# **Tube Feeding Using a Pump**

A flexible plastic tube has been placed through your nose into your stomach or directly into your stomach and/or small intestine. Through this tube you can take in liquids, formula and/or medicines as directed by your health care team.

# **Goals for Tube Feeding**

Formula:

Pump Type: Kangaroo Joey (or equivalent)

\_\_\_\_\_ cans or milliliters of formula per day provides:

**\_\_\_\_\_ calories**, \_\_\_\_\_ grams of **protein** and \_\_\_\_\_ milliliters of **fluid (free water)**.

**Goal Schedule** ml = milliliters

Feeding				ng dual feeding/flush bag sets:		
#1	1.	Pourcans/ml of formula into the bag.	1.	Pourcans/ml of formula into the bag.		
	2.	Run the formula forhours at	2.	Run the formula for hours at		
		a pump setting ofnhour.		a pump setting ofnhour.		
	3.	Flush tube before and after	3.	Set auto flushes forml of		
		feeding withml of water.		water every hours.		
			4.	Flush tube before and after feeding		
				withml of water.		
#2	1	Pour cans/ml of formula into	1	Pour cans/ml of formula into		
#4	1.	the bag.	1.	the bag.		
	2.	Run the formula for hours at	2.	Run the formula for hours at		
		a pump setting ofml/hour.		a pump setting ofml/hour.		
	3.	Flush tube before and after feeding	3.	Set auto flushes forml of		
		withml of water.	4	water every hours.		
			4.	Flush tube before and after feeding		
#3	1	Pour cans/ml of formula into	1	withml of water. Pourcans/ml of formula into		
#3	1.	the bag.	1.	the bag.		
	2.	Run the formula forhours at	2.	Run the formula for hours at		
		a pump setting ofml/hour.		a pump setting ofml/hour.		
	3.	Flush tube before and after	3.	Set auto flush forml of		
		feeding withml of water.		water every hours.		
			4.	Flush tube before and after feeding		
				withml of water.		

#### Rinse feeding bag between feedings if total feeding time is greater than 12 hours.

You may feed yourself at the times that are best for you.

☐ If your tube feeding is not at the above goal rate: Increase the rate on your pump by \_\_\_\_\_\_hour(s) until you reach the goal rate above.

#### Additional Fluid Needs

Flush your tube with \_\_\_\_\_ cup of water \_\_\_\_\_ times each day (total \_\_\_\_\_ ml/\_\_\_ cups).

#### This will meet your total daily fluid needs in addition to your goal tube feeding formula.

Helpful Fluid Conversions <sup>1</sup>/<sub>2</sub> syringe = 30 ml = 1 ounce 1 syringe = 60 ml = 2 ounces = <sup>1</sup>/<sub>4</sub> cup 2 syringes = 120 ml = 4 ounces = <sup>1</sup>/<sub>2</sub> cup 4 syringes = 240 ml = 8 ounces = 1 can = 1 cup

#### Other Instructions

## **Steps in Tube Feeding**

- 1. Clean all areas that you will be working on and around.
- 2. Wash your hands before handling the feeding equipment.
- 3. Gather your feeding equipment: pump, water, formula, feeding set (bag and tubing) and irrigation syringe. The formula and water should be at room temperature. If it is in the refrigerator, take it out about 15 minutes before using. Do not microwave formula.
- 4. Before feeding, fill your syringe with at least 30 ml of water or as instructed by your dietitian. Unclamp or unplug the feeding tube. Connect the syringe to your feeding tube and flush the water into your tube. This clears the tube for feeding.
- 5. Remove the syringe and close the tube.
- 6. Thoroughly shake the formula and pour the formula into your feeding bag. Prime the tube according to the instructions for your pump. Priming the tube prevents air from entering your stomach or small intestine, which can cause gas. For manual priming, unclamp the tubing and let the liquid flow through the tubing.
- 7. Set the flow rate on your feeding pump. Unclamp your tube, connect the feeding set (bag and tubing) to your tube. Then begin to run your continuous feeding.

- 8. Cover and refrigerate unused canned formula. Use formula within 24 hours. At home, formula should not hang in the feeding bag more than 12 hours. Before adding new formula to a bag, always rinse with water first. Use a new bag every 24 hours.
- 9. Do not lie flat when feeding. If you must remain in bed, place 2 pillows behind your back or use a wedge pillow.
- 10. After your feeding, disconnect the tubing from the feeding tube. Next, fill your syringe with at least 30 ml of water or as directed by your dietitian. Connect the syringe to your feeding tube and flush. Flushing the tube with water prevents the tube from clogging and helps meet your body's fluid needs.
- 11. Close the end of the feeding tube.
- 12. Secure the feeding tube by taping it to your body. This will prevent accidental removal of the tube.

#### After the feeding, keep your head elevated to at least a 30 degree angle for 30 minutes.

# **Solving Problems**

Your body is being fed in a different way. It is possible to have the following symptoms. If you are unable to improve your symptoms at home, contact your clinic.

Symptom	Solution	
Nausea/vomiting	<ul> <li>Check to see if your tube is in place by checking the mark on the tube (if applicable).</li> <li>Adjust the pump to decrease the formula flow rate.</li> <li>Ask your doctor if there are medicines to help reduce nausea.</li> </ul>	
Diarrhea	<ul> <li>Increase your intake of fluids.</li> <li>Call your doctor if you have diarrhea for more than 24 hours.</li> </ul>	
Constipation	<ul> <li>Increase your intake of fluids.</li> <li>If your doctor approves, increase your exercise and activity.</li> <li>Ask your doctor about a stool softener or laxative, especially if you are taking pain medicine.</li> <li>Contact your clinic if you do not have a bowel movement for more than 3 days.</li> </ul>	
Cramping	<ul> <li>Make sure your formula is at room temperature.</li> <li>Adjust the pump to decrease the formula flow rate.</li> <li>Check to see if your tube is in place.</li> </ul>	

Symptom	Solution
Gas	<ul> <li>Clamp or plug your tube right after you finish feeding.</li> <li>If you have gas from constipation, follow the constipation tips on the previous page.</li> <li>Make sure you are priming the tube before starting your feeding.</li> <li>If your doctor approves, increase your activity.</li> <li>Ask your doctor for anti-gas medicine.</li> </ul>
Thirst	<ul> <li>If your doctor has approved taking in liquids by mouth, take in additional fluids as needed between meals.</li> <li>Increase your intake of fluids by using water flushes through your feeding tube.</li> <li>Your fluid needs may increase if you have a fever, vomiting, diarrhea or constipation.</li> </ul>

# Additional Information

## Tube Feeding Pump

If you do not receive instructions in the hospital about how to use the feeding pump, please request that the durable medical equipment company (DME) teach you when they deliver the supplies.

There are online resources for pump operation by the company that produces each pump. For the Kangaroo Joey<sup>TM</sup> Enteral Feeding Pump (Covidien) refer to the following website:

https://www.cardinalhealth.com/content/dam/corp/web/documents/patientrecovery/Literature/kangaroo-joey-enteral-feeding-pump-operation-and-service-manual.pdf

#### **Equipment Care**

You should receive enough bags to use 1 bag each day. If needed, feeding bags and tubing can be safely used up to 5 days. Follow these instructions to safely use the bag for longer than 24 hours:

- 1. Each day **after the final feeding**, dissolve about <sup>1</sup>/<sub>4</sub> teaspoon of liquid dishwashing detergent with hot tap water in a glass.
- 2. Pour the mixture into the feeding bag after disconnecting it. Recap the bag, close the roller clamp and shake it very well.
- 3. Thoroughly rinse the bag and tubing with tap water allowing it to drain into the sink.
- 4. After washing, place the bag and tubing inside a zip-lock type bag. Store this bag in a refrigerator.

#### Medicine

- Medicines can clog your tube. **Only** use medicine in your tube that your doctor prescribes. **Do not** mix medicines with the formula. **Do not** mix medicines together when putting them through the tube.
- Give each medicine separately.
- Flush your tube with at least 30 ml of water before and after you put medicines through it.

#### **Clogged Tube**

Try to open the clogged tube by gently flushing **warm** water through it with a syringe. **Do not** use other items such as meat tenderizer or carbonated beverages to unclog your tube. If the tube does not open, call your clinic. If it is after normal business hours, go to the nearest hospital emergency center.

Flushing your feeding tube with at least 30 ml of water every 4-8 hours may help prevent tube clogging.

#### Formula and Supply Prescription

A dietitian from the clinical nutrition triage group will contact you (Monday through Friday) to discuss your options for choosing a DME.

Below, write down the name and contact number for your DME company.

#### **Durable Medical Equipment company:**

Name: \_\_\_\_\_ Phone: \_\_\_\_\_

A dietitian may be able to help you regarding insurance verification of benefit coverage. If you would like to speak to a dietitian in triage about coverage of tube feedings by your insurance plan, call 713-563-5167.

The DME company will contact you to review insurance coverage and arrange supply delivery. Your order was entered on \_\_\_\_\_\_ for \_\_\_\_\_months.

For your MD Anderson medical team to renew your tube feeding formula and/or supply order after the order expires, it is required for you to currently be under the care of a MD Anderson provider **and** your provider has seen you recently.

The MD Anderson dietitian must re-evaluate your nutritional needs and tube feeding schedule before a reorder can be placed. Your doctor must evaluate your need for tube feedings and sign the prescription.

#### Please schedule an appointment within 1 month before the current order expires:

- Call your home clinic to schedule an appointment with the dietitian.
- If you have not seen your doctor recently, you will also need to request an appointment with the doctor.

If you do not see your MD Anderson doctor before your tube feeding prescription expires, the MD Anderson dietitian will not be able to assist with your reorder. Contact your local medical provider who is managing your care outside of MD Anderson to request a tube feeding prescription.

# Resources

- For nutrition or tube feeding tolerance questions, call Clinical Nutrition at 713-563-5167 to schedule an appointment with a dietitian.
- Call your DME company to order formula and supplies or for help managing the pump.
- Contact the clinical nutrition triage group for order status and delivery of formula and supplies. They can also help with questions/concerns regarding your DME company. Call 713-563-5167 during normal business hours.

## When Tube Feeding Formula and/or Supplies are Not Covered by Insurance

Your insurance may not cover tube feeding formula and/or supplies. Use the information below to help you understand what is covered.

- Call your **insurance provider** for:
  - Guidelines for covering formula and tube feeding supplies.
  - Any co-payments, co-insurance or deductible that are your responsibility.
  - A list of in-network DME providers.
- Speak with the **doctor** who ordered the tube placement. He or she can help you determine if you meet the guidelines for your insurance company to cover your formula and tube feeding supplies.
- Call the DME company and discuss what is covered and the amount of your **out-of-pocket** responsibility.
- If you have confirmed that the DME company should deliver your tube feeding supplies and you do not receive them within 24 hours, please call the DME company. Most companies have a 24 hour-answering service.

## Tube Feeding Formula

- If your insurance does not cover the tube feeding formula, ask the DME for special pricing for MD Anderson patients.
- Some general oral supplements (Ensure<sup>®</sup>, Boost<sup>®</sup>, similar generic store brands) may be okay to take through the feeding tube. You may use this if you are not on a special predigested/semi-elemental formula. Your dietitian can give you more details about this. Speak to your dietitian before you substitute formulas for those prescribed.
- Many nutrition formulas can be purchased at grocery stores, pharmacies, online and warehouse stores. Ask your dietitian (713-563-5167) for the formula and daily amount for you.
- Formula can also be purchased on the website for the company that manufactures the product. See the "Resources" section for more information. Your local pharmacy may be able to order your formula.

## Tube Feeding Supplies (Bags, Tubing, Syringes)

- Some insurance companies may cover these supplies even when they do not cover the formula.
- If your insurance does not cover the supplies or formula, then you do not need a prescription if you purchase on-line through websites like <u>www.amazon.com</u>. See the "Resources" section for more information.

• Check with your doctor or nurse when your feeding tube is placed to get the specific size of the feeding bag and/or syringe you will need so that you can search online for a supplier.

# Resources

### **Oley Foundation**

http://www.oley.org (click on Equipment/Supplies tab)

The Oley Foundation is a non-profit organization that offers an **equipment/supply exchange** to help connect patients with free supplies and equipment donated by members who no longer need them. The individual requesting the donated supplies is expected to arrange pick up or pay shipping costs.

Order products directly online. See examples below.

- Abbott Nutrition: 800-258-7677 (Monday through Friday); <u>http://abbottnutrition.com</u>
- Nestle Nutrition: 888-240-2713; http://www.nestlenutritionstore.com
- Online general tube feeding supply order search: <u>http://www.amazon.com</u> (enter "tube feeding supplies" in search bar)

Compare DME providers for pricing and services offered. See examples below.

- Coram/CVS: 888-942-7742; <u>http://www.wenourish.com/</u>
- Option Care: 713-794-0599; <u>http://optioncare.com</u>
- Preferred Homecare: <u>http://preferredhomecare.com/nutrition-services/</u> or nutrition enteral customer service at 800-871-6605.
- LinCare: 800-965-2689
- Epic Medical Solutions: 866-883-1188; http://www.epichealthservices.com
- Paragon Healthcare: 931-433-9799; <u>http://www.paragonhealthcare.com</u>

The dietitian will give you information on local DME companies that may assist you.

# **Emergency Care**

- Call your clinic Monday through Friday 8 a.m. to 5 p.m. You may call 866-775-2342 and select option 3 to be connected with the appropriate center.
- In case of an emergency, call 911 or go to the nearest hospital emergency center. The MD Anderson Acute Cancer Care Center is open 24 hours a day, every day. From Holcombe Boulevard, turn at Entrance Marker 3. The entrance is on Bates Street for patient drop off only. You can park in Garage 2.