



## **Dietary advice – how to control your phosphate level in your blood**

**Building healthier lives**

# Introduction

This leaflet is for people with chronic kidney disease who have a raised phosphate and have been advised to change their diet to help control their phosphate level. 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 to keep your bones strong. Normally the kidneys are responsible for keeping your phosphate level stable. However in kidney failure phosphate levels can increase and it is therefore sometimes necessary to adjust your diet.

## Why is phosphate important?

Your phosphate level will be measured regularly when you have a blood test in clinic or in the dialysis unit. A high phosphate level (called hyperphosphataemia) can weaken your bones making them more prone to fractures.

Too much phosphate in the blood can also combine with calcium and make your blood vessels hard leading to heart disease and blood vessel disease. High phosphate can cause itching which may be unpleasant. It is therefore important to keep your blood levels in a safe range to help you stay healthy.

**Phosphate ideal range should be 0.8–1.5 mmol/l, but for some people your health care professional may advise a higher level is acceptable.**

## How to reduce your phosphate through diet:

Include more fresh foods in your diet rather than processed foods. This is because many processed foods have phosphate-containing food additives. These can be found on food labels. Look for the letters 'phos'. The table below shows some common ones:

E Number	Phosphate additive
E338	Phosphoric acid
E339	Sodium phosphate
E340	Potassium phosphate
E341	Calcium phosphate
E343	Magnesium phosphate
E450	Diphosphates
E451	Triphosphates
E452	Polyphosphates
E541	Sodium aluminium phosphate

Examples of food which may contain such food additives are:

- **Bakery products:** cakes, biscuits, pastries and tortillas
- **Seafood products:** frozen processed fish and shellfish. Fish paste
- **Dairy products:** evaporated milk, creams, sterilised and UHT milk, dried milk products, and processed milky desserts
- **Processed cheese:** Spreadable and sliced processed cheese
- **Potato products:** frozen, chilled and dried products (for e.g. chips, waffles, roast potato and mashed potato)
- **Dried powdered food items:** Sauces (especially cheese-based), dessert mixes, soups, instant pasta dishes and instant noodles
- **Non-alcoholic drinks:** dark fizzy drinks such as Pepsi, Coca Cola, supermarket own brand cola style drinks, Dr. Pepper. Chocolate and malted dairy drinks
- Some foods with a high phosphate content such as dairy products, nuts and chocolate can be included in moderation

- Include fresh meat, poultry, fish, eggs, beans and pulses in your diet
- Soft bones of tinned fish such as sardines should be avoided
- Include wholegrain in your diet regularly

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.

Medication	When to take
Calcichew (Calcium Carbonate)	Chew just before meals
Adcal (Calcium Carbonate)	Chew just before meals
Phosex (Calcium Acetate)	Swallow with meals
Renacet (Calcium Acetate)	Swallow with meals
OsvaRen (Calcium Acetate/ Magnesium Carbonate)	Swallow with meals
Renagel (Sevelamer Hydrochloride)	Swallow with meals
Renvela (Sevelamer Carbonate)	Swallow with meals
Fosrenol (Lanthanum Carbonate)	Chew to a paste and take during or just after meals
Velphoro (Sucroferric Oxyhydroxide)	Chew or break into few pieces. Take with water with meals

## **Remember...**

- You are an individual with your own set of unique blood results
- For people on dialysis, both good quality dialysis and diet are important in controlling phosphate levels in the blood
- Take your phosphate binders with you if you plan to eat away from home
- It is important that you eat a well balanced diet including wholegrain foods
- If you are worried about your diet or if your appetite is poor please ask to speak to the dietitian
- For people on haemodialysis, 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](http://www.kidney.org.uk)
- NHS Choices website has information about a wide range of health topics [www.nhs.uk](http://www.nhs.uk)
- [www.kidneycareuk.org](http://www.kidneycareuk.org)

Please use the space below to write down any questions you may have and bring this with you to your next appointment.



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