

# Reducing your phosphate intake: information for children and young people

Calcium and phosphate are both important for growth and development of strong bones. The kidneys usually remove the phosphate that your body does not need. When your kidneys are not working well, the phosphate level in your blood starts to rise. It is important to control this, as high blood phosphate levels can stop your bones growing properly and becoming strong and can damage your blood vessels and heart. This information sheet from Great Ormond Street Hospital (GOSH) tells you about the small changes you can make to your diet, which can help manage your phosphate levels.

## Which foods contain phosphate?

- Phosphate is present as an additive in a lot of processed foods and drinks.
  - Please see the list below and begin to reduce your intake of foods which contain phosphate additives.
- Phosphate is also found naturally in a wide variety of foods, particularly dairy products (milk, yoghurt, cheese, custard, ice cream and chocolate) as well as eggs, nuts, meats and chicken.
  - These foods also provide other important nutrients you may need to reduce your intake of these foods but this should always be discussed with your renal dietitian first.

## Phosphate additives – reduce your intake of these

- Phosphate additives may be used in processed foods to extend their shelf life, maintain colour and moisture or enhance the flavour
- Eating food containing phosphate additives can considerably increase the phosphate level in your
- Foods which are likely to contain phosphate additives include: processed cheeses, processed
  chicken, meats, and sausages, frozen products (such as fish fingers, chicken nuggets/dippers) and
  some fizzy drinks (mainly darker drinks, such as Coca-Cola, Pepsi-Cola, and Dr Pepper)
- Many other food products can contain phosphate additives including instant desserts, ice cream, cakes, pancake mixes, naan bread, crumpets, tortilla wraps and bakery products
- Phosphate additives are included in ingredients lists. They may be labelled by name OR an E number. Reading food labels can help you choose suitable options free from phosphate additives



#### Check ingredient labels for:

•	E 338	Phosphoric acid
•	E 339	Sodium phosphates
•	E 340	Potassium phosphates
•	E 341	Calcium phosphates
•	E 343	Magnesium phosphates
•	E 450	Diphosphates
•	E 451	Triphosphates
•	E 452	Polyphosphates

Products with the above ingredients should be limited or avoided

For example: ingredient label from fish fingers

Cod (**Fish**) (60%), Breadcrumbs, Rapeseed Oil, **Wheat** Flour, Water, **Wheat** Starch, Salt, Palm Oil, Raising Agent (Sodium Bicarbonate), Glucose Syrup, **Disodium Diphosphate**, Sunflower Oil, **Milk** Proteins, Breadcrumbs contains: **Wheat** Flour, Water, Salt, Dextrose, Yeast, Rapeseed Oil, **Wheat** Flour contains: **Wheat** Flour, Calcium Carbonate, Iron, Niacin, Thiamin

### High phosphate foods

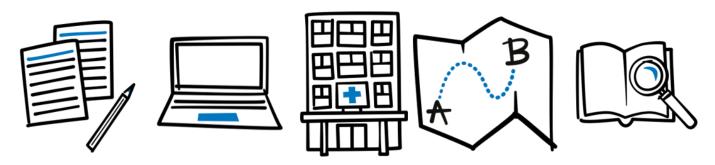
- Many of the foods which are naturally high in phosphate are an important part of your daily food intake and so should not be avoided completely. However, they may need to be reduced to control blood phosphate levels. Discuss this in more detail with your renal dietitian.
- Full fat, semi-skimmed and skimmed milk all contain similar amounts of phosphate. Adding water to
  full fat milk will give you a larger volume of milk to drink or use on breakfast cereals. It will taste like
  semi-skimmed milk.

## What is a phosphate binder?

- This medicine acts like a sponge by absorbing some of the phosphate from the food that you eat. It is then passed out of your body in your poo when you go to the toilet.
- Examples of phosphate binders are calcium carbonate, calcium acetate, sevelamer hydrochloride and sevelamer carbonate.
- It is important to take phosphate binders with feeds, meals and any high phosphate drink or snack.

  Ask your dietitian or doctor how to take your phosphate binders.

This diet sheet may not be suitable for all children with kidney disease. Please refer to a paediatric dietitian to discuss your particular needs.



## **Further information and support**

- The infoKID website offers information on kidney disease and treatments www.infoKID.org.uk
- The kidskidneydiet app is an interactive educational app for children and families. It is available for Apple devices – visit the Apple Store for details. Note: No version for Android devices is currently available.

We advise all children with Chronic Kidney Disease to avoid Star Fruit

Please note: This information sheet should only be used under the supervision of a medical professional and may not be suitable for every child. Although every care is taken when compiling this information sheet, manufacturers may alter ingredients of foods and drinks without warning. You should always check the ingredients label. This information sheet may include brand names but in many cases, alternatives (including supermarket own brands) may be suitable. Including specific products in this information sheet does not mean we are recommending them.

