



## Department of Nutrition & Dietetics

### Parenteral nutrition: information for patients

#### **What is parenteral nutrition (PN)?**

Parenteral nutrition (PN), sometimes called total parenteral nutrition (TPN), is a form of liquid food given directly into your blood stream.

#### **What are the benefits?**

PN allows nutrition to be given even when the gut isn't working. It allows the gut to rest, for example, following surgery to the stomach or bowel so that it can heal, or if the bowel is obstructed due to disease.

#### **How and when is it given?**

PN is given directly into a large vein either in your upper arm, neck or chest or into a central line. Occasionally it may be given into a vein through a peripheral line (cannula) in your arm for a short period of time only, usually until a central line can be inserted.

The feed comes in a special bag and will be attached to your line via a pump. It is usually given continuously over 24 hours initially but the infusion rate can then be increased to allow a break from being attached to the pump.

#### **How is the line inserted?**

A central line is placed under sterile conditions by the procedure team either in the procedure unit or radiology department. You will be given a local anaesthetic to help minimise any pain or discomfort. If you are very anxious about this procedure it may be possible to have sedation so that you are drowsy and relaxed. You will have a chest x-ray afterwards to check the line is in the correct position. When you have your line inserted the staff will give you 'The Christie information booklet - Care of your central venous catheter'.

#### **Will PN provide all the nutrients I need?**

The feed contains all the nutrients and fluid your body requires for health, healing and growth:

- glucose for energy
- proteins for growth and repair
- fat for energy and cell repair
- vitamins and minerals to keep your body healthy and your body's organs working well.

#### **How will I know if the PN is working?**

Your nursing staff, dietitian and medical team will monitor you closely whilst you are receiving PN. You will have your pulse, blood pressure, blood sugar and fluid intake and output checked regularly throughout the day. You will also have daily blood tests and be weighed weekly.

#### **What are the risks?**

- Line infection is the most common complication. It is important that your temperature and the line site are monitored closely. Please read the booklet on 'Care of your central venous catheter' for more information on the risks related to central venous catheters.
- Raised blood sugar levels – your blood sugar will be checked regularly.

### **How long will I need to be on PN?**

This will depend on why you are having PN. If you are having PN following surgery you may need it for up to 7-14 days, until your bowel starts to work properly again. If you have bowel obstruction you may need it for longer. Most people only need PN for a relatively short period of time. Your medical team or dietitian will discuss this with you.

### **When will it be stopped?**

Your PN will be stopped when you are able to be given food and fluid directly into your gut either by mouth or via a feeding tube.

### **Can I eat and drink while having PN?**

This will depend on why you are having PN. Sometimes it is necessary to completely rest your bowel by having nothing to eat or drink. In other situations, you may be allowed some fluid and /or food. Your medical team or dietitian will be able to advise you as to what you are allowed to have.

### **Will I feel hungry or thirsty?**

You generally should not feel hungry or thirsty whilst having PN; however, your mouth may feel dry. It is important to brush your teeth and use mouthwashes regularly.

### **Will I be able to move around while receiving PN?**

You will be able to move around whilst the feed is running as the drip stand is mobile and the pump has a battery that can last for several hours.

You will need to take care when washing to ensure the line site remains dry. While PN is running over 24 hours, you will not be able to take a bath or shower.

### **Will PN affect my bowels?**

PN goes straight into the blood stream and will not cause diarrhoea, abdominal pain or nausea/vomiting. The bowel will still produce mucus, cells and bacteria even though food is not being eaten and so you are likely to still have a bowel movement, although it may be different to when you are normally eating and drinking.

### **Are there any alternatives?**

Not if you need to rest your gut or if your bowel is obstructed.

### **Where can I get further information?**

Your dietitian, doctor or nurse will be able to answer any questions you may have.

There are also websites you can access for information:

**BAPEN** (British Association for Parenteral and Enteral Nutrition) - [www.bapen.org.uk/](http://www.bapen.org.uk/)

**PINNT** (Patients on intravenous or nasogastric nutrition therapy) - [www.pinnt.com/](http://www.pinnt.com/)

If you would like to have details about the sources used please contact [Patient.Information@christie.nhs.uk](mailto:Patient.Information@christie.nhs.uk)