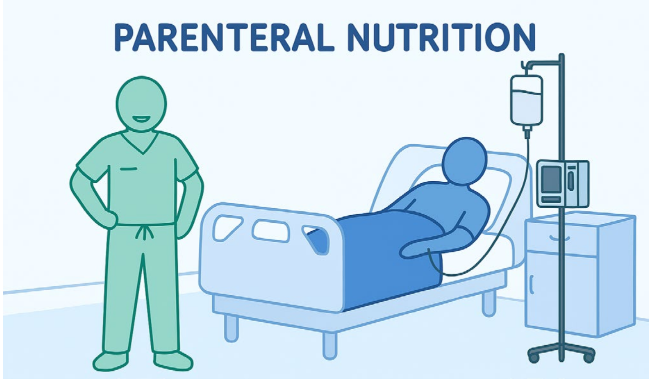
Good to know: Parenteral Nutrition explained

Information for patients and relatives/carers



What is Parenteral Nutrition (PN)?

Parenteral Nutrition (PN) is a way of giving your body nutrition directly into your bloodstream when you cannot get enough nutrition by eating or through a feeding tube. You may hear it called Total Parenteral Nutrition (TPN) or intra-venous (IV) Nutrition. In this leaflet, we will refer to it as PN.

We use PN when your digestive system or gut cannot absorb the nutrients your body needs to heal, stay strong and have energy.

Why do I need it?

You may need PN if:

- Your gut is not working well because of illness, surgery, or your bowel is blocked
- You are unable to absorb enough nutrition through your gut
- Your gut needs time to rest and heal
- You are unable to have a feeding tube placed, or tube feeding is not appropriate

Some people may receive all their nutrition through PN, whilst others may be able to eat and drink a little, and the PN supplements their oral intake. Your clinical team will inform you what is appropriate for you.

How is PN given?

PN is given directly into your bloodstream via a fine tube or line. You may hear different name for the line, such as:

- Peripheral Inserted Central Catheter (PICC)
- Central Venous Catheter (CVC)
- Hickman line
- Peripheral line.

Your clinical team will choose the safest and most appropriate line for you.

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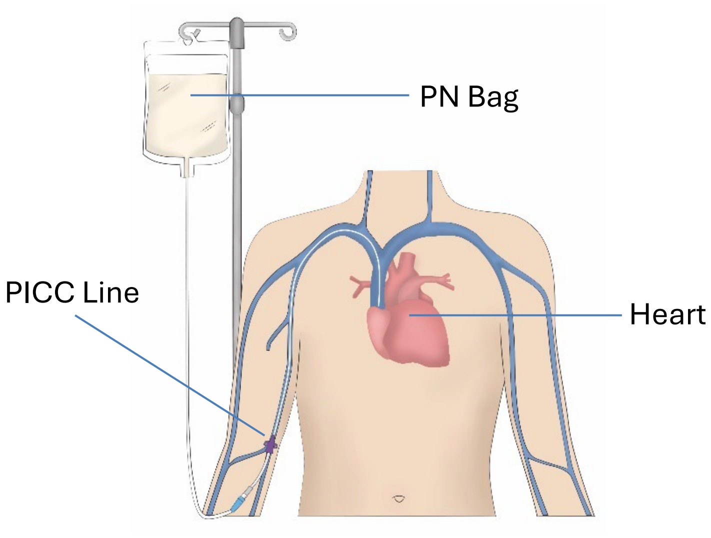

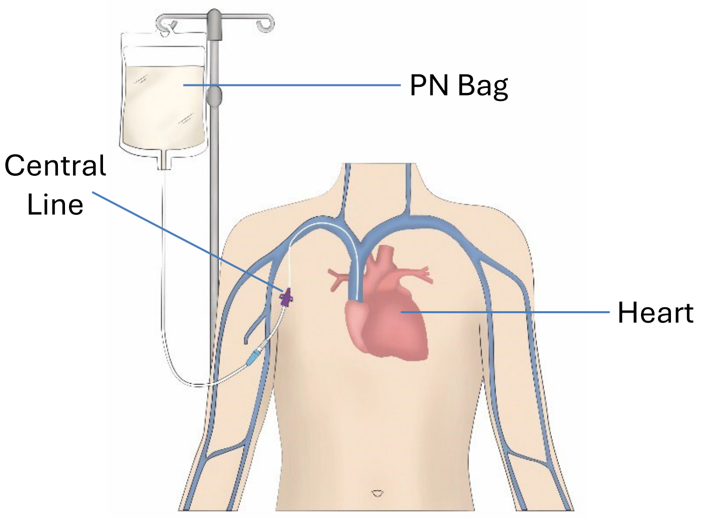

PN is usually started slowly and increased over a few days. A pump is used to control the infusion rate, and this is usually over 24 hours initially. However, once things are stable the duration of your infusion may reduce, if appropriate, to allow you to move around more freely. If the decision is made to stop your PN, this will be gradually reduced over a few days.

What is in PN?

Your PN bag will be specially prepared for you daily. It is carefully calculated for your own individual needs.

It usually contains:

- **Fluids** to keep you hydrated
- **Carbohydrates** (glucose) for energy
- **Protein** (nitrogen) to repair and maintain muscle
- **Fat** for energy and cell repair
- **Vitamins and minerals** to support essential body functions & health
- **Salts** (electrolytes) to keep your body in balance.

PN bags may contain certain **allergens**, therefore please ensure that you tell us if you have any allergies, in particular **soya, fish, nuts or eggs**. Not all our PN products are suitable for vegetarians or vegans, therefore if you have any concerns about this please highlight your dietary preferences to your clinical team.

Peanuts Soybeans Nuts Crustaceans Fish Eggs

What are the potential risks and/or complications of PN?

When on PN the doctors, nurses, pharmacists and dietitians will regularly monitor:

- Blood tests
- Body weight
- Blood pressure
- Blood glucose (sugar) levels
- How your gut is functioning
- Your line site.

This helps ensure that your PN is appropriate for you, and any risks are minimised. PN cannot be given safely without regular monitoring, but as you become more stable or established on PN, the frequency of monitoring may reduce.

The risks of PN can include but are not limited to:

Infection

Because PN goes directly into your bloodstream, infection in the line can be serious. Tell your doctor or nurse if:

- The skin around your line becomes red, swollen, or painful
- You notice any discharge from the line site
- You feel hot, shivery, or unwell.

This may mean your line if infected and may need to be replaced, and you may require antibiotics.

Blood sugar changes

PN can raise your blood sugar levels, and you may require insulin treatment if your blood sugar levels become high. If you have diabetes, your insulin prescription may need to be adjusted according to your blood glucose levels.

Frequently Asked Questions

Can I eat & drink whilst on PN?

This depends on why you need PN. Some people may be nil by mouth and so will not be able to, whilst others can have small amounts of food and drink. Your clinical team will inform you if you are able to do so. If you can eat or drink it is important that you try to do so and that you let your nurse and dietitian know so that your PN prescription can be adjusted.

Regardless of your oral intake recommendations or restrictions, maintaining good oral hygiene through regular mouth care is important. You should use mouthwash, or oral saliva spray if required. A clean mouth helps comfort, taste, reduces bad breath and reduces the risk of oral infections.

Will I feel hungry or thirsty?

You may still feel hunger or thirst as PN bypasses your stomach. It is important to tell your clinical team caring for you if you feel hungry and thirsty, as it may mean that your PN needs to be adjusted.

How will PN affect my bowels?

Your bowel may still produce stools even if you are not eating. As PN bypasses your gut, it will not cause you to be sick, have diarrhoea or have stomachache. If you have any of these symptoms, it may be a result of your illness or condition and it is important that you tell your clinical team.

Will I be able to move around?

Yes. Your PN bag is usually attached to a mobile drip stand, so this will not stop you from moving around if you are able.

Will I be able to have a bath or shower?

Yes, but you will need to take care when washing to try and keep the line dressing dry. If your dressing becomes wet, you should ask for this to be changed as soon as possible to prevent infection.

How long will I need to have PN?

This varies from person to person, depending on why you are on PN. Your clinical team will discuss your progress with you regularly. If you are ever unsure, please speak to a member of the clinical team.

PN may be stopped when you are able to start having enough nutrition by mouth, or when a specially placed feeding tube can be inserted into your stomach.

What if I don't want to have PN?

The decision to have PN can only be made with your consent, and this will be discussed with you. It is important that you ask any questions that you may have to help you make an informed decision which is right for you. However sometimes, the decision to start PN may need to be made for you in your best interest if you are unable to make medical decisions for yourself at that time.

Further information on PN

Further useful information can be found on these websites:

- PINNT (Patients on Intravenous or Nasogastric Nutrition Therapy) https://pinnt.com
- BAPEN (British Association of Parenteral and Enteral Nutrition) www.bapen.org.uk

Or speak to a member of your clinical team. We would be happy to discuss things in more detail, and we are here to support you.