



Parenteral Nutrition (PN)

All people need nutrition to live. Nutrition supplies your body with the fuel or energy it needs to function well. It is best to use the stomach or bowel when possible to receive this fuel, but for some people, this may not be possible. Nutrition can be delivered other ways to meet your body's needs for energy. With parenteral nutrition (PN), nutrients can be put directly into a vein to supply your body with energy. This reduces or removes the need to eat.

Your body needs 3 types of fuel: protein, carbohydrates and fats. Other nutrients, such as vitamins, minerals and water are needed to use these fuels.

- **Carbohydrates** are needed by the body to give fuel to your organs. They supply most of the energy your body needs to work well.
- **Protein** is made up of amino acids, the building blocks of life. Your body uses protein to build muscle, repair tissue, fight infections and carry nutrients through your body.
- **Fats** are an important source of calories and give some essential nutrients that your body needs for optimal health.
- **Vitamins, minerals and water** do not contain calories, but they are essential for your body's functions, growth and good health.

All of these nutrients can be delivered as part of a PN prescription. PN bypasses normal digestion to supply the fuels and nutrients directly into the bloodstream through an intravenous (IV) catheter in a vein. PN contains proteins, carbohydrates, fats, vitamins and minerals. It comes in a bag and is a clear liquid. When vitamins are added, it turns yellow. When fat is added, it turns a milky white color.

A special IV catheter is needed for PN. You may have a catheter placed into a large vein in the chest by a surgeon or into a smaller vein in the arm by a nurse. Different kinds of catheters may be used based on the length of time PN is needed and on your preference.

You will need to have your blood drawn and your urine collected often to check that the right amounts of nutrients are being given. It is also important to be weighed daily to check that you are getting enough calories and fluid. You will also need your temperature checked daily to make sure that your body does not get an infection from the IV catheter.

If you have questions about your PN, please ask your doctor, nurse or dietitian.



THE OHIO STATE UNIVERSITY
WEXNER MEDICAL CENTER

For more health information, go to patienteducation.osumc.edu, call 614-293-3707 or email health-info@osu.edu.