



Information about parenteral nutrition

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Version 2

> About this leaflet

This leaflet gives you information about Parenteral Nutrition.

> What is parenteral nutrition and why do you need it?

Parenteral Nutrition is a method of giving you nutrients directly into your bloodstream, by passing the usual process of eating and digestion.

If it is not possible for you to absorb enough nutrition from the bowel either by eating, drinking and, or tube feeding, it is sometimes necessary to use intravenous feeding. This is called Parenteral Nutrition and involves giving nutrients through a catheter in the vein.

There may be a number of reasons why you need it:

- when the digestive system is not working
- after certain operations
- when you are not able to absorb nutrition
- to give your bowel a rest in order to support healing
- removal of your bowel
- certain medical conditions

If you need this type of nutrition support, the ward staff and dietitian will assess you and explain the risks and benefits of the treatment with you. Together you will decide which treatment is best for you.

Nutritional Support Team

The Nutrition Support Team includes medical staff, dietitians and pharmacists. Your nurse and the Nutrition Support Team will look after all aspects of your care while you are receiving Parenteral Nutrition.



What is in parenteral nutrition?

Parenteral Nutrition contains nutrients that your body requires and that would normally come from food and water.

- **Water:** to keep your kidneys working
- **Amino acids:** allows your body to produce proteins for growth and muscle repair
- **Carbohydrates:** a source of energy
- **Fats:** a source of energy
- **Sodium (salt):** for fluid balance
- **Potassium:** for normal functioning of muscle tissue
- **Calcium:** for healthy bones and to help your blood to clot properly
- **Magnesium:** to support nerve and muscle function
- **Phosphate:** for energy production
- **Trace elements and Vitamins:** for healthy tissues.

Depending upon your condition, we will replace some or all of the above nutrients with Parenteral Nutrition, and you may be able to eat and drink whilst receiving it.

The Nutrition Support Team will visit you regularly to review and monitor your progress.

We will frequently assess you by taking blood samples and monitoring your urine, blood glucose, weight, temperature, blood pressure and pulse.

How long will I receive parenteral nutrition?

You may only require Parenteral Nutrition for a few days or weeks to help you recover.

If you need Parenteral Nutrition long term, we will discuss this with you in detail.

How is parenteral nutrition given?

Parenteral Nutrition is a sterile solution which comes in a large bag and is given slowly via a drip (infusion) into your bloodstream. You will receive this through a cannula (needle) in your arm or hand or through a central catheter line inserted into a larger vein. We will discuss the type of line with you before we insert it.

When you receive Parenteral Nutrition, a pump is used to control the infusion rate. Initially we will give it over 24 hours. This will then be reviewed and you may receive future doses over a shorter period of 12-18 hours.

How is the central catheter line inserted?

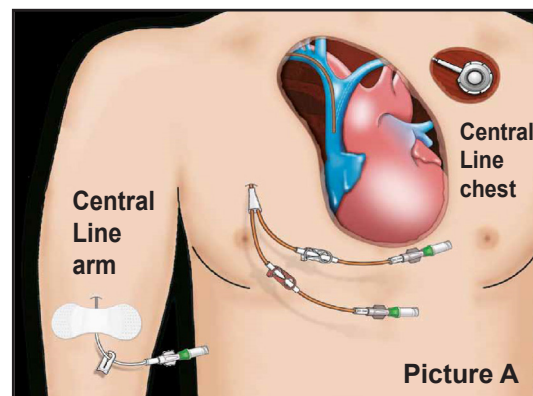
The line will either be inserted in theatre or in the x-ray department; occasionally it can be inserted at your bedside.

We will clean the area with a cleansing solution and give you a local anaesthetic to numb the insertion site.

There are different types of central catheter lines and the medical staff will discuss and agree with you which is most suitable for you.

- **Central Venous Catheter CVC** (chest – see picture A)

We will insert a needle into the vein in your neck or below your collarbone, then feed a soft narrow tube through until it reaches a large vein near your heart. We will then remove the needle leaving the line in place. The tube will lie underneath the skin and come out on your chest wall. We will secure the line with stitches and you may also have one or two stitches above where it has been inserted. You may have two dressings in place. You may feel slightly uncomfortable afterwards, but we can give you painkillers to help with this.



- **Peripherally Inserted Central Catheter PICC** (arm – see picture A)

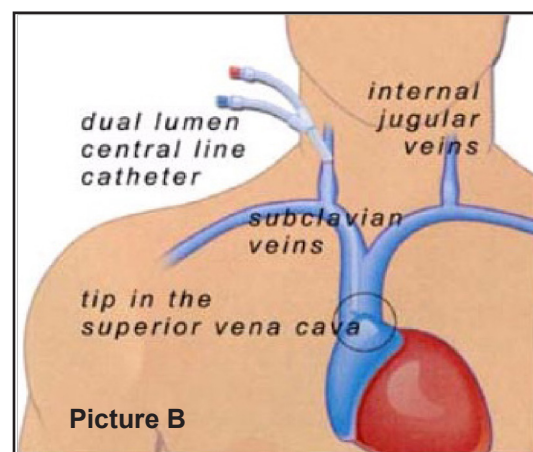
We will insert a needle into the vein in your upper arm, then insert a soft narrow tube and feed it through the needle until it reaches a large vein near your heart. We will then remove the needle leaving the line in place. We will secure the line with a dressing.

These kinds of lines can last for several weeks or even months.

- **Short Term Central Catheter** (see picture B)

We will insert a needle into the vein in your neck, then feed a soft narrow tube through the needle until it reaches a large vein near your heart. We will remove the needle, leaving the line in place. We will secure the line with stitches and a dressing.

You will need a chest x-ray before we can use the line to check the position of the tip – this should lie in a large blood vessel that sits just outside your heart.



> What are the possible complications?

- **Infection:** The biggest risk of Parenteral Nutrition is an infection. There are two areas which can become infected:
 - Catheter exit site (where the dressing covers) – we will check this daily to make sure the dressing is clean and in place. The nurses will follow a strict procedure when changing the dressing to help reduce the risk of infection.
 - Hub or port of the catheter (where we connect and disconnect the feed) – to reduce the risk of infection we do not disconnect the bag unless it is empty or medical staff request it to stop.
 - Never reconnect a bag once it is disconnected. Nurses will follow a strict procedure when changing, starting or stopping the bags.
- **Pneumothorax:** There is a small chance (2 in 100) of causing some puncture to the lung while inserting a central line which can result in air in the lung lining / leakage of air from the lung.

Frequently asked questions

Can I eat normally?

You may or may not be able to eat depending upon the medical reasons why you require Parenteral Nutrition. A dietician will assess you and discuss any recommendations or restrictions to what you can take orally.

Will I feel hungry or thirsty?

Parenteral Nutrition provides you with the nutrition you require but it will not give you the same satisfaction as eating. Some patients may still feel hungry at mealtimes and with the sight and smell of food.

The Nutrition Support Team will review the contents of the Parenteral Nutrition you are receiving to make sure they meet your needs.

What will happen to my bowels?

This depends on your condition. Your bowels may continue to work even when you do not take in any food or fluids as the bowel wall always produce fluid and mucus.

Although it is often possible to eat while you receive Parenteral Nutrition, you may not absorb properly the food you take and you may suffer from diarrhoea, flatulence (wind) or experience stomach cramps. Your doctor and dietitian will advise you about the best choice of food and fluids to take.

Can I move about?

The Parenteral Nutrition bag will hang on a mobile stand and the infusion pump will have a battery that will last for several hours. If you are able, you can walk about pushing the stand.

Can I have a bath or shower?

Before taking a bath or shower please make sure that your dressing is not damaged. Nursing staff will change the dressing if there are any signs of it coming loose or leaking. When receiving Parenteral Nutrition, we advise against lengthy and frequent disconnections.

When will the Parenteral Nutrition stop?

We will stop your Parenteral Nutrition when you are able to meet your nutritional requirements by eating or through a feeding tube.

What if I don't want Parenteral Nutrition?

The Nutrition Support Team will provide you with all the information you require to allow you to decide if you want to have Parenteral Nutrition.

Further information

If there is anything you are unsure about or have any questions, please speak to one of the Nutrition Team:

Nutrition Support Team	
Name:	
Department:	
Telephone number:	

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