

Modernisation Initiative

kidney disease

Improving local healthcare

Your 15 Minutes of Learning Time





Your 15 Minutes of Learning Time

This booklet is for use by nurses as a tool for teaching, it is not intended to be a patient information booklet. Please try to use it at least once a week for 15 minutes at a time.

Section 1 addresses some of the questions people often ask about their dialysis

Section 2 addresses some of the questions people may ask about chronic kidney disease and lifestyle.

Section 1



What are the functions of the kidneys?

- Filtering the blood to remove excess waste and water
- Producing the hormone erythropoietin to prevent anaemia
- Keeping the bones strong by balancing calcium and phosphate
- Keeping acid and alkaline levels balanced in the blood
- Controlling blood pressure.

What happens when kidneys fail?

- There is no cure, so kidney function needs to be replaced by dialysis or transplantation
- Dialysis is not as effective as working kidneys but enables many people to live a long and full life.



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How does haemodialysis work?

- Blood is taken from your body, cleaned in a filter known as a dialyser (artificial kidney) and then returned back to you
- In the dialyser blood flows along one side of a semi-permeable membrane and dialysate fluid flows along the other side
- The dialysate contains small amount of minerals normally present in the blood. Excess fluid and wastes in the blood pass through the membrane into the dialysate until a correct balance in the blood is achieved.



What is haemodiafiltration? (not available in all dialysis units)

- Haemodiafiltration is a combination of haemofiltration and simultaneous haemodialysis
- Haemofiltration is a more gentle form of dialysis using replacement fluid to remove larger molecules (waste substances) that cannot easily be removed by haemodialysis alone
- Haemodiafiltration is usually recommended on an individual patient basis according to medical need and availability.





What does dry weight or target weight mean?

- You need to be aware of your dry or target weight. This refers to fluid weight not flesh weight and is the weight at which your body is neither fluid overloaded or fluid depleted i.e. your fluid levels are balanced
- Your dry weight is:

What is blood pressure and why is it important to measure it?

- Blood pressure is the pressure that the blood exerts against the walls of the arteries as it flows through them
- If you are fluid overloaded your blood pressure will be high. If you are fluid depleted your blood pressure will be low so we measure it to help assess your fluid levels before and after dialysis
- We aim to keep your blood pressure within the normal range (below 140/90)
- High blood pressure over a long period can cause heart attacks and strokes so it is important to keep it within the normal range.



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What is ultrafiltration?

- This is the process of removing excess fluid on dialysis
- For example:
 - Dry weight = 70kg
 - Pre-dialysis weight = 72.3kg
 - Need to remove 2.3kg (+ 700mls 'washback'/ drinks = 0.7kg) = 3kg in total
 - Over 4 hours dialysis the machine will remove 0.75kg per hour – this is the ultrafiltration rate.



Why do I occasionally feel dizzy on dialysis?

- This may occur as fluid is being removed from your body especially if you are removing a lot of fluid or removing it too quickly
- Your blood pressure may have fallen suddenly
- You should inform a nurse.





Why do I need to check my temperature?

- A high temperature i.e. above 37° may suggest you have an infection which is why we check it before and after dialysis.

Why do I need heparin on dialysis?

- To stop your blood from clotting when it leaves your body
- Blood will clot naturally when it leaves the body so heparin is given to prevent this happening during dialysis.



How can I look after my fistula?

- Keep it clean
- Don't have blood taken from that arm
- Don't take blood pressure on that arm
- Keep it warm in cold weather
- Check daily for 'buzz' and any signs of infection
- Do not carry heavy bags of shopping on that arm
- Inform the unit immediately if you have any concerns.



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What does arterial pressure mean?

- This represents the blood flow in the arterial (red) needle that is taking the blood out of your body
- If arterial pressure alarms – check arterial needle – may need to be re-positioned.

What does venous pressure mean?

- This represents the blood flow in the venous (blue) needle that is returning the blood to your body
- If venous pressure alarms – check venous needle – may need to be re-positioned.

How do I know my dialysis is effective?

- We can check this by your monthly blood results and also by how well you feel
- If necessary changes may be suggested to increase the efficiency of your dialysis e.g. change of dialyser
- (show patient their blood results, discuss relevance).





Can I do less or more hours on dialysis per week?

- Most people need at least 12 hours dialysis a week to keep them well
- If you miss a dialysis session you will start to feel unwell and the build up of wastes in your body can be dangerous
- Generally the more dialysis you have the better you will feel.

Can I dialyse at home or change units?

- This may be possible (your unit has other information on this).

Section 2

Why do I have to restrict my diet?

- Dialysis is not as efficient as working kidneys at removing wastes
- In between dialysis sessions wastes will build up in your body so that's why you need to restrict some foods
- If you have any queries about your diet please ask to speak to a dietician.

Why do I have to restrict what I drink?

- We advise you to restrict your fluid intake (drinks) because when kidneys fail you make little or no urine so anything you drink stays in your body 'till the next dialysis and may make you breathless and raise your blood pressure
- You should restrict your fluids according to how much urine you make so if you measure your urine over 24 hours we can work out how much you should drink in litres or pints or cups
- Ideally your weight should not increase by more than 2 kg between dialysis sessions.

Why do I need to take medications?

- You need to take medications to help support the functions of the kidney which do not work well when kidneys fail. For example, EPO replaces the hormone erythropoietin which healthy kidneys usually produce. This hormone helps produce red blood cells so if you are lacking in this hormone you will be anaemic. By replacing this hormone with EPO we can prevent anaemia
- (ask patients to bring the drugs, or a list, to discuss).

Why do I feel tired at times and can I do anything about it?

- Tiredness affects many people on dialysis due to the level of wastes in the blood and anaemia
- It is important to take your medication regularly, and eat well
- Taking gentle exercise is also a good way to increase your stamina and general wellbeing, for example, walking or swimming or you can join your local recreation centre.



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How can I keep my heart healthy?

- Take your EPO to prevent anaemia
- Try to keep to your fluid restriction to help prevent high blood pressure
- Take your blood pressure tablets as prescribed
- Try to keep to your diet (for example, when phosphate is high it combines with the calcium in your blood and collects on blood vessels which is bad for them so avoid the high phosphate foods such as dairy produce)
- Take your statin tablets to keep your cholesterol low.

Can having kidney failure and being on dialysis affect my sex life?

- Many healthy people encounter difficulties with sexual relationships at some point in their life. Both men and women with kidney failure can experience a decrease in libido (sex drive) for a number of reasons
- There are many effective treatments available, please do not feel embarrassed to ask
- Some people may find that counselling helps with any emotional issues (renal counsellor or via GP).

Can I have children if I am on dialysis?

Fertility in men and women with kidney failure is reduced. This usually returns to normal following a successful transplant.

- Women – Periods are often irregular or absent but contraception is still advisable. It is rare, but not unheard of, to have a successful pregnancy whilst on dialysis. You would require very close monitoring and for this reason it is advisable to discuss the pros and cons with your doctor before trying for a baby
- Men on dialysis can successfully father children but usually the sperm count is reduced.

Can I go on holiday if I am on dialysis?

Yes, it is possible to have holidays whilst on dialysis. Holiday dialysis can be arranged in the UK and abroad, depending where you want to go and for how long. Please discuss this with the nurses before making any holiday arrangements and we can advise you how to go about it.

Should I stop smoking?

YES! There is plenty of evidence to suggest that smoking greatly increases the risk of developing heart disease and other serious illnesses. The risks are greater in someone with kidney failure. Most GPs can offer support on stopping smoking.

Am I on the transplant list?

- If you are not sure, we can check this for you
- If you are on the list you may like a copy of the leaflet 'Understanding the kidney transplant pool'
- If you are not on the list and you don't know why you aren't, we can ask the doctor to discuss this at your next clinic appointment.

What if I think I may wish to stop dialysis treatment?

The aim of dialysis is to allow you to continue with a quality of life that is acceptable to you. Some people may have a quality of life that is considerably reduced, particularly if you have other serious health problems or extreme frailty, which dialysis will not improve. In such a situation, some people may choose to stop treatment which means that you will have a very limited life expectancy.

This decision can only be made after careful consideration and discussion with your loved ones but ultimately the decision is yours. We will continue to support you whatever you decide and, of course, you are free to change your mind at any time. We have a supportive care team specifically to help people in these circumstances.

Please encourage patients to ask any questions they wish. This booklet is just a guide to help you start off the process of teaching and learning which should be ongoing.

If patients ask questions you do not feel confident to answer please refer to other members of the renal healthcare team.

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