

Parenteral Nutrition (PN) Information for patients and carers

If you need this leaflet in a different language or accessible format please speak to a member of staff who can arrange it for you.

اگر به این بروشور به زبان دیگر یا در قالب دسترس پذیر نیاز دارید، لطفاً با یکی از کارکنان صحبت کنید تا آن را برای شما تهیه کند.

Jeśli niniejsza ulotka ma być dostępna w innym języku lub formacie, proszę skontaktować się z członkiem personelu, który ją dla Państwa przygotuje.

Dacă aveți nevoie de această broșură într-o altă limbă sau într-un format accesibil, vă rog să discutați cu un membru al personalului să se ocupe de acest lucru pentru dumneavoastră

如果您需要本传单的其他语言版本或无障碍格式、请联系工作人员为您安排。

إذا احتجت إلى هذه النشرة بلغة أُخرى، أو بتنسيق يسهل الوصول إليه، يرجى التحدث إلى أحد الموظفين لترتيب ذلك لك.

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What is Parenteral Nutrition (PN)?

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.

Parenteral nutrition is special liquid food in a bag, that can be given directly into your blood without the need to go into your gut first.

It can be used on its own or in addition to eating food by mouth.

It is a way of providing nutrition when your gut is not working properly.

What is Total Parenteral Nutrition (TPN)?

TPN is just another term used for parenteral nutrition. You may hear both terms used, but they both refer to feeding you directly into your blood stream. TPN usually refers to parenteral nutrition being given without any other form of nutrition being given along side this.

Why do I need to be fed like this?

You may have had an operation, developed a medical condition that requires your gut to be rested or your medical condition may mean that you are not able to absorb all the nutrients that you need from your gut. PN provides the nutrients that your body needs during this time.

Notes

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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 (NG tube) whilst we are changing from PN to normal food. 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.

What is the nutrition support team?

The nutrition support team is a multi-disciplinary team, with experience and specialist knowledge in looking after patients who need PN. The team consists of medical and surgical doctors, nutrition nurses, dietitians and a pharmacist.

When the team caring for you think that you may need PN, they refer you to the nutrition support team to be assessed.

The team will decide exactly what formulation the PN needs to be for you and order the PN each day. They will do this by discussing your circumstances with your own medical team and looking at your blood test results. You are likely to see at least one member of the nutrition support team daily (excluding weekends) whilst you are receiving PN.

You may not see all of these team members, but each of them will be involved in your care behind the scenes.

What does PN contain?

PN contains:

- 1. Glucose (sugar) for energy
- 2. Proteins for growth and repair
- 3. Fat for energy and cell repair
- 4. Vitamins and minerals to keep your body healthy, and the body's organs working well.

PN is usually a white colour and must always be covered with another bag. This is to prevent daylight damaging the bag.

How will I be given the PN?

PN is given directly into the blood stream, via a central venous access device (usually a PICC line). This is a small tube placed near your neck, chest or upper arm that leads into a large vein. It is not possible to give PN into a small cannula in your hand, as you may have had for other intravenous fluid or medications, as the PN is very irritating to these smaller veins.

How long will it take to give?

When you first start PN it will be given over 24 hours for a few days. If you require PN for more than 7 days, then the timing may be altered to allow breaks during the day. The PN will be given via a pump to ensure it is not given too quickly or too slowly. Your PN should only be disconnected when it is finished, and should not be disconnected for any other reason. If it has to be disconnected, your bag will need to be discarded and **must not** be reconnected.

Can I eat or drink while I am having PN?

This depends on your individual circumstances. Sometimes, complete rest of the bowel is needed, or only a small amount of water will be allowed. Your doctor and/or nutrition support team will advise you on this.

Will I feel hungry?

Even though you are being provided with all the nutrients that your body needs through the PN, you will usually have no food going into your stomach and therefore, may still experience hunger. You may experience a dry mouth. Cleaning your teeth, regular mouthwash and washing your mouth around with water may help with this.

Will I be able to move around whilst on PN?

The PN bag will hang on a mobile stand and the infusion pump will have a battery that will last several hours, so this should not restrict your movements. You can wash, but please take care not to get the dressing on your line or your pump wet. If the PN is running for 24 hours a day, you can either have a shower in the time between bag connections or wash with a bowl and sponge.

What happens to my bowel motions during PN?

Mucous, cells and bacteria in the bowels still produce bowel movement, even though food is not being eaten. PN goes straight into the blood stream and therefore **does not** cause diarrhoea, tummy pain or vomiting. If you experience any of these symptoms, tell your doctor or nurse as this may be due to your illness/condition.

Are there any risks or complications?

Yes. There is a risk of developing infections from the central venous access device (line) 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 or when giving your PN, to prevent infection.

There are also risks of developing a blood clot from the central line. If this occurs, your arm may be hot, red and painful and once a clot is confirmed on ultrasound, you will be given a blood thinner to treat this.

Also, because there is a lot of sugar 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 into 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 and we need to check for this. This means you will need to have regular blood tests (initially every day) while you are receiving PN.