

You have been referred for **Parenteral Nutrition (PN)**.

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, pharmacy staff or the members of the Nutrition Support Team (NST) who have been asked to see you. The NST will come to see you every day during the week and while the members may vary slightly from hospital to hospital it will usually consist of a nurse, a pharmacist, a dietician and a doctor. The NST will also liaise with your medical team to ensure that all your requirements are met and everyone is kept fully informed of your progress.

What is Parenteral Nutrition?

This is sometimes referred to as Total Parenteral Nutrition (TPN) or Intravenous Nutrition (IVN), but is more commonly called simply Parenteral Nutrition or PN.

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

In order to provide PN a small catheter (tube) will be inserted into one of the large veins near your heart. The catheter may be tunnelled under the skin. The insertion is often carried out under a mild sedative and with local anaesthetic to minimise any pain or discomfort. A chest X-ray needs to confirm the position of the catheter before PN can start.

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 and calcium for bones, vitamins and trace minerals which are essential for growth and health. These complex mixtures of nutrients are combined in 2-3 litres of water in a large plastic container. This may sometimes be called a "drip feed" which is dispensed for you under extremely high standards of cleanliness and hygiene by the PN pharmacist in a sterile or aseptic room.

How will this affect me?

Some patients need PN for the rest of their lives while others need it only for a short period. If you are going to be a long term patient, perhaps on PN for a few months, we will provide you with some different information that is more appropriate for you.

If you are having PN in hospital you will probably receive it over 24 hours (throughout the day and night). If you are likely to be having PN for sometime, and once everything is stable you may be able to receive the nutrition over a shorter time. The feeding time will be reduced gradually to ensure you can tolerate the volume of fluid over a shorter time span, hopefully resulting in an overnight feed. This may mean that you are "free" of the drip for sometime during the day. Some patients have PN at home after they have been trained and usually they will have it overnight so that they can be as normal as possible.

What will happen?

For the first week or so on PN you will probably need to have blood tests every day. When the team are happy that your results are stable this may only change to once or twice a week. It is important that you are weighed regularly, at least twice per week so the team can assess that you are receiving enough weight and that you are maintaining your weight. This will also give an idea of how well you are although the dietician may ask you to do some other simple tests too.

While you are on PN you may not feel hungry or thirsty at all. This is because you are receiving your daily requirements continuously. If your gut is working a little you may also be allowed to eat and drink, this will be explained to you. When you start to eat larger amounts again the PN content may be changed slightly to encourage you to eat, or the drip may be run over fewer hours.

Are there any problems I need to know about?

The majority of PN patients begin eating normally after a few weeks and go on to make an uneventful recovery. However as the special catheter to enable you to have PN goes directly into your bloodstream, it is important that you look out for signs of infection. If you develop a fever, or there is redness or swelling around the insertion site of the catheter please tell the nursing staff or a doctor. This may mean you have an infection and you may need antibiotics or the catheter might need to be removed.

If you feel dizzy, irritable, experience palpitations or sweat a lot please tell the nursing staff, as you may need more glucose in your PN feed. Equally if you feel drowsy, thirsty or pass large amounts of urine please tell the nursing staff, as you may need less glucose in your PN feed.

If you have any other worries or questions please speak to a nurse or a doctor or a member of the Nutrition Support Team and they will discuss them with you.

