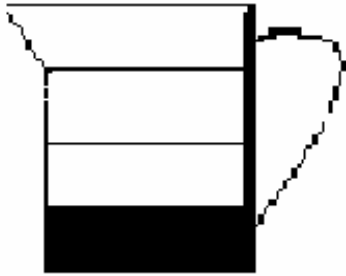
STOMA: An artificial permanent opening from the skin's surface going into the body.

TEP TUBE: Tracheoesophageal Puncture tube. A feeding tube that passes from a neck stoma, through the esophagus, to the stomach.

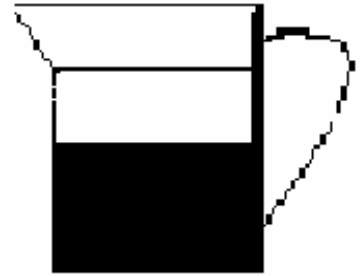
TUBE FEEDING: The process of administering formula through a small feeding tube.

Fluid Measurements and Equivalents

mL is milliliter
cc is cubic centimeter
mL and cc are the same amount
1 mL = 1 cc
30 mL = 1 ounce
240 mL = 8 ounces
8 ounces = 1 cup



$\frac{1}{4}$ cup = 60 cc = 2 oz



$\frac{1}{2}$ cup = 120 cc = 4 oz



$\frac{3}{4}$ cup = 180 cc = 6 oz



1 cup = 240 cc = 8 oz