

# Enteral Pumps: General Pump Safety

#### Introduction

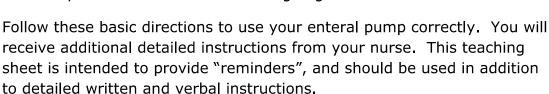
Your feeding pump is an important part of your home care and was designed with patient use in mind. Here are some basic safety tips for use in your home.

- Read all instruction materials given to you by the pharmacy so you can safely
  use and maintain your feeding pump.
- Ask questions during your training session. Keep your pump manual and instructions in a designated location and refer to this information when you have questions. If you still have questions call your pharmacy or home care agency.
- Always make sure you can hear the alarms and know what do
  if the pump alarms. You or your caregiver should be able to
  hear the alarm during the night. Your caregiver may need to
  hear it from another room.
- Always notify the home care agency or our pharmacy immediately if your pump alarms and you are unable to restart the infusion.
   Also, let us know if your pump appears to be pumping too quickly or too slowly.
- Ask your nurse if your pump is affected by transmitters such as cell phones, wireless computers, two-way radios, or microwaves.
- Have the number of your home care agency and our pharmacy posted in several places throughout your home.
- If you plan to travel with your feeding pump notify your pharmacy so they can provide travel instructions and arrange for service in your new location. If you plan to travel by air you may need additional documents for medical equipment.

## What is an Enteral Pump?

An **enteral feeding pump** is an electronic device that is designed to infuse formula into a feeding tube.

Some formulas are provided in "Ready to Hang" containers and require attaching a tube to the container. Others are in smaller containers and must be poured into an enteral feeding bag.







#### **Basic Guidelines**

- Follow all prescriber, pharmacist, and nurse instructions for the use of your pump, and the rate of infusion.
- Most enteral pumps used in the home can use wall current and have a battery for backup short-term power. Always plug your pump in to recharge the batteries when it is idle.
- Enteral pumps that use wall current require a grounded outlet.
  Most homes today have grounded (three prong) outlets. If you
  live in an older home whose outlets are not grounded, please
  notify our staff and we will provide you with information on
  proper outlet grounding.



- There are several different models of enteral pumps. Power buttons, alarms, and other features will vary. Our pharmacy will give you additional written information on your specific type of pump.
- When unplugging your enteral pump from the electrical outlet, firmly grasp the plug end to safely disconnect it. Never pull on the flexible cord itself as the pump could be damaged requiring replacement for which you may be financially responsible if the pump is being rented from the pharmacy.

## Infusing Your Enteral Formula with a Pump

## **Key Points about Your Enteral Feedings**

• Your enteral formula will be delivered on a regular basis. Be prepared to tell our pharmacy staff how much formula (number of containers or cases ) you have remaining when they call for a "supply check" just before the next delivery. They may also be asking you some questions to determine how you are progressing at home. Please remember to tell your pharmacy if you have been admitted to the hospital or your prescriber has changed the amount or schedule for your feedings.



- Be certain to read the instructions left by your nurse on the correct use, dilution, and administration of your formula.
- Always store your formula in a dry location with temperature control. The formula should not get extremely hot or cold, and should not be stored in direct sunlight.
- A container of formula, once opened, must be refrigerated (unused portion).
   Discard unused refrigerated portions after 24 hours.
- To prevent complications, always keep your work area clean, and cover all unused portions of containers.
- To prevent complications such as infections, always wash your hands before handling your formula or feeding tube. Your nurse will show you proper hand washing technique.
- To prevent complications such as infection and diarrhea, use bag administration sets for no longer than 24 hours and "Ready to Hang" containers with tubing attached no longer than 24 hours. Formula that is poured into an enteral bag should be discarded after 12 hours at room temperature.
- If you have an external feeding tube, monitor the length of the tube and call your nurse if the tube length changes.
- Make sure you are getting the correct amount of water each day. In addition
  to the enteral formula, you may need additional water. Your nurse,
  pharmacist, or prescriber will instruct you on how much additional water is
  required.
- NEVER mix medications or other solutions with your formula unless specifically instructed to do so by your home care nurse or pharmacist. Many medications, especially powder from tablets or capsules, will clog the tube

when mixed with formula, or can "curdle" the formula. Always notify your pharmacy of any changes to your medications.

• To prevent aspiration and reflux, always keep your head elevated at least 30 to 45 degrees during feedings. NEVER lay down flat. Stand or walk during feedings only if approved by your home health nurse.



#### Administering the Formula

- 1. Prepare a clean working area.
- 2. Wash your hands as instructed by your nurse
- 3. Assemble your supplies:
  - a. Damp paper towel
  - b. Correct number of containers of formula or "Ready to Hang" container
  - c. Water for dilution and/or flushing
  - d. An enteral administration set for the specific enteral pump
  - e. Your enteral pump
  - f. An enteral syringe (for flushing before and after)
- 4. Remove the administration set from its wrapper and close the clamp. Shake the formula and wipe off the top of the container with a clean, damp paper towel. Check the expiration date on the container. Pour ordered formula (and water if applicable) into the administration set container. You may pour enough formula to last up to 12 hours. Hang the container on the IV pole.
  - For "Ready to Hang" containers, open the tubing package, close the clamp, and insert spike into top of the container until well seated. Hang container on the IV pole.
- 5. Do not squeeze the drip chamber. Open the clamp slowly and fill the tubing with formula. Close the clamp.
- 6. Insert the tubing into the enteral pump as taught by your nurse and the pump user guide. Open the tubing clamp.
- 7. Open your feeding tube and insert/attach the enteral syringe.
- 8. Using the enteral syringe, pre-flush your feeding tube with \_\_\_\_\_ 10 \_\_ ml of water.
- 9. Attach the administration set tubing to the feeding tube.
- 10. Set rate infusion rate and prime the tubing. Start the pump.
- 11. After completing the feeding stop the pump, close the clamp, and remove the administration set. Discard the set unless it will be used for another feeding within the same 24-hour period. Ready to hang sets may be used for 24 hours.

If adding additional formula to the administration container within the same 24 hour period, we recommend the removal of the container from the IV pole hook before pouring. This prevents spilling of formula onto the pump

- mechanisms, which can cause malfunctions and pest infestations. Spills of formula should be cleaned immediately with warm soap and water. Prior to refilling, rinse the container with warm water and flush the tubing set.
- 12. Post-flush the feeding tube as directed with specified water in the syringe.
- 13. Keep your head elevated between 30 and 45 degrees during the feeding and for one (1) hour after the feeding has ended to prevent reflux or aspiration.

## **Supplemental Water**

Give the following amount of additional water each day as instructed below:

Administer the directed volume of water at directed frequency as ordered.

## When to Call your Home Care Nurse, Pharmacist, or Prescriber

- Cramping, nausea, or vomiting during or after feeding
- If the length of your tube has changed
- Diarrhea
- Constipation
- Upset stomach
- Coughing or difficulty breathing during or after feeding
- Clogging of the tube that does not clean with warm water
- Unusual sense of thirst, dry itchy skin, dark urine, dry mouth
- Pump malfunctions/complications

#### **Notes and Instructions**