

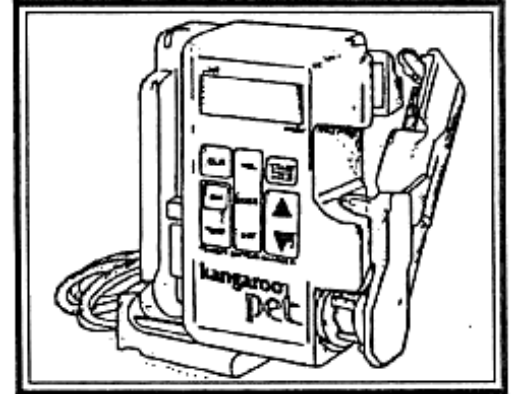
# Administration of Your Enteral Feeding

## Pump Method: Kangaroo Pet Pump

### ***About The Kangaroo Pet Pump***

The Kangaroo Pet pump is a small enteral pump, designed to control and monitor the infusion of your *formula*. The pump will make sure that the correct amount of formula infuses in the proper amount of time.

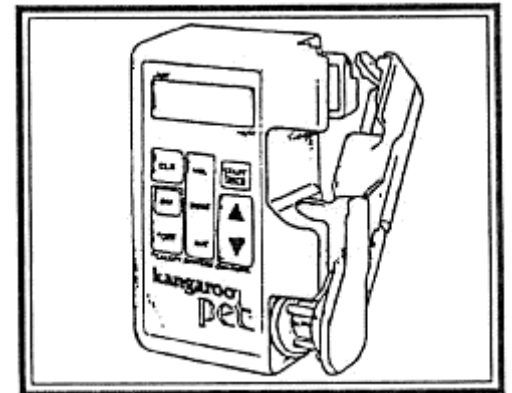
This pump that you use at home may be different from the one used in the hospital. The Kangaroo Pet pump has been chosen for you to make your home enteral therapy as easy as possible.



### ***Kangaroo Pet Power***

The Kangaroo Pet pump runs on electricity or on its internal battery. When you are at home or when your pump is not in use, the Kangaroo Pet Pump should be placed inside its “charger” and plugged into a 3-pronged wall socket. Please let your homecare nurse know if you do not have these type of sockets where you live. An adapter from the hardware store can be used to convert a 3-pronged plug into a two-pronged plug, if properly grounded. By keeping the pump plugged in most of the time, the pump battery will always be well charged and ready for use.

If you choose to unplug the Kangaroo Pet Pump while it is pumping, the pump battery will take over automatically. With a fully charged battery, the pump should be able to operate on battery power for 12 hours at a rate of 125 mls/hour. The actual amount of “battery time” depends on how well charged the battery is and the rate of your infusion.



Whenever the battery needs recharging, you will see a low batter alarm (“LO BAT”) on the pump screen. The pump will operate for approximately 15 more minutes. Prior to shutting itself off again, the low battery (“LO BAT”) alarm will show on the pump screen and an audible alarm of 10 beeps will sound. As the batteries get older, the time between initial signal and pump shut-down may be less than 15 minutes.

## Kangaroo Pet Positioning

The pump is attached to an I.V. pole and placed in its “charger” when run by electricity. When running on the battery, the pump is placed in a special carrying case.

### I.V. Pole Method

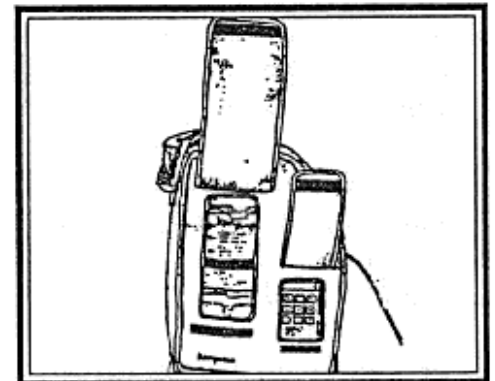
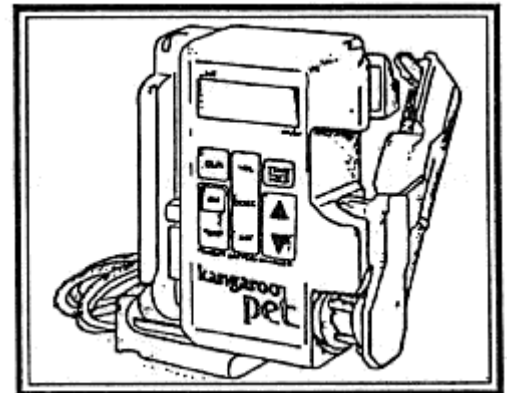
The Pump is placed completely inside its “charger,” making sure that it is locked completely into place. The pump is held in place on the I.V. pole by a screw at the back of the “charger.” The formula bag should hang about 2 feet above the pump.

### Carrying Case Method

The Pump can be loosened from the “charger” by pressing the small black button marked “release” at the left lower corner of the “charger.” Hold the “Release” button down while you slide the pump directly to the right.

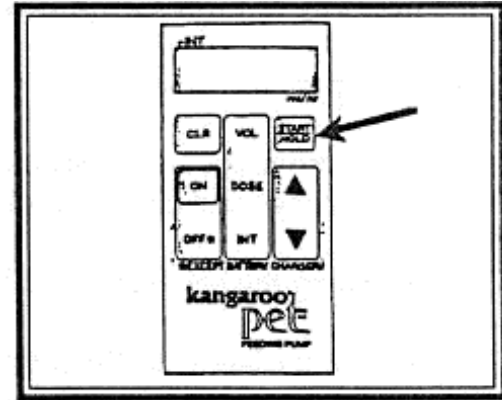
The pump, tubing and formula sit in the carrying case. The cover will zip around the pump and bag.

The carrying case should always be in the upright position to ensure proper formula flow through the pump.



# Kangaroo Pet Pump Alarms

When your feeding is complete or if the pump senses a potential problem, it will display a message on the front panel of the pump and sound an alarm to inform you of the change. Press the blue “START/ HOLD” button to silence the alarm and stop the pump while you make the necessary adjustments. If the alarm sounds again, press the “START/HOLD” button again and continue troubleshooting the pump.



Most alarms point out a minor problem that you can easily fix on your own. Reasons for alarms and how to fix them are listed in the TROUBLESHOOTING Guide at the back of this section. Questions you have about your pump or your therapy should be discussed with your homecare team.

# Kangaroo Pet Pump Method

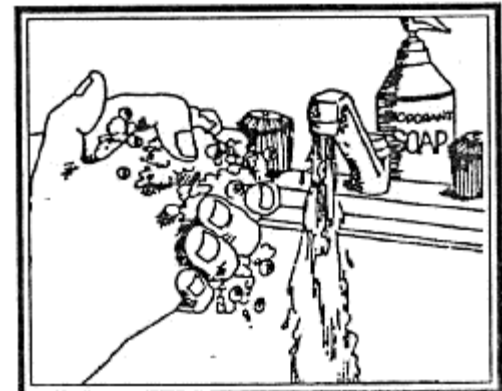
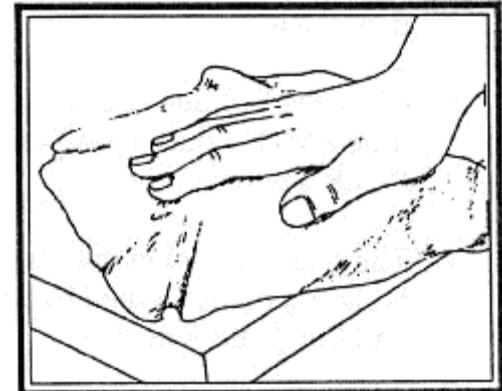
Here are the steps for giving your feeding using the Kangaroo Pet pump.

## Equipment

- Feeding Bag or Pump Set (special tubing for this pump)
- Kangaroo Pet pump mounted on I.V. pole
- Prepared formula
- Water in syringe for flushing
- Tape
- Other \_\_\_\_\_

## Procedure:

1. To prepare for your infusion:
  - Gather your equipment.
  - Make sure the information on all the labels is correct for you.*
  - Clean your work area
  - Wash your hands thoroughly.



2. Check your feeding tube exit site for redness, swelling, drainage, or tenderness. Contact your nurse or physician if you note any of these symptoms.

3. To prepare the tubing:

Remove the administration tubing from its package and close the roller clamp.


- Hang the bag from the I.V. pole.
- Fill the bag with the proper amount of formula and close the top of the bag.


4. Turn pump “ON” by pressing the white button.

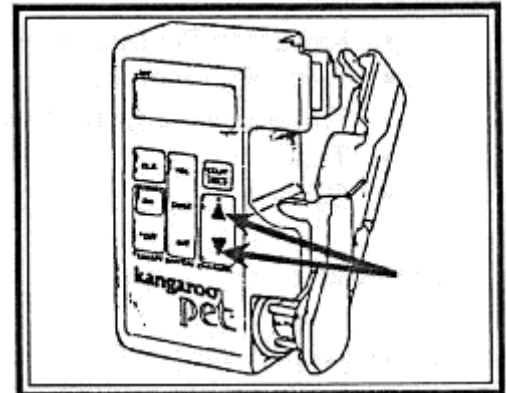
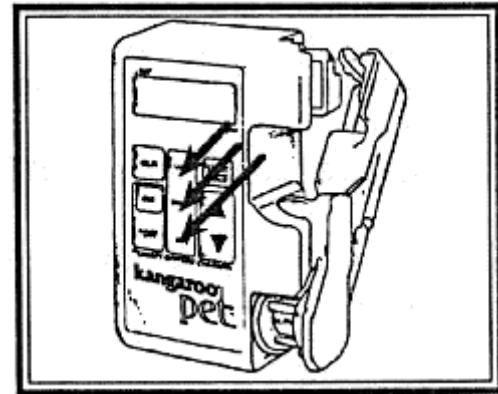
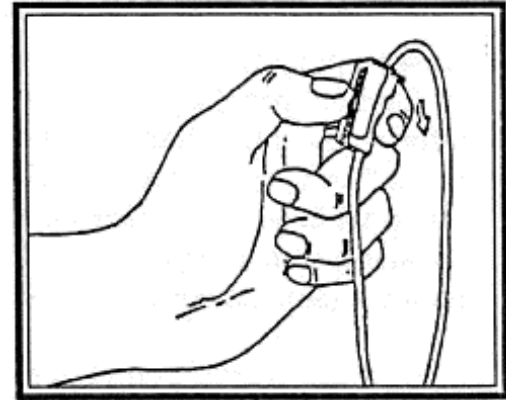
5. The screen will show “VOL” and then a number to indicate the total volume most recently delivered. The screen will then show ‘TNT’ and then the interval setting which is the total scheduled time for the infusion.

The screen will then show “DOSE” and the dose setting, which is the volume to be delivered during the interval time. The rate, which is determined by the pump, will then *flash*.

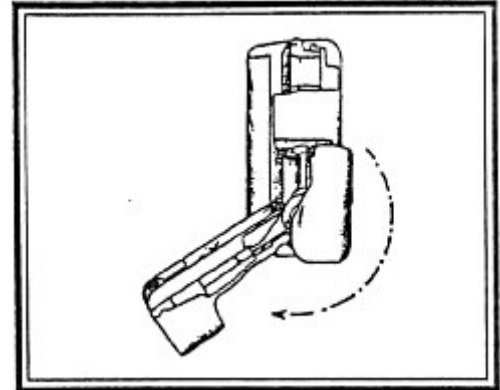
6. Clear the Volume delivered by pushing the Volume (“VOL”) button and then pressing the Clear (“CLR”) button.

7. The rate of infusion may be changed when the rate is shown on the screen by using the CLR button and the  arrows.

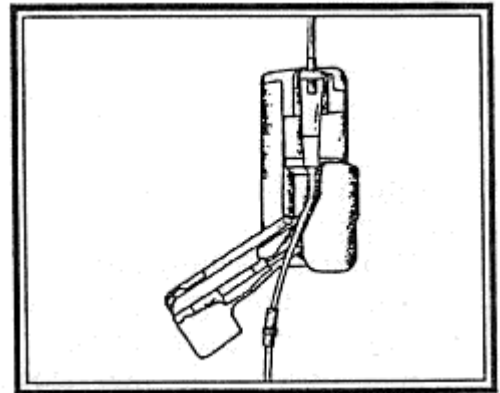
8. Set the dose to be given by pressing the “Dose” button and the  arrows.



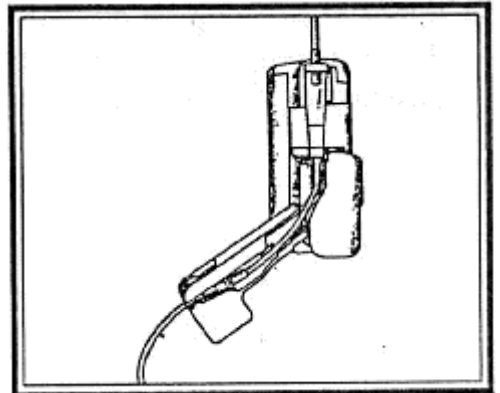
9. Open the loading arm by pressing the release button on the back of the arm and bringing it forward fully. You will feel it lock into place.



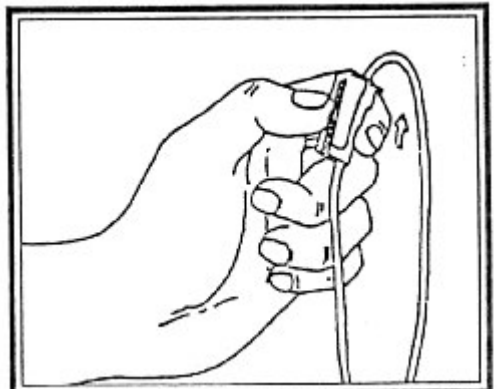
10. Insert the bottom of the drip chamber into the lower drip chamber guide, then insert the top of the drip chamber into the upper drip chamber guide.



11. Insert the tubing into the loading arm. The black circle on the tubing will sit in about the middle of the arm.



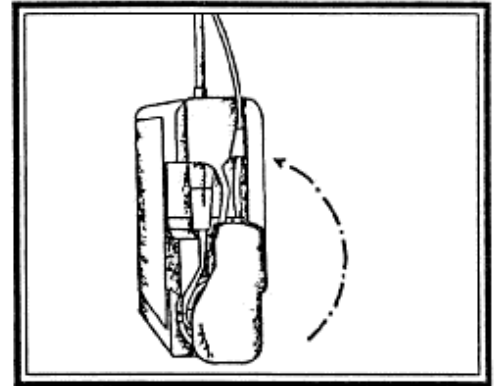
12. Remove the protective cap from the end of the tubing if this has not been done already. Make sure that the exposed tip rests in a clean place.



13. Open the roller clamp slowly to allow the pump tubing to fill with formula. Close the clamp when the entire length of the tubing has been filled.

14. Close the arm, making sure that it latches shut.

Remember: Never use the pump in its carrying case AND hanging the formula bag on an I.V. pole. The wrong amount of formula will be delivered.



15. Close clamp on feeding tube.

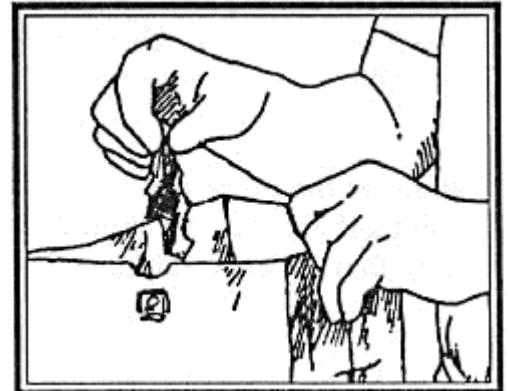
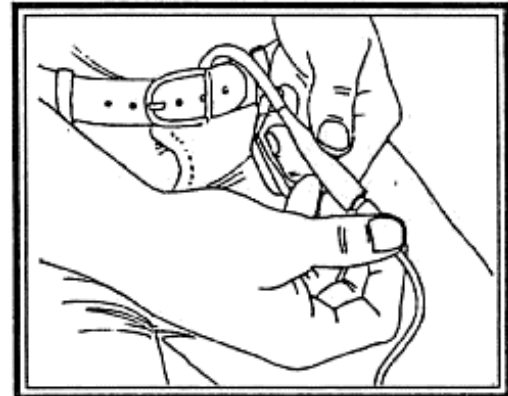
16. Attach tip of pump tubing to feeding tube and tape securely.

17. Open clamp on feeding tube. Press the START/HOLD button to begin the feeding.

18. The pump will sound an alarm when the feeding is complete.

- Clamp the feeding tube
- Remove tip of pump tubing from feeding tube
- Insert water flush syringe into tip of feeding tube, open clamp, flush slowly with water, close clamp on feeding tube.

19. Either rinse pump set out with water and hang to dry or dispose of it as instructed by your home care nurse.



## Kangaroo Pet Troubleshooting Guide

Alarm	Cause	Correction
<p><b>no SET</b> (No Alarm Set)</p>	<p>Pump set has been improperly placed onto pump.</p>	<p>Check to make sure that only Kangaroo Pump Set has been placed onto the pump</p> <p>Check to make sure that the pump set has been properly positioned on the pump.</p>
<p><b>FLO Err</b> (Flow Error Alarm)</p>	<p>Feeding container is empty.</p> <p>Feeding tube or feeding set tubing is occluded.</p> <p>Drip chamber walls are coated with feeding formula.</p> <p>Sensor in upper drip chamber guide is blocked.</p>	<p>Refill feeding container. If feeding set has been in use for 24 hours, replace.</p> <p>Locate point of occlusion and correct. Note: occlusion may occur upstream downstream from pump.</p> <ul style="list-style-type: none"> <li>• Feeding Container</li> <li>• Feeding Pump Set (control clamp closed) -.</li> <li>• Feeding Tube -feeding tube should be checked for obstruction.</li> </ul> <p>Check to make sure formula is not preventing drop detector from proper operation. If formula cannot be removed from inside walls of chamber via chamber manipulation, replace feeding set.</p> <p>Check to make sure black surface of drip chamber guide is free of dried formula. Remove any deposits by using a cotton swab dampened with warm soapy water or isopropyl alcohol.</p>

<b>LO bAt</b> (Low Battery Alarm)	Battery has been run down.	Insert pump into charger base and plug power cord into wall outlet.
<b>HLd Err</b> (Hold Error Alarm)	Pump has been left in the hold mode for over 2.5 minutes	Press START/HOLD to silence alarm, then press START/HOLD again to restore flashing rate display, and press START/HOLD again to restart pump.
<b>SYS Err</b> (System Error Alarm)	Problem with rotor, rotor position sensing or other rotor circuit problem.	Return pump for technical service.
<b>8 8 8 8</b> (Internal Circuit Problem Alarm)	Problem with internal pump circuitry,	Return pump for technical service.
<b>dOSE dEL</b> (Dose Delivered Alarm)	Preset dose has been delivered to patient.	Repeat the dose amount by clearing the volume delivered; <b>OR</b> cancel the dose feature by pressing DOE and CLR; <b>OR</b> to feed additional volume, increase the dose amount by pressing DOSE, then ↑ until new dose is displayed; <b>OR</b> turn the pump off.

# Preparing Your Formula

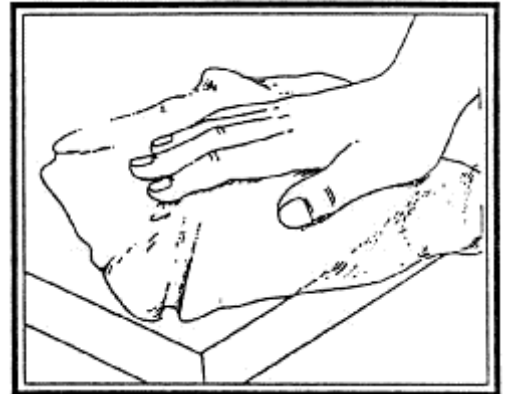
Your Enteral Nutrition Formula is ordered by your doctor to meet your individual calorie and nutrient needs. Your nurse can help you complete your personal feeding plan below.

Your personal feeding plan is:

Formula: _____
Amount of formula each day: _____
Feeding times: _____
Amount of formula each feeding: _____
Amount of water to flush tube: before feeding; _____ after feeding; _____
Additional water each day: _____
Formula Preparation Instructions: _____ _____ _____

# Ready To Use Formula

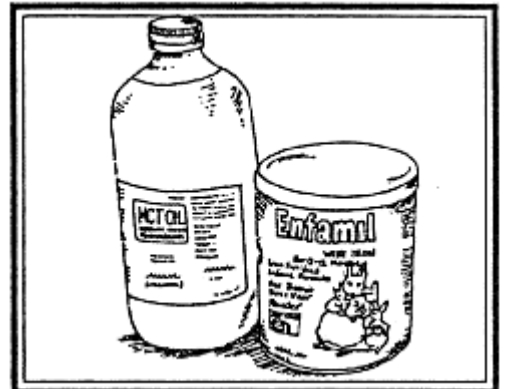
1. Clean your work area as previously instructed.



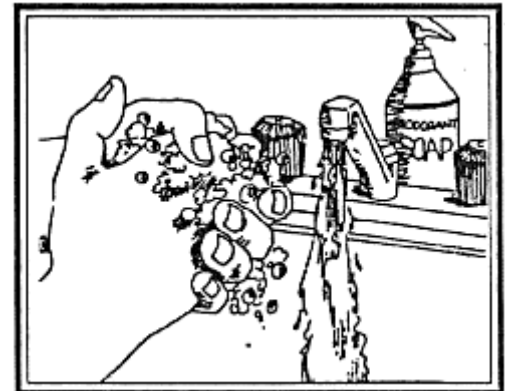
2. Gather your supplies:

- \_\_\_\_\_ containers or cans of \_\_\_\_\_

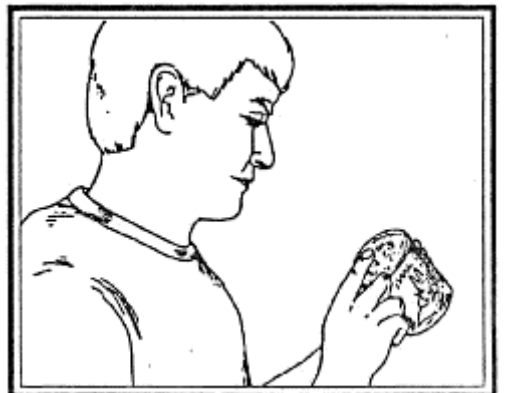
- Clean, damp paper towel



3. Wash your hands thoroughly.

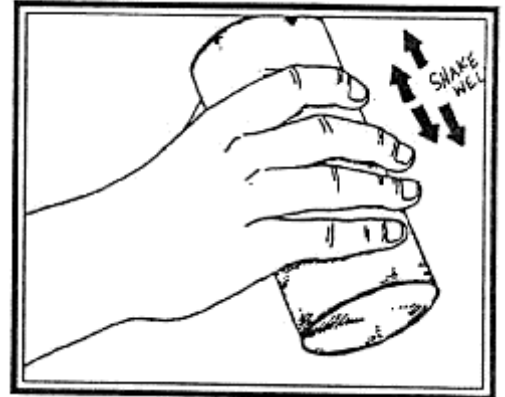


4. Check the containers for leaks and expiration date. Do not use if leaking or expiration has passed. Do not use if can is bulging. Call you Patient Supply Representative to exchange.

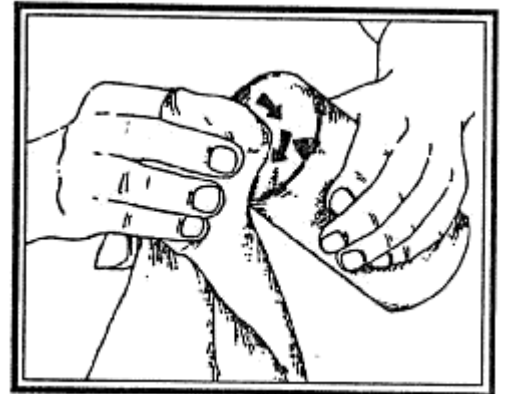


## Ready To Use Formula (continued)

5. Shake the container well.

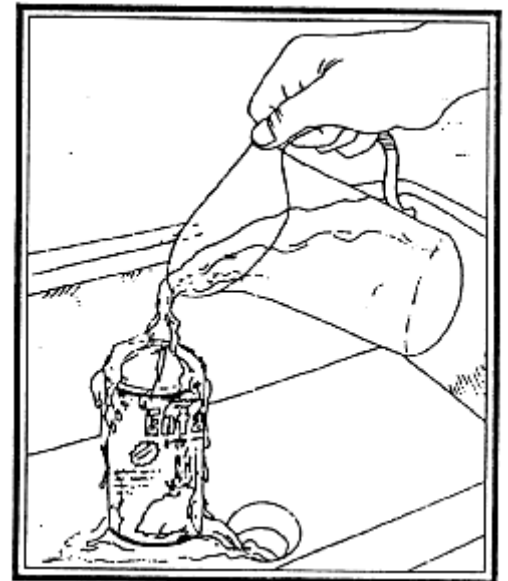


6. Wipe the top of the container with a clean damp paper towel, or pour warm tap-water over top of can. Dry thoroughly



7. Use a clean can opener when opening cans. If there is extra formula, refrigerate in a covered glass or plastic container **NOT IN THE CAN**. The formula should not be stored > 24°F.

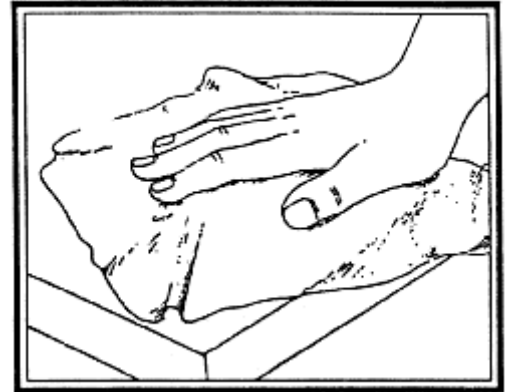
Dangerous bacteria can develop if formula is refrigerated in the can.



# Preparing Powdered Formula

You must mix new formula every day. Mix only enough formula for 24 hours.

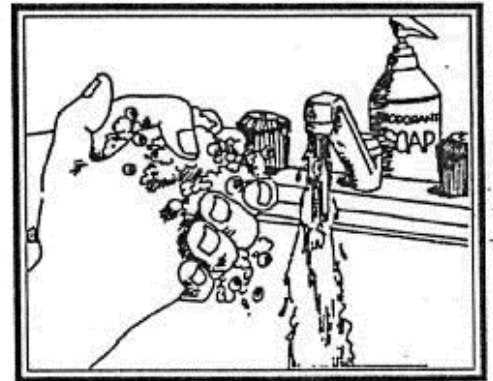
1. Clean your work area as previously instructed.



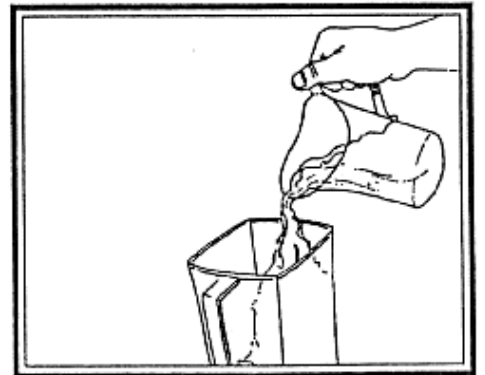
2. Gather your supplies:

- Measuring cup
- Blender or large bowl and mixing utensil
- \_\_\_\_ packages or cups of \_\_\_\_\_
- large, clean container with cover
- tape

3. Wash your hands thoroughly.



4. Pour \_\_ cups of water into a blender or large bowl.

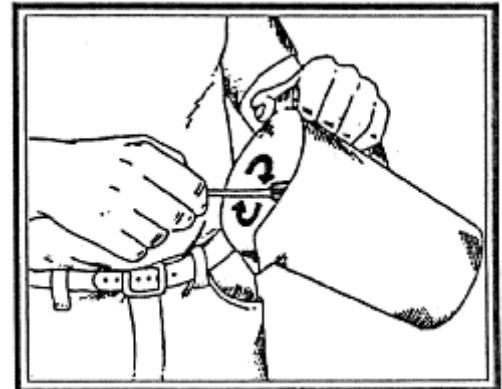


## Preparing Powdered Formula (continued)

5. Gradually stir in \_\_ packages/cups of your formula until it all dissolves. Use a blender, electric mixer, or a wire whisk to mix the formula. The blender or mixing bowl may not hold the entire amount of formula. If that is the case, mix 1/2 of the formula at a time.

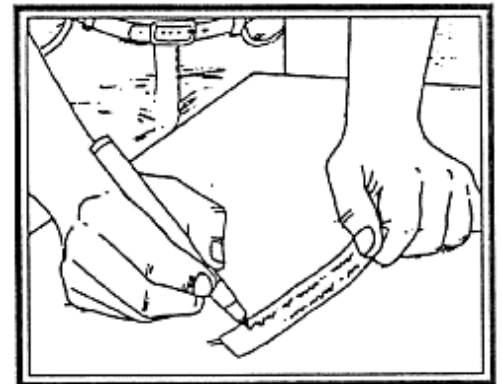


6. Pour the prepared formula into a clean, large container and cover.



7. Write the date and time on a piece of tape and place on the container.

If the formula is not used within 24 hours, throw it away.



8. Place the covered container in the refrigerator for storage.
9. Clean the blender or mixing utensils in hot, soapy water. Rinse and dry well.