

## TPN at Home

Soon you will be discharged from the hospital. Since you are still unable to eat or digest enough food to nourish your body and give you energy, the doctor may order Total Parenteral Nutrition (TPN) for you to receive at home. You will be taught how to give the TPN to yourself, either before discharge from the hospital or after discharge by the home nurse or the home nutrition service.

### Adding Multivitamins to the TPN

You will receive multivitamins (a mixture of several vitamins and minerals) to add to your TPN. The types of vitamins and minerals ordered are based on your needs. You need to know the following information about adding multivitamins to TPN:

- You will add the multivitamins to the TPN bag right before you "hook up" your TPN. Please do not add the multivitamins to the bag ahead of time, since they are only stable for a certain period of time.
- When you receive your TPN, the liquid in the bag is clear like water. If lipids are included in the formula, the liquid in the bag will have a milky-white appearance. When you add the multivitamins, the TPN liquid turns yellow.
- Multivitamins come in two forms, pediatric and adult. One way they differ is the amount of liquid in the bottle or vial.
- Multivitamins are packaged in many different ways. During your teaching session with the clinical nurse specialist and/or the IV infusion company nurse, you will learn what type of vitamins you will receive and how to draw up the vitamins into the syringe.

### Showing What You Have Learned

After the teaching session(s) you may be asked to show what you have learned. You will perform the following steps with a nurse standing by to answer your questions:

- Add the multivitamins to the TPN
- · Spike the TPN bag
- Prime (fill) the tubing by running TPN through it
- Program the ambulatory pump (the machine used for giving TPN)
- Connect the TPN to your central line or catheter

Since there are many kinds of pumps, you will receive a specific guide on how to program your pump. The clinical nurse specialist or IV infusion company nurse will give you this information during your teaching session.

### Keeping Everything Clean

If germs enter your central line or the site where the line enters your body, a blood infection could occur, making you very ill. The following guidelines will help you keep everything as clean as possible.

- It is important to wash your hands well with an anti-bacterial soap before touching the supplies or your central line.
- Wash your hands before and after cleaning your work area. Then do not touch anything except the TPN and supplies. If you touch anything such as the telephone or furniture, wash your hands again.
- Try not to cough or sneeze over the TPN and supplies.

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### Preparing Your Work Area to Set Up TPN

- Choose a space that is away from household traffic and other things that could distract you.
- The work area should be clean and dry.
- The work area should be a hard surface that is washable, such as a bedside table or countertop. Do not prepare the TPN on a bed.
- Remember that the tables and hard surfaces around your home may have dust and germs on them. This is normal. You should clean off the work area with alcohol or an anti-bacterial soap or spray. Dry it with a clean cloth or paper towel.
- If the work area is not washable, such as a wooden tabletop, wipe it free of dust and spread a clean cloth or paper towel over the surface.
- Keep all pets out of the room while setting up your home TPN.

### Keeping TPN and Supplies Clean

Keeping the TPN mixture and supplies sterile (clean) is very important. Sometimes the TPN or supplies can become contaminated (dirty). TPN has sugar in it, and bacteria (germs) love sugar. TPN can become dirty with germs if it is not kept clean. Contamination of the TPN mixture or supplies does not happen often, but it can happen. The following tips will help prevent germs from entering your central line.

- Keep the TPN supplies in their packages until you are ready to use them.
- Store the TPN, multivitamins, and batteries in the refrigerator. Place them either on a clean shelf or in a clean drawer. Do not store any food items on the same shelf or in the same drawer as the TPN.
- Store supplies in a clean dry place, away from children and pets.
- Check the TPN bag for leaks. Give the bag a gentle squeeze. If the bag has a hole, you will see the TPN leak out.

- While you are adding the multivitamins, the needle could pierce the plastic bag. This would contaminate the bag (make the contents dirty with germs). Do not use a bag that has a hole.
- Anytime you have a question or concern, call your IV infusion company.

# What To Do If The TPN Becomes Contaminated

- Do not use the bag. If you have an extra TPN bag in the refrigerator, use it. After you have connected to the TPN, call the IV infusion company. Tell the company about the leak or contamination. You will receive a new TPN bag the next day.
- If you do not have an extra bag, call the IV infusion company and report the problem.
   The company will make a new bag and bring it to you.

Accidents do happen. Sometimes the clean end of the TPN tubing may fall on the floor. If this happens, it is considered dirty. Do not use it. Use new tubing instead. This rule applies to all supplies that have a sterile tip or end, such as needles and syringes. Anytime you are not sure that something was kept clean, such as your vials or injection cap, start over. Re-clean items that can be cleaned with alcohol.

### Discharge Day and Beyond

The IV infusion company nurse will contact you in the hospital and again when you are discharged as an outpatient. This nurse will talk you about what time of day you want to connect your TPN. The infusion company nurse will come to you on your first night out of the hospital to watch you set up and connect your TPN. This nurse will be there to answer your questions and to make sure you feel comfortable with these tasks. But the nurse will not connect you to the TPN.

You can change the times you hook up and disconnect to fit your life. For example, if you get

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TPN for 12 hours, then you might want to connect to the TPN around 8 p.m. so that the TPN will be complete at 8 a.m.

### **Outpatient TPN**

Please remember to call the IV infusion company:

- If you change living facilities;
- If you are admitted to the hospital; or
- If there is a change in your program (pump numbers), such as a change in the amount of fluid or a change in the number of hours it should run. Your infusion company nurse will talk to you by phone or will leave a message for you to call before you hook up your TPN that night. By telephone, the nurse will help you re-program the pump to be sure it has the correct numbers. If you cannot get the new numbers into your pump, this nurse will come to help you.

# If you are admitted or re-admitted to the hospital:

- Bring your TPN bag or prescription with you.
   This will assist the medical team in assessing and ordering the TPN while you are an inpatient.
- Depending on your condition, the medical team may stop the TPN for awhile, and then restart it. It will all depend on your treatment plan.

### When will my TPN be stopped?

Your clinical team will stop ordering TPN when you are eating enough calories to maintain your weight and when your clinical status allows. Team members watch for TPN benefits, side effects and clinical changes that may help or hinder your nutrition. They will look at how much you're eating and drinking, your blood work, your urine glucose results, and your weight changes.

#### **Ouestions?**

If you have more questions about TPN, please talk to your doctor, clinical nurse specialist, nurse, pharmacist, or nutritionist.

This document is not intended to take the place of the care and attention of your personal physician or other professional medical services. Our aim is to promote active participation in your care and treatment by providing information and education. Questions about individual health concerns or specific treatment options should be discussed with your physician.



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