



# Parenteral Nutrition

Parenteral nutrition is used for patients who can't digest or absorb food normally. PN is intravenous or IV nutrition. If your child is on PN, they are getting all their nutrition through an IV.

## What is parenteral nutrition?

Parenteral nutrition (called "PN") is a complete source of nutrition that is given to your child through an IV (intravenously). It is used when a child can't digest or absorb food normally. PN provides your child all their nutrition and contains carbohydrates, protein, fat, fluid, vitamins and minerals. We will individualize your child's PN solution based on their nutrition needs.

## How does PN work?

PN comes in a solution in a bag and is given through an IV. Instead of going through your child's digestive system, the nutrients in parenteral nutrition get absorbed into the body by the blood.

If your child starts PN, they will have a PN team that consists of a dietitian, pharmacist, their doctor and nurse. The PN team will be closely monitoring your child to make sure that your child's healing and growth goals are being met. When you have any questions about your child's PN, do not hesitate to ask any of the team.

## What are the benefits of PN?

- It can be a life-saving therapy if it is the only option to nourish your child
- It can be used temporarily to nourish your child until their body can digest and absorb food
- PN preserves your child's muscle and fat stores during an acute illness

## Are there risks with PN?

As with any medication, there are risks associated with PN. We will be closely watching your child for any complications. Because PN is given through a vein, there can be risks related to the IV.

### Possible risks with the IV:

- The IV line can become infected. The line can become infected from outside the body (such as bacteria on the skin) or inside the body (such as bacteria inside the GI tract). If your child develops a line infection, they will need to take antibiotics through an IV.
- Clots can form around the IV line. If this happens, the line may need to be removed, and your child may need a blood thinning medication until the clot goes away.
- There can be inflammation or damage to the skin at the IV site. This is called phlebitis or infiltration. This can occur when PN is given through a regular temporary IV line. This can be prevented by placing a special central IV line for PN in your child. This is often placed through a large vein in the neck or upper chest.

### To Learn More

- Nutrition  
206-987-4758
- Ask your child's healthcare provider
- [www.seattlechildrens.org](http://www.seattlechildrens.org)

### Free Interpreter Services

- In the hospital, ask your child's nurse.
- From outside the hospital, call the toll-free Family Interpreting Line 1-866-583-1527. Tell the interpreter the name or extension you need.

### Possible risks with the PN solution:

- If PN is stopped too quickly, it could cause low blood sugar (called hypoglycemia).
- High blood sugar (called hyperglycemia). This can occur from the carbohydrate in the solution, especially in combination with certain medical conditions and medications such as steroids.
- Abnormal electrolytes. This can occur if there is too much or too little of an electrolyte in the PN solution. This can occur if your child is on certain medications or during periods of acute illness. If this occurs, your child may need more frequent lab tests to monitor their electrolyte levels
- Liver irritation. PN can be irritating to the liver, especially in very young patients who need PN for a long time. We will closely monitor your child's liver function for any signs of irritation. We can adjust the makeup of the PN to help prevent and treat liver irritation.

### Will my child be able to normal activities on PN?

When your child is on PN in the hospital, they will be able to take part in normal activities. But, your child's IV will be connected to the PN bag on an IV pole, which may limit some of their activity. For children that need PN outside the hospital, we will teach you what activities your child will need to avoid because of increased risk for infection (swimming) or damage to the line (contact sports).