
Discharge Instructions: Total Parenteral Nutrition (TPN) for Your Child

Your child is going home on total parenteral nutrition (TPN). TPN is a way for your child to get proper nutrition through a small, soft tube called a catheter. The catheter is inserted into a vein. This allows liquid nutrition to be put directly into your child's blood vessels. You were shown how to give your child TPN before your child was discharged from the hospital. The information below can help you remember those steps at home. The healthcare team will also schedule a home health nurse to help as needed. Always contact your healthcare team with any questions or concerns.

Always follow the instructions given by your child's healthcare provider or home health nurse. Make sure you have these important phone numbers below:

Healthcare provider phone number: _____

Home health nurse phone number: _____

Medical supply company phone number: _____

Central and PICC lines

There are 2 types of intravenous (IV) lines used to give TPN through a catheter:

- **Central line.** This kind of line is often used for infants and very young children. The catheter is placed into a vein in the neck or chest. This allows nutrients to be sent to the large blood vessels leading into the heart.
- **Peripherally inserted central catheter (PICC) line.** This type of line is placed into a vein in your child's arm. The line is gently threaded through the vein up to a large blood vessel leading into the heart.

Giving your child TPN

Your child is given the TPN solution using an infusion pump. The infusion pump has settings that give your child the TPN solution in a controlled and precise manner. TPN may be given continuously or for a set time. This will depend on your child's needs. Don't change the pump settings unless you're instructed to do so.

Supplies

TPN supplies may include:

- Sterile gloves
- Alcohol wipes
- Saline (single-use vials)
- Heparin (single-use vials)
 - Note: Both saline and heparin are included as flush solutions in the instructions. Use the solution advised by your child's healthcare provider.
- Needles (may not be needed if you have blunt-end syringes)
- Syringes
- TPN bag

- IV tubing
- IV pole
- Infusion pump
- Sharps container to throw out used needles. You can buy a sharps container at a drugstore or medical supply store. You can also use an empty laundry detergent bottle or any other puncture-proof container and lid.

Steps

- **Step 1. Clean your work area.**
 - Wash your hands with soap and water.
 - Clean your work area with alcohol or a disinfectant solution. Dry with a paper towel.
 - Wash your hands with soap and water again.
 - Put on sterile gloves before touching any supplies.
- **Step 2. Check the TPN bag.**
 - Check the label on the TPN bag to make sure it matches your child's prescription.
 - Check the expiration date. Don't use the solution if it's expired. Instead, get a new bag.
 - Check the bag for problems, such as leaks, cloudiness, change in color, or floating particles. Don't use the bag if you see any of these. Instead, get a new bag.
 - Allow the TPN solution to warm up by leaving it at room temperature for 60 minutes. Don't try to warm up the bag in the microwave.
 - Place the TPN bag on the clean surface in your work area.
- **Step 3. Prepare the TPN bag.**
 - Add any additional medicines or vitamins to the bag (as you were shown in the hospital).
 - Hang the TPN bag on the IV pole.
 - Clamp the IV tubing.
 - Connect the spiked end of the IV tubing to the TPN bag.
 - Loop the IV tubing over the pole again to prevent the end from touching the floor.
 - Slowly open the clamp on the IV tubing. Let a small amount of TPN solution run out the end of the tubing. This clears air out of the tubing and prevents air from entering the IV line.
 - Close the clamp on the IV tubing and replace the sterile cap over the end of the tubing.
 - Make sure the pump is in the STOP/OFF mode.
 - Load the IV tubing into the pump.
- **Step 4. Prepare the syringe to flush the catheter.**
 - If you're using pre-filled saline or heparin syringes, skip this section.
 - Clean the rubber top of the saline vial with an alcohol wipe.
 - Attach the needle or blunt end tip to the syringe. Be careful not to touch the opening.

- Fill the syringe with 10 mL of air.
- Stick the needle or blunt end tip of the syringe into the rubber top of the saline vial. Push air into the vial.
- With the needle or blunt end tip of the syringe still in the vial, turn the vial upside down.
- Pull back the plunger to withdraw 10 mL of saline.
- Be sure to keep the needle or blunt end tip of the syringe below the fluid level.
- Check for air bubbles. Hold the syringe straight up and tap the barrel of the syringe. The bubbles should go to the top of the syringe. Gently push the plunger to remove any air bubbles. Draw back if more saline is needed in the syringe.
- Put the syringe and vial down on your clean work surface.
- Repeat with the heparin vial.
- **Step 5. Flush the catheter.**
 - Clean the port on the end of the catheter with an alcohol wipe.
 - Remove the needle or blunt end tip from the saline-filled syringe. Put it in the sharps container.
 - Connect the syringe to your child's port.
 - Push the plunger slowly and gently, so that the saline goes into the port. If there is resistance, don't force the saline solution in. Contact your child's healthcare provider right away.
 - Disconnect the syringe.
 - Clean the port again with an alcohol wipe.
 - Repeat with the heparin-filled syringe.
- **Step 6. Connect the TPN bag to start the infusion.**
 - Remove the end cap and connect the IV tubing from the TPN bag to the port on the end of the catheter.
 - Open the clamp on the IV tubing.
 - Turn the pump to START/ON.
- **Step 7. Disconnect the TPN bag after infusion.**
 - Wash your hands with soap and water. Put on a new pair of sterile gloves.
 - Turn the pump to STOP/OFF.
 - Disconnect the IV tubing from the port.
 - Clean the port with an alcohol wipe.
 - Repeat the steps above ("Prepare the syringe" and "Flush the catheter").
 - Discard any used syringes in the sharps container.
 - Clean the port again with an alcohol wipe.
 - Loop and tape your child's catheter to the chest or arm as instructed by your child's healthcare provider.

Additional
instructions: _____

When to call the healthcare provider

Call your child's healthcare provider right away if any of these happen:

- The tubing leaks or comes out
- You can't flush the tube.
- There is pain, fluid, redness, swelling, or bleeding at the catheter site
- Your child has a fever of 100.4°F (38°C) or higher, or as directed by your child's healthcare provider.
- Your child has chills.