Dietary Dialysis Advice – how to control your phosphate level in your blood

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Introduction
This leaflet is for people on haemodialysis or peritoneal dialysis. It provides a guide on how you can help control the phosphate level in your blood. Having good quality dialysis and being careful with your dietary intake are equally important in controlling phosphate levels. The renal dietitian will be able to provide you with individualised dietary advice based on your most recent blood results and will answer any questions.

What is phosphate?
Phosphate is a mineral in the body that is important in keeping your bones strong. Normally the kidneys are responsible for keeping your phosphate level stable. However, in kidney failure phosphate levels tend to go up. As dialysis cannot remove all the excess phosphate it is sometimes necessary to adjust your diet.

Why is phosphate important?
Your phosphate level will be measured regularly when you have blood test taken in clinic or in the dialysis unit. A high phosphate level (called hyperphosphataemia) can cause bone disease, itching and a chalky substance to be left in your blood vessels. It is therefore important to keep your blood levels in a safe range to help you stay healthy.

Your phosphate level should ideally be between 1.1 and 1.7 mmol/l

Your blood test has shown that your phosphate level is high.
### Tips on what foods are high in phosphate

The list below gives a simple guide on some of the foods that are high in phosphate and need to be limited. It also provides tips on alternative foods that can be used.

<table>
<thead>
<tr>
<th>Foods high in phosphate</th>
<th>Alternatives you can have</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dairy:</strong> milk, cheese, eggs, yoghurt, ice cream, custard, milk puddings, processed cheese (for example Dairylea, Laughing Cow and supermarket branded cheese spreads).</td>
<td>Soft/cream cheeses such as Philadelphia or supermarket branded cream cheese, milk substitutes, double cream.</td>
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<tr>
<td><strong>Fish:</strong> Shell fish, kippers, fish with edible bones for example tinned sardines and mackerel. They can be eaten if the bones are removed.</td>
<td>White fish, fish fingers, tuna, salmon.</td>
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<td><strong>Offal:</strong> Liver, kidney, pate.</td>
<td>Beef, pork, lamb, chicken and turkey.</td>
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<td><strong>Breakfast Cereals:</strong> All cereals containing bran, nuts or chocolate.</td>
<td>All other cereals.</td>
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<tr>
<td><strong>Biscuits and cakes:</strong> Flapjacks, oatcakes, chocolate biscuits, scones, crumpets.</td>
<td>Shortbread, rich tea biscuits, doughnuts, pancakes, cream crackers, water biscuits.</td>
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</table>
Foods high in phosphate

Drinks:
Cola, Dr Pepper, chocolate and malted drinks (such as Horlicks and Ovaltine).

Alternatives you can have
All other fizzy drinks and squashes, tea.

Others:
Nuts, chocolate, marmite, dried instant snacks (such as instant noodles and soups), marzipan.

Boiled sweets, jelly, mints and chewing gum.

To help dietary changes lower blood phosphate, we may also suggest that you are prescribed phosphate binding medication.

How do phosphate binders work?

Phosphate binders are taken alongside food and work by attaching themselves to any phosphate in your gut, so less of the phosphate is absorbed and does not build up in your bloodstream.

It is important to take the phosphate binders at the right time as written in the instructions. The table below gives information on phosphate binders.

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<td>Medication</td>
<td>When to take</td>
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<tr>
<td>Calcichew (Calcium Carbonate)</td>
<td>Chew just before meals.</td>
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<tr>
<td>Phosex (Calcium Acetate)</td>
<td>Swallow with meals.</td>
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<tr>
<td>Renacet (Calcium Acetate)</td>
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<tr>
<td>OsvaRen (Calcium Acetate/Magnesium Carbonate)</td>
<td>Swallow with meals.</td>
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<tr>
<td>Renagel (Sevelamer Hydrochloride)</td>
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</tr>
<tr>
<td>Renvela (Sevelamer Carbonate)</td>
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</tr>
<tr>
<td>Fosrenol (Lanthanum Carbonate)</td>
<td>Chew to a paste and take during or just after meals.</td>
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</table>
Remember...

• You are an individual with your own set of unique blood results. The dietitian will give you advice to try to control your blood results and keep you healthy

• Both good quality dialysis and diet are important in controlling phosphate levels in the blood

• Take you phosphate binders with you if you plan to eat away from home

• If you are prescribed iron tablets do not take them at the same time as your phosphate binder

• It is important that you eat a well balanced diet

• If you are worried about your diet or if your appetite is poor please ask to speak the dietitian

• It is important to take your phosphate binder if you eat during your haemodialysis treatment

Where can I find further sources of information?

Further information can be obtained from:

• The National Kidney Federation www.kidney.org.uk

• NHS Choices website has information about a wide range of health topics www.nhs.uk

• Renal Patient View www.renalpatientview.org

• Eating Well for a Healthy Kidney: Expert Guidance and Delicious Recipes (Class Health), Helena Jackson, Gavin James and Claire Green
The Trust provides free monthly health talks on a variety of medical conditions and treatments. For more information visit www.uhb.nhs.uk or call 0121 627 7803

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