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| **An Introduction to peritoneal dialysis** |

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| [Click here...](http://www.kidneypatientguide.org.uk/pdanim.php) | With this method, instead of being cleaned by an artificial [membrane](http://www.kidneypatientguide.org.uk/glossary.php#Membrane) outside the body, the blood is cleaned inside the body, through the [Peritoneum](http://www.kidneypatientguide.org.uk/glossary.php#Peritoneum). This is the thin membrane that surrounds the outside of the organs in the abdomen.  The peritoneum allows waste products to pass through it and is very rich in small blood vessels. By running a [dialysis fluid](http://www.kidneypatientguide.org.uk/glossary.php#Dialysis_Fluid) into the [peritoneal cavity](http://www.kidneypatientguide.org.uk/glossary.php#Peritoneal_Cavity), through a tube called a [Tenckhoff Catheter](http://www.kidneypatientguide.org.uk/glossary.php#Tenckhoff_Catheter) - and then out again - waste can be filtered from the blood. |

**There are two types of peritoneal dialysis:**

**CAPD** - which stands for Continuous Ambulatory Peritoneal Dialysis - happens throughout the day, at home or at work, while the person goes about his or her daily life. Between 1.5 and 3 litres of fluid is run in four times a day, exchanging for the fluid from the previous exchange. This takes about 30-40 minutes.

**APD** - Automated Peritoneal Dialysis - in which the dialysate solution is changed by a machine, at night, while you are asleep. The machine will exchange 8-12 litres over 8-10 hours and then leave 1-2 litres to dwell during the day.

You will be trained by the PD nurses - the techniques need to be done correctly and in a clean manner - but are designed to be done at home perhaps with the help of a partner. Although you are at home, you will be contacted frequently by the nurses and will come to the out-patient clinic every few weeks.

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| **What is the Peritoneal Dialysis Fluid?**   * Peritoneal dialysis fluid is a sugar ([glucose](http://www.kidneypatientguide.org.uk/glossary.php#Glucose)) solution containing other salts. Bags come in 3 strengths (1.36%, 2.27% and 3.86% or light, medium and heavy) - the "heavier" the bag (ie.3.86%), more water will be removed from the body. * If you have a lot of fluid in the body, you would use heavy bags to remove fluid. If you are dehydrated, you would use some light bags so that the dialysis does not remove fluid. * The sugar solution can be a problem for [diabetic](http://www.kidneypatientguide.org.uk/glossary.php#Diabetes) patients and changes in therapy may be needed. New solutions are being developed - [Protein](http://www.kidneypatientguide.org.uk/GoodNutrition.php#Protein) or starch. |

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| **How good is peritoneal dialysis?**   * Peritoneal dialysis can provide good, efficient dialysis but needs to be monitored carefully. It needs to be performed daily with breaks only because of unusual circumstances. * The nurses and doctors will measure how effectively the dialysis is being performed and change the volume and strength of the fluids. * If good dialysis cannot be achieved it is important to think about a change - from CAPD to APD or to [haemodialysis](http://www.kidneypatientguide.org.uk/glossary.php#Haemodialysis). |

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| **What are the problems with peritoneal dialysis?**   * There can be problems with fluid leaks in the groin or around the [catheter](http://www.kidneypatientguide.org.uk/glossary.php#Catheter) when dialysis starts. These problems can be managed easily. * Infections are the major risk - either in the exit site or most importantly in the tummy itself, peritonitis. This shows as tummy pain, a fever and a cloudy fluid bag. It is important to ring the kidney unit immediately if a cloudy bag develops. Peritonitis is treated with antibiotics added to the bags and may need admission to hospital for a few days. Rarely, the infection may be so bad that the [catheter](http://www.kidneypatientguide.org.uk/glossary.php#Tenckhoff_Catheter) has to be removed. * In the long term, there can be a thickening of the peritoneal [membrane](http://www.kidneypatientguide.org.uk/glossary.php#Membrane) so that it does not work efficiently. The [dialysis fluid](http://www.kidneypatientguide.org.uk/glossary.php#Dialysis_Fluid) may need to be changed or switched to haemodialysis. |