

TOTAL PARENTERAL NUTRITION (TPN) ADMINISTRATION

When you are **NOT** hooked up to the TPN you should be charging your pump. If the TPN bag is being administered over 24 hours, you will need to charge the pump either during the day or night while it is infusing.

TPN is always stored in the refrigerator and is stable at room temperature for 24 hours.

1. Wash Hands or Hand Sanitize
2. Prepare a clean work surface area.
3. Gather your supplies
 - a. TPN bag: you are administering a “fat” bag (white) on _____ and fat free (clear) on _____.
 - b. Alcohol wipes
 - c. TPN tubing
 - d. 2 Saline syringes
 - e. ___ Heparin syringe(s) (need one for each IV lumen)
 - f. TPN Additives with appropriate supplies per chart below:

Name of Additive/Volume	Frequency	Syringe Size /Pre-drawn	Add Needle Y/N	Room Temp or Refrigerate

4. Inspect the TPN label and compare the prescription to the one in your home folder. Make sure it has the correct name, correct volume, correct additives listed and the “DO NOT USE AFTER Date” is not expired.
5. Unwrap your Saline and Heparin flushes.
6. Re-clean your hands.

7. Locate the inject port on the TPN bag (usually to the far right and it is covered with tin foil). This port is used to add the additives. Remove the foil and vigorously clean the end with an alcohol wipe for 15 seconds. You can put a clean alcohol wipe under the port to protect it from recontamination.
8. It is best practice to draw up one additive at a time and inject it into the TPN bag starting with the smallest volume. For example, this would be the Regular Insulin in the orange syringe, if applicable to your TPN formula prescription.
9. Draw up each additive above as instructed. Remove the plastic caps from the additive vials and discard. Clean all opened vials for 15 seconds each time with a new alcohol wipe.
10. Put the additive needle directly into the center of the vial. Invert the vial so that it is on top and the syringe is below. Inject the air into the vial and then pull back. You may have to adjust the vial so that the tip of the needle is in the fluid; otherwise you will just be pulling back air. Make sure you have the proper amount of drug in the syringe. Remove the needle from the vial and immediately inject into the clean additive port on the TPN bag. Always clean the inject port on TPN bag prior to injecting any additives. Discard the syringes and needles in red sharps container.
10. Now it is time to draw up your multivitamins. If you have been instructed to use two small vials (one white top, one blue top), you will only need ONE 10ml syringe to draw up both vials. You should have already prepared the vials by removing the vial caps and have cleaned each vial with a separate clean alcohol wipe. Take your syringe out of the package and tighten the needle. With the cover still attached, pull the plunger back to approximately 5ml. Take the cover off the syringe by pulling straight off (no twisting motion – this will remove the needle). Put the needle directly into the center of the vial. Invert the vial so that it is on top and the syringe is below. Inject the air and then pull back until you have removed 5ml of fluid from one of the small vials (it doesn't matter which you draw up first). Remove the syringe from this vial. Now pull the very same plunger back to 10ml (you will essentially have 5ml of air and 5ml of fluid in one syringe). Put this needle into the next vial of multivitamins, invert it so the vial is on top and the syringe is below. Inject the air into this vial and then pull back to 10ml. You should now have

10ml of yellow fluid in one syringe. Remove the vial from the syringe and directly inject into the TPN additive port. Make sure you have cleaned the inject port on TPN bag with a new clean alcohol wipe. Discard the needles and syringes into the red sharps container.

11. Once all the additives have been added to the bag, gently massage the TPN bag to mix the additives. (DO NOT SHAKE)
12. Open up your TPN tubing and remove any paper.
13. Remove the cover/tab on the MIDDLE port of the TPN bag.
14. Remove the protective cover from the spike at the end of the TPN tubing, **BE CAREFUL NOT TO TOUCH THE SPIKE**, and put the spike into the MIDDLE PORT of the TPN bag using a firm back and forth motion.
15. Open the door of the pump by pulling the silver latch down on the side of the pump.
16. Put the TPN bag to the left of the pump.
17. Locate the black “Lego” like piece on the TPN tubing. Put the black “Lego” piece into the pump, smooth side up. Align the ring and the rest of the tubing in the channel and close the door.
18. Turn your pump on by pressing the **GREY ON/OFF Button**.
19. Locate the small square filter on the TPN tubing that has an arrow on it. Hold this piece making sure the arrow is up, facing the ceiling.
20. Press the **ORANGE/PRIME Button**, one time.
21. Press the **GREEN/OK Button** two times. The TPN will begin to fill the tubing and it will stop when it gets to the end. If for some reason there is no prime volume preprogrammed into your pump (when you press the **ORANGE/PRIME Button** it has a ___ volume, simply press 10ml and then **GREEN/OK Button** twice.
22. Re-clean your hands.
23. Locate the end the IV catheter that you will be hooking up to and vigorously clean the end cap or hub for 15 seconds with an alcohol wipe (“SCRUB THE HUB”).
24. Attach the Saline syringe, open the clamp on your IV catheter, flush, and then discard the empty syringe in the garbage.

25. Wipe the end of your IV catheter again with a clean alcohol wipe and vigorously cleanse the end cap or hub for 15 seconds (“SCRUB THE HUB”).
26. Remove the cover on the end of the TPN tubing and connect to your catheter.
- 27. NOTE: WHEN YOU ARE STARTING A NEW BAG, IF YOU EVER GET A PROMPT THAT SAYS “RESUME PRESS OK, REPEAT PRESS NO” MAKE SURE YOU CHOOSE “REPEAT” BY PRESSING THE RED STOP/NO BUTTON ONE TIME**
28. Start your pump by pressing the **GREEN/OK BUTTON** TWO times or until the green light is flashing and the icon in the right upper screen is dripping.
29. Put the Extra Normal Saline and Heparin syringe in your TPN bag with alcohol wipes to be used to disconnect after allotted time.
30. Re-clean your hands.

DISCONNECTING FROM TPN

Allow the TPN to infuse for the allotted time.

1. You will always have a small amount (100ml) left in the bag at the end of the infusion.
2. When the infusion is completed the pump will beep several times and then go into a KEEP VEIN OPEN MODE (KVO) at 5ml/hr. The screen will say 5ml/hr. It will not stop until you manually stop the pump or all of the overfill TPN medication runs dry.
3. Press the **RED/STOP BUTTON** one time.
4. Hold down the **GREY ON/OFF BUTTON** until the black bar scrolls across the screen.
5. Re-clean your hands.
6. Clamp your IV catheter closest to your body.
7. Disconnect the TPN tubing from the end of your IV catheter, but **DO NOT** remove then end cap or hub.
8. Vigorously cleanse the hub for 15 seconds with an alcohol wipe (“SCRUB THE HUB”).
9. Attach the saline syringe, open your clamp, flush, and then discard the empty syringe in the garbage.



10. Vigorously cleanse the hub for 15 seconds with an alcohol wipe, again (“SCRUB THE HUB”).
11. Attach the heparin syringe, flush, and then discard the empty syringe in the garbage.
12. Clamp your IV catheter.
13. If you have another lumen on your IV catheter, it will also need to be flushed daily with heparin as you just did above.
14. Re-clean your hands.
15. **REMEMBER** to re-charge your pump.