

Parenteral Nutrition

You have been referred for Parenteral Nutrition (PN) also sometimes referred to as 'TPN'.

This leaflet will help you to understand what this is and how it may affect you.

If you need any other questions answered please do not hesitate to ask the medical, nursing, dietetic, pharmacy staff or members of the Nutrition Support Team (NST) who have been asked to see you.

The NST consists of a Doctor, Nurse, Dietitian and Pharmacist. The NST will come to see you every day during the week. The NST will also liaise with your medical and nursing team to ensure that all your requirements are met and everyone is kept fully informed of your progress.

What is Parenteral Nutrition?

PN is a way of providing food in a liquid into your body using the veins rather than the gut. All the nutrients you require go into your bloodstream thus bypassing the gut.

In order to provide PN a small tube (catheter) will be inserted into one of your veins. This may be into one of the veins in your arm (there are two types of catheters used, one called a 'midline' and the other a 'PICC'). Alternatively a line is inserted into one of the larger veins in your neck or chest. If so, such a type of line may have already been inserted if you have had an operation. If not then the line may be inserted using local anaesthetic or in some cases general anaesthetic.

The person who inserts this line will be able to discuss

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this procedure with you. In all catheters (except midlines) you will have a chest X-ray to make sure that the tip of the catheter is in the correct place before PN is started.

Food by Vein

PN contains all the nutrients you need. It contains amino acids (the building blocks of protein) for growth and maintenance of tissues; glucose and fat for energy and to supply essential fatty acids, electrolytes such as sodium, potassium and calcium (for bones); and vitamins and trace elements which are essential for growth and health. This complex mixture of nutrients is combined in about 2 litres of water in a large plastic container (a bit similar to a 'drip'). The mixture is made in the Pharmacy department in a sterile room under extremely high standards of cleanliness and hygiene. The liquid from the bag is delivered into your veins in a controlled way via a pump that moves the liquid from the bag via the catheter and into your body at a set rate.

How will this affect me?

Some patients require PN for a long time (months to years) whereas others need it only for a short period (days to weeks). If you are having PN in hospital then you will usually receive it at least initially over 24 hrs (throughout the day and night). The feeding time may then be reduced so that you receive the PN over a shorter time period (for example just overnight); so that you are then 'free' of the drip during the day. Some patients have PN in this kind of way at home after they have been trained to administer it to themselves.

What we check

Initially we will require relatively frequent blood tests (at

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least every other day) to check that we are giving you the correct amounts of everything in the bag. We can adjust what we give to you in the PN according to these blood tests. We will also need to check your weight every few days.

The PN provides water so that you do not need to worry if you are not allowed to or not able to drink any fluid. PN can sometimes take away the feeling of hunger. At some point the doctors looking after you may allow you to start taking liquids and then food as and when your gut starts to work. We will change the amount of PN you receive accordingly and the dietitian will be able to advise you on drinking and eating. You may be allowed to eat and receive PN at the same time.

Are there any problems I need to know about?

The majority of patients only require PN for a few days or weeks and make an uneventful recovery. The main risk of this type of treatment is an infection of the catheter which may then result in an infection in your blood. For this reason great care is taken when handling the catheter (in particular when the bag of PN is connected or disconnected) to ensure that it does not become infected. Disconnection is only allowed when the bag is empty (or infusion finished).

Signs that a line may be infected include your temperature going up or a redness or swelling around the insertion site of the catheter. If this occurs the catheter is usually removed and you are treated with antibiotics.

If you have any other worries or questions please speak to a Doctor or Nurse on the ward or a member of the Nutrition Support Team.