

Parenteral nutrition

Nutrition Support Team (NST)



Patient information leaflet

This leaflet gives you information to help you understand what parenteral nutrition (PN) is and why you may need it. If you still have questions after reading it, please speak to your doctor, nurse or a member of the Nutrition Support Team.

What is parenteral nutrition?

Normally when you eat, food is broken down and digested in your gut. The nutrients are then absorbed through your gut and into your blood stream. Parenteral nutrition is an artificial nutritional formulation in a bag that can be given directly into your blood stream. Therefore it does not need to go through your gut first. It is a way of providing nutrients when you are unable to be fed into your gut.

Why do I need to be fed like this?

You may have had a surgical procedure or developed a medical condition that requires your gut to be rested. Alternatively, your medical condition may mean that you are not able to absorb all the nutrients you need from your gut. PN provides the nutrients that your body needs during this period by bypassing your gut and the way nutrients are normally digested.

What does parenteral nutrition contain?

The bag of PN contains a sterile mixture of glucose for energy, protein for repair of body tissue (also called nitrogen), fat as another energy source, vitamins and minerals (essential for body functions such as healing) and water. PN is usually a white colour in appearance and must always be covered with another bag. This is to prevent daylight damaging the vitamins in the bag.

How will I be given the parenteral nutrition?

PN is given via a drip (intravenous infusion) into the blood stream via a central venous access device, using an infusion pump. PN is a concentrated solution so it must be given into a large (central) vein. A central venous access device is a small sterile tube (called a line or catheter) this will need to be inserted into a large vein in your neck, chest or arm. A specialist nurse or experienced doctor will insert the line under sterile conditions to reduce the risk of infection. Your medical team will discuss this with you. Some bags of PN can be given via a peripheral cannula (which is a small tube inserted into a vein in your hand or arm) this is usually done, until a central venous access device can be inserted.

Will I be connected all day?

PN is normally given each day over 24 hours. You should not be disconnected from the bag until it is empty or has been hanging for 48 hours. However, if you find this is restricting, you may be able to have it over a shorter period of time, allowing some hours free off the PN to allow showering, for example, discuss this with the Nutrition Support team.

The number of days you need PN for will depend on your individual circumstances. PN is usually given for at least 5-7 days but can be given longer if needed. It will continue until you are able to be fed into your gut again or eat and drink normally.

Will I feel hungry or thirsty?

While you are on the PN you may not feel hungry or thirsty at all. This is because you are receiving all 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 PN may be run over fewer hours. If your doctor does not want you to eat and drink, ensure your mouth is kept fresh and clean by brushing your teeth and tongue and rinsing your mouth frequently. We can arrange the use of a gel that you can put inside your mouth to keep it moist and stop it from feeling dry.

Are there any risks or complications?

Yes. There is a risk of developing infections from the central venous access device used to give your PN. Therefore the area around the device must be kept clean and staff must always wash their hands and wear gloves when handling this, to prevent infection.

Also, because there is glucose in the PN there is a risk that your blood sugar levels may become unusually high. Nursing staff will do a finger prick blood test at least daily while you are having PN to monitor this. Some people have very high blood sugar levels when having PN and need to have insulin for a short time to help control this. This does not mean that you will become diabetic from the PN as blood sugar levels usually return to normal when the PN is stopped. If you do have diabetes then the nursing and medical team will monitor your blood sugar levels carefully and may need to change your usual treatment whilst you are receiving PN.

Finally, because the PN is being given directly in to your blood stream and bypassing normal digestion, we need to check the salts and electrolytes in your blood each day to ensure we have the balance right for you. Sometimes PN can upset your liver function and so we need to check for this also. This means you will need to have regular blood tests (initially, each day) while you are receiving PN.

There is also the small risk of developing a thrombosis in the vein containing the central line so this should be monitored closely.

Are there any alternatives?

There is no other way of giving nutrients into your blood stream. However, we will always try to allow you to eat and drink or feed you via your gut if at all possible, as these methods carry fewer risks and complications than PN. Sometimes we need to feed you through a fine tube into your stomach or intestine whilst we are changing from PN to feeding in the gut again. PN will only be given if there is a definite medical reason for it and if the team looking after you believe it will be of benefit to you.

Will I go home with PN?

Not normally, this treatment is usually only given for a period of time in hospital.

What is the nutrition support team?

The nutrition support team is a multi-disciplinary team with experience and specialist knowledge of looking after patients who need PN. When doctors think their patient may need PN they refer them to the nutrition support team to be assessed. The nutrition support team will decide exactly what formulation the PN needs to be for individual patients and order the PN each day. They will do this by discussing your circumstances with your own medical team and looking at your blood results. You are likely to see a member of the nutrition support team several times each week whilst you are receiving PN.

What else should I know?

If you feel dizzy, experience palpitations or become hot and sweaty, inform your nurse or doctor immediately as this may indicate you are developing an infection or your blood sugar levels may be abnormal.

Who do I contact if I have any further questions?

If after reading this leaflet you would like to ask more questions please ask a member of the ward or medical team. You can also ask a member of the nutrition support team, the team will see you regularly on Monday, Wednesday and Friday mornings.

Reference source

Guidelines on Nutrition support in adults. National Institute for Health and Care Excellence 2017

■ www.nice.org.uk

Further support

For those who remain on PN for longer periods of time there is a national patient support group known as **PINNT** (Patients on Intravenous and Nasogastric Nutrition Therapy) www.pinnt.com, PINNT PO Box 3126, Christchurch, Dorset. BH232XS

Telephone: 01202 481625 (9.30am–4.30pm)

Email: PINNT@dial.pipex.com

Contact details

If after reading this leaflet you would like to ask more questions please ask a member of the ward or medical team. You can also ask a member of the nutrition support team, the team will see you regularly on Monday, Wednesday and Friday mornings.

Alternatively you can speak to the Nutrition Clinical Nurse Specialist on

Telephone: 01483 571122 **ext** 2598

PALS and Advocacy contact details

Contact details of independent advocacy services can be provided by our Patient Advice and Liaison Service (PALS) who are located on the right hand side as you enter the main reception area. PALS are also your first point of contact for health related issues, questions or concerns surrounding RSCH patient services.

Telephone: 01483 402757

Email: rsc-tr.pals@nhs.net

Opening hours: 9.00am–3.00pm, Monday to Friday

If you would like information documents in large print, on tape or in another language or form please contact PALS.

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