



Patient Name: _____

Goal: Patient / Caregiver will demonstrate proper preparation and administration of prescribed therapy.

Dr. _____ has prescribed home TPN in the amount of _____ mls to be infused over _____ hours _____ days/week.

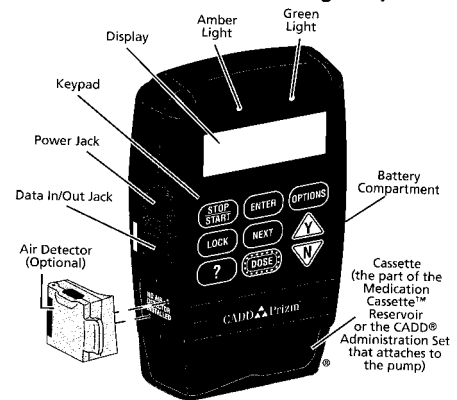
TO PREPARE THE TPN:

1. **Clean** a well-lit area for preparation of the TPN.
2. **Wash hands** with soap and water. Dry with paper towels or clean towel.
3. **Gather** the following **supplies:**

- 1 - **Bag of TPN at room temperature (remove from the refrigerator 4-8 hours prior to connection)**
- 1- **CADD PRIZM Pump and Battery Pack**
- 1- **CADD TPN Administration Set (IV Tubing)**
- 1- **Multivits/MVI-12 with 10ml syringe with needle**
- 2- **Normal Saline Flush Syringe(s)**
- 1 - **Heparin Flush Syringe (if directed to use)**

- Coin to unlock cassette/adapter**
- Alcohol Wipes**
- Sharps Disposal Container**
- Non-Sterile Gloves (as directed)**
- Wastebasket**

CADD-Prizm® Pump (Diagram)



OTHER MEDICATIONS TO BE ADDED TO TPN:

_____ with ___ ml syringe in the amount of ___ mls

_____ with ___ ml syringe in the amount of ___ mls

_____ with ___ ml syringe in the amount of ___ mls

_____ with ___ ml syringe in the amount of ___ mls

4. **Prepare** your Flush Syringes (Saline and Heparin (if prescribed) in the following manner:
 - a. Remove the Flush syringe from the wrapper.
 - b. Remove the protective cover from the end of the syringe (be careful not to touch the end of the syringe with your fingers as this would contaminate it and require you to use a new syringe).
 - c. Gently pull back on the plunger of the syringe to break the internal seal.
 - d. Holding the syringe with the tip pointed toward the ceiling, gently push on the plunger to expel any air until a drop of fluid shows on the tip.
 - e. Replace the protective cover on the end of the syringe. Set aside until ready to use.
 - f. Repeat procedure for each flush syringe.

5. **Inspect** the TPN bag label for your name and expiration date. If either are incorrect, contact the NELC pharmacist immediately.
 - **If your TPN solution is white**, check that there is no separation (curdling) of the fats from the solution or yellow streaking.
 - **If your TPN solution is clear**, check the solution for clarity and lack of particles.

Contact the NELC pharmacist immediately if the solution is not as it should be.

6. **Clean the port on the TPN bag with a new alcohol wipe prior to injection of each medication to be added.**

7. Preparing the Vitamins to be added:

1 Vial Method

- a. Remove the white cap on the vial of the Vitamins.
- b. Push the stopper on the vial in (this mixes the water and fat soluble vitamins). Rotate vial to mix the vitamin solution.
- c. Open the 10 ml syringe with attached needle. Check that the needle is on securely.
- d. Clean the top of the vitamin bottle with an alcohol wipe.
- e. Pull the plunger of the syringe down to the 8ml mark.
- f. Remove the cap off the needle on the syringe.
- g. Push the needle into the bulls-eye on the rubber stopper of the vitamin vial. Inject the air into the vial then turn the vial upside down and draw back . mls.
- h. Remove the needle from the vial. Using the “one handed scoop” method, recap the syringe to prevent contamination.
- i. Open the new, non-filter needle and attach to the medication syringe.
- j. Set aside until ready to add to the TPN Bag as instructed in Step 9.

2 Vial Method

- a. Open box labeled **MVI-12**.
- b. Remove the caps from each vial.
- c. Open the 10ml syringe with attached needle. Check that the needle is on securely.
- d. Clean the top of both vials with an alcohol wipe.
- e. Pull the plunger of the syringe down to the 5ml mark.
- f. Remove the cap off the needle on the syringe.
- g. Push the needle into the rubber stopper on the #1 vial. Inject the air into the vial then turn the vial upside down and draw back 5ml of the vitamins.
- h. Remove the needle from vial #1.
- i. Pull the plunger of the syringe down to the 8ml mark.
- j. Push the needle into the rubber stopper on the #2 vial. Inject the air into the vial then turn the vial upside down and draw back to the 10ml mark on the syringe.
- k. Remove the needle from the vial. Using the “one handed scoop” method, recap the syringe to prevent contamination.
- l. Set aside until ready to add to the TPN Bag as instructed in Step 9.

8. Preparing other medications to be added to the TPN Solution:

If preparing medication from an ampule:

- a. Open the syringe and attach the filter needle securely.
- b. Open an alcohol wipe and wrap it around the tapered end of the medication ampule. Break off the top of the ampule and discard in the trash.
- c. Remove the cap from the needle on the syringe.

- d. Put the needle of the syringe into the ampule.
- e. With the tip of the needle in the solution, draw back prescribed amount of medication.
- f. Remove the needle from the ampule of medication. Discard the ampule into the trash.
- g. Using the “one handed scoop” method, recap the syringe then remove the filter needle and discard into the Sharps Container.
- h. Open the new, non-filter needle and attach to the medication syringe.
- i. Set aside until ready to add to the TPN Bag as instructed in Step 9.

If preparing medication from a vial:

- a. Open the syringe. Secure the needle onto the end of the syringe.
- b. Remove the cap on the top of the medication vial.
- c. Clean the top of the medication vial with an alcohol wipe.
- d. Pull the plunger on the syringe back to the desired amount.
- e. Remove the cap off the needle on the syringe.
- f. Push the needle into the vial and turn the vial upside down.
- g. With the tip of the needle in the solution, draw back prescribed amount of
 - i. medication.
- h. Remove the needle from the vial of medication.
- i. Using the “one handed scoop” method, recap the syringe to prevent contamination.
- j. Set aside until ready to add to the TPN Bag as instructed in Step 9.

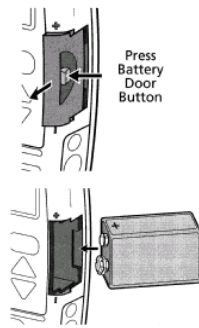
9. Adding each medication to the TPN:

**** Cleanse the port on the TPN bag with a new alcohol wipe before adding each medication.**

**** Inject smaller volumes of medication first to ensure that no medication is left in the neck of the port on the TPN bag.**

- a. Cleanse the medication port on the TPN bag with an alcohol wipe.
- b. Remove the needle cover from the syringe.
- c. Insert the needle into the bulls-eye on the port of the TPN bag.
- d. Inject the full amount of the medication syringe into the TPN bag.
- e. Remove the needle from the port on the TPN bag and discard the entire syringe into the Sharps Disposal Container.
- f. Rotate the TPN bag back and forth to mix the medication into the TPN solution.
- g. Repeat this procedure for each additive.

10. **Install new battery**
 Pump will complete a “power up sequence of self testing”. When finished, **“Power Up Successful”** will appear on the screen & 6 beeps will sound.



Description of the Keys

- STOP START** Starts and stops the pump and silences alarms.
- LOCK** Used by the clinician.
- ?** The “Help” Key — explains what you see on the display.
- ENTER** Used by the clinician.
- NEXT** Advances you from one screen to the next and silences some alarms.
- DOSE** Lets you give yourself a dose of medication, if allowed.
- OPTIONS** Used by the clinician.
- Y** Lets you answer yes to a question on the pump's display.
- N** Lets you answer no to a question on the pump's display.

11. Set up the TPN :

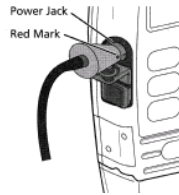
- a. Open the tubing set, stretching it out so there are no knots in it.
- b. Close the clamp on the tubing.
- c. Remove the tab from the administration port on the TPN bag.
- d. Remove the protective cover from the spike on the end of the tubing being careful not to touch the spike with your fingers as this would contaminate it and require you to use a new set.
- e. Push the spike into the port that you just pulled the tab from.
- f. Insert the cassette/tubing adapter hooks onto the hinge pins on the pump.



- g. Insert a coin into the locking button on the right side of the pump. Push the button in and turn it counterclockwise until the coin lines up with the seam of the pump.
- h. Gently twist and pull the cassette/ tubing adapter to assure that it is firmly attached.

11. Attach battery pack to the CADD PRIZM pump:

- a. Unplug charged battery from the wall (ensure that the light is green indicating the battery pack is fully charged).
- b. Connect the battery adapter to the battery pack by lining up the red dots on the connectors and pushing the 2 ends together.



12. Reset the pump program (THIS IS VERY IMPORTANT):

- a. After attaching the cassette / tubing adapter to the pump, press the “**NEXT**” button. “Do you want to reset the “**RES VOL**”? will appear. (This screen will only show for 30 seconds). Press “**Y**” to reset the “**Res Vol**”. **If you miss the chance (within 30 seconds) to reset the “RES VOL”, then remove the cassette / tubing adapter from the pump, wait 30 seconds then reattach it and follow the above instructions again.**
- b. Proceed to Step #13 for priming your tubing.

13. Prime the IV Tubing to remove the air:

- a. Open all clamps on the TPN tubing.
- b. “**PRIME TUBING?**” will appear on the screen.
- c. Press and hold the “**Y**” button until the tubing is fully primed or until priming stops.
- d. Repeat this step until the tubing is fully primed.
- e. When priming is finished, press “**N**” button.
- f. Close the clamp on the TPN Tubing.

14. Flush the catheter:

- a. Cleanse the injection site on the end of your IV catheter with an alcohol wipe. Let dry.
- b. If you have a clamp on the IV Catheter, unclamp it a this time.
- c. Remove the protective cap from the end of 1 Normal Saline Flush Syringe and screw it into the Injection Site on the end of the catheter by pushing and turning the syringe to the right to lock it onto the Injection Site. Slowly inject _____mls of Normal Saline. Unscrew the syringe and discard it into the trash.

15. Beginning your TPN Infusion:

- a. Place the TPN bag with attached tubing and the battery pack into the backpack (see picture inside backpack).
- b. Cleanse the injection site on the end of the IV catheter with an alcohol wipe. Let dry.

- c. Remove the protective cover from the end of the cassette/adaptor tubing. Screw the end of the tubing and screw it onto the injection site on the end of the IV catheter.
- d. Open all clamps on the cassette/adaptor tubing. Ensure that the clamp on your IV catheter is open.
- e. Start the pump by pressing and holding the “**STOP/START**” button on the front of the pump. “**START THE PUMP?**” will appear on the screen. Press the “**Y**” button.
- f. “**Starting the pump...**” will appear on the screen. The pump will automatically review and display the programmed settings.
- g. “**Running**” will appear on the screen. The green light will blink, and the TPN will begin as programmed by your clinician.

16. Completing your TPN Infusion:

- a. When your TPN Infusion is complete, stop the pump by pressing and holding the “**STOP/START**” button on the front of the pump.
- b. “**STOP THE PUMP?**” will appear on the screen. Press the “**Y**” button.
- c. If your IV Catheter has a clamp on it, clamp it at this time.
- d. Close all clamps on the cassette/adaptor tubing.
- e. Disconnect the cassette/adaptor tubing from your IV catheter by unscrewing it. Place the end of the tubing into a trash receptacle (to avoid dripping on anything).
- f. Flush your catheter with Saline using the instructions outlined in Step 14. If you have been instructed to flush your IV catheter with Heparin, repeat Step 14 using the Heparin once the Saline flush has been completed.
- g. If your IV Catheter has a clamp on it, clamp it at this time.
- h. Remove the cassette/adaptor from the pump by inserting a coin into the locking button on the right side of the pump. Turn the coin **clockwise** to unlock the cassette/adaptor.
- i. Discard the entire unit (tubing and attached TPN bag) into the trash.
- j. **Disconnect the battery adapter from the batter pack and recharge the Battery Pack.**

That’s It!!! Great Job!!!

POINTS TO REMEMBER:

- The Battery Pack should be charged for at least 12 hours or until the light is green indicating it is completely charged before using.
- The TPN needs to be warmed to room temperature before infusing.
- Call NELC if you have to discard any TPN or supplies unexpectedly to avoid running out before your next scheduled delivery.

ALARM MANAGEMENT:

Refer to the Patient information manual for alarm Troubleshooting.



**TPN Administration
Using the
CADD Prizm Pump / TPN Mode**
(abbreviated instructions)

TO PREPARE THE TPN:

1. **Wash** hands.
2. **Gather** Supplies:
 - 1 - **Bag of TPN at room temperature**
(remove from the refrigerator 4-8
hours prior to connection)
 - 2- **CADD PRIZM Pump and Battery
Pack**
 - 2- **CADD TPN Administration Set (IV Tubing)**
 - 2- **Multivits/MVI-12 with 10ml syringe
with needle**
 - 2- **Normal Saline Flush Syringe(s)**
 - 1 - **Heparin Flush Syringe (if directed
to use)**
 - Coin to unlock cassette/adaptor**
 - Alcohol Wipes**
 - Sharps Disposal Container**
 - Non-Sterile Gloves (as directed)**
 - Wastebasket**
3. **Inspect** TPN.
4. **Prepare** your **Flush** Syringes.
5. **Add** Medications to TPN. Mix solutions thoroughly.
6. **Connect** IV Tubing to TPN bag (make sure clamps on tubing are closed before spiking the bag).
7. Change battery as directed.
8. **Attach** the TPN cassette/adaptor to the pump.
9. **Reset** the pump program.
10. **Prime** the IV Tubing to remove the air.

11. **Load** TPN, Tubing and Pump into Backpack. **Attach** battery pack to pump.

BEGINNING YOUR TPN INFUSION:

1. **Clean** the Injection Site on the end of your IV Catheter with an alcohol wipe.
2. **Flush** your IV Catheter with Normal Saline.
3. **Clean** the Injection Site on the end of your IV Catheter with an alcohol wipe.
4. **Connect** the TPN tubing to the Injection Site on the end of your IV Catheter. Open all clamps on IV Tubing and IV Catheter
5. **Start** pump.

COMPLETING YOUR TPN INFUSION:

1. **Stop** pump.
2. **Clamp** IV Tubing.
3. **Disconnect** IV Tubing from Injection Site on the end of your IV Catheter.
4. **Clean** the Injection Site on the end of your IV Catheter with an alcohol wipe.
5. **Flush** your IV Catheter with Normal Saline.
6. If instructed, **flush** your IV Catheter with Heparin.
7. If instructed, **clamp** your IV Catheter.

POINTS TO REMEMBER:

- **The Battery Pack should be charged for at least 12 hours or until the light is green indicating it is completely charged before using.**
- **The TPN needs to be warmed to room temperature before infusing.**
- **Call NELC if you have to discard any TPN or supplies unexpectedly to avoid running out before your next scheduled delivery.**

ALARM MANAGEMENT:

Refer to the Patient information manual for alarm Troubleshooting.