

TPN Self-Monitoring

When you are at home, your parenteral nutrition will be monitored by blood tests as well as by several self-monitoring measurements that you will do. These measurements will help determine if the TPN solution is doing its job and whether or not any complications are developing.

Intake and Output Record

It is important to keep a record of ALL fluids taken orally and intravenously (IV). It is also necessary to keep a record of all body fluids (urine or any other drainage such as a stoma or fistula) that are excreted on a DAILY basis. The purpose of this intake and output record is to establish an accurate record which will show the fluid balance of your body from day to day. You will be provided with plastic measuring cups to use for measuring urine and other drainage fluids. All fluids are to be measured in milliliters (mL). The Intake and Output Record (I&O record) should be kept as accurately as possible as part of your daily routine. I&O record sheets will be provided to you either by your Home Care nurse or by contacting the TPN Office.

Oral Fluid Intake includes beverages such as coffee, tea, water, carbonated beverages, fruit juices or drinks, and cream. Soup, jell-o, popsicles, and ice chips/cubes, are also considered a fluid.

Intravenous (IV) Intake includes total amount of TPN solution infused as well as any other IV fluids infused such as IV antibiotics or medications and lipids. Ideally, your total intake (both IV and oral) should be 500 mL GREATER than your total output each day.

Total Intake is calculated by adding all ORAL fluids and IV fluids (TPN, lipids, antibiotics, etc) consumed or infused for the 24 hour period.

Output includes urine and any other drainage such as diarrhea, stoma, drain, tube, or fistula drainage

and any vomiting or emesis. Ideally, the 24 hours URINE output should be 1000 to 2000 mL/day.

Total Output is calculated by adding all urine output as well as any other drainage output for the 24 hour period.

Measurements for Use at Home:

- 1 ounce = 30 mL
- 4 ounces (1/2 cup) = 120 mL
- 6 ounces = 180 mL
- 8 ounces (1 cup) = 240 mL
- 12 ounces = 360 mL
- 16 ounces = 480 mL

Blood Tests

After you have been discharged from the hospital your physician will request certain blood tests on a regular basis to determine the status of your blood work. This information will aid your physician in deciding whether or not your TPN additives will need to be altered. Most of these blood tests can be done by any medical/hospital lab or your home care nurse. The following blood values are monitored; sodium, potassium, chloride, CO₂ content, BUN, creatinine, blood sugar, calcium, magnesium, phosphorus, hemoglobin, hematocrit and white blood cell count. Other additional blood tests may also be needed to monitor you while you receive TPN.

Daily Weight

You will need to weigh yourself daily at home. Choose a time that is most convenient for you, such as the first thing in the morning. Weigh yourself at the same time each day wearing similar articles of clothing. A goal weight will be established with you prior to your hospital discharge. If you are to maintain your weight, some variation on a daily basis can be expected, but from week to week it should remain relatively stable.

If you will need to gain or lose weight, you will be informed of how much weight to expect to gain or lose per week.

The daily weight should be recorded on the I&O sheet. Be sure to use the same scale to weigh yourself. If you do use another scale, indicate this on the I&O record. Scales can vary by as much as several pounds. The record of your daily weight will provide your physician with information that may show impending fluid overload or dehydration.

Daily Temperature

You will need to take your temperature daily at home. Your temperature can be checked with a digital thermometer. Be sure to take your temperature PRIOR to eating, drinking or brushing your teeth. Your temperature should be recorded on the I&O sheet. **If you have a fever, shakes or chills, stop your TPN and page the Home TPN pager or contact your physician.**

Urine Glucose

Your TPN solution contains high concentrations of sugar (dextrose). While in the hospital your blood sugar is being monitored several times a day to be sure that your body is tolerating the sugar in your TPN solution. At home you will monitoring your sugar level by checking your urine for the presence of sugar. Abnormally high blood sugar levels can, in some people, produce dehydration and kidney damage. This is why checking your urine daily is a necessary part of your home monitoring.

If your body is having difficulty tolerating the high sugar concentrations, it will try to rid the bloodstream of the excess sugar by excreting it through the kidneys (“spilling” the sugar into your urine). Sugar (glucose) in the urine is not normal. If there is excess sugar in your urine it can be detected by using a Diastix®. Diastix® is a plastic

strip with a specially treated paper attached for finding sugar (glucose) in urine.

You will be testing your first urine of the morning with Diastix®.

1. Dip the test strip into your urine and remove immediately.
2. Draw the edge of the strip along the rim of the specimen container to remove excess urine. Begin timing.
3. After 30 seconds read the test by holding the strip close to the color blocks on the Diastix® container. Carefully match the test strip to the color blocks. Ignore any color changes that occur after 30 seconds. Record the urine glucose results on your I&O sheet.

If the test strip color is POSITIVE, page the Home TPN pager or contact your physician.

Blood Glucose

Patients with diabetes, who already have a self-blood glucose monitor, will not be asked to test urine or glucose. Patient with diabetes will be instructed to test their blood glucose level at certain times. These levels are to be recorded on your I&O sheet.

If blood glucose level is **less than 60 or greater than 150**, page the Home TPN pager or contact your physician.