

LOW PHOSPHORUS DIET



Low Phosphorus Diet

What is phosphorus?

Phosphorus is a mineral needed by the body in energy producing processes as well as for building healthy strong bones.

What happens in kidney failure?

The normal healthy kidney helps to keep phosphorus in balance by removing extra phosphorus from the body. In early kidney failure, the usual corrective changes are initially successful in correcting the phosphorus level by increasing elimination through the kidneys (urine). This is through signal from parathyroid hormone (PTH). With more severe kidney failure, even with high level of PTH, the kidneys cannot respond. PTH causes minerals to be released from the bone, making the bone structure weak.

High blood phosphorus level lowers the calcium level in the blood and causes calcium to be taken from the bones, which weaken the bones and cause easy fractures. The common symptoms of high phosphorus levels are itch, bone pain and red eyes.

The normal range for phosphorus is 0.77mmol/L to 1.38mmol/L or 2.0mg/dl to 4.0mg/dl. High phosphorus level is detected through a simple blood test.

How can I control my phosphorus level?

You can keep your phosphorus level normal by understanding your diet and what medications can help in phosphorus control.

Your doctor may order phosphate binders, which are medications for you to take with your meals and snacks. Phosphate binder will bind with the phosphorus in your food when you take your meals. Phosphate binders include aluminium hydroxide, calcium carbonate and lanthanum carbonate commonly known as Alutab,

Calcichew, Tums and Fosrenol. These medications must be taken with meals; otherwise they will not be effective.

Dialysis can remove some phosphorus from your blood, but its action is limited.

What foods are high in phosphorus?

Phosphorus is mainly found in dairy products, high protein food, and all kinds of nuts and beans. Here are some foods that you need to avoid.

High Phosphorus Foods (Best to Avoid)

Dairy Products:

Milk, Cheese, Yogurt, Ice Cream

Meat, Poultry, Fish and Seafood:

Organ Meat, Marrow, Ikan Bilis, Sardine, Seafood, Shellfish, Beef, Mutton

Nuts and Beans:

Baked Beans, Peas, Lentil, Soya Bean, Pumpkin Seed, Sunflower Seed, Almonds, Cashew, Walnut, Peanut, Pecans, Cocoa

Grains:

Bran, Muesli, Oat, Wheat Germ, Wholemeal Bread, and Foods containing a lot of baking powder and yeast

Yeast and Vegetable Extracts:

Beer, Wine, Bovril, Marmite.

Drinks:

Carbonated Cola, Soy Milk, Beer, Cocoa, Malted drinks e.g. Horlick, Ovaltine, Milo

Others:

Egg Yolk, Bean Curd, Coconut, Coconut Products, Chocolate and Chocolate Products

What can I eat?

You may eat some of the phosphorus foods. Although poultry and fish may be higher in phosphorus, they are acceptable alternatives because they are good sources of protein.

Lower Phosphorus Foods

Poultry, Fish:

Fish and Chicken

Grains:

White Rice, Pasta, White Bread, Corn Flakes

Drinks:

Coffee, Tea, Cranberry Juice, Apple Cider

Others:

Egg White, Popcorn, Plain Cracker.

Tips

- Restrict to a minimum amount or avoid food that contains high phosphorus.
- Remember to take phosphate binders with food. Do not stop taking them on your own. If you experience problem or side effects, discuss them with your doctor, dietician or nurse.
- Some foods may also contain a high amount of potassium, so be careful in your selection.
- When in doubt about the food products, check with your doctor, dietician or nurse whether the products are suitable for you.

Take phosphate binding medication as prescribed by your doctor and avoid high phosphorus food can help you control phosphorus levels.




You may visit these websites for more information:

<http://www.kdf.org.sg/health.aspx>



<http://www.davita.com/>

<http://www.kidney.org/atoz/content/phosphorus.cfm>



Phosphorus is a mineral needed by the body in energy producing processes as well as for building healthy strong bones.

低磷质饮食



磷质是身体所需的一种矿物质来制造体力与维持骨骼的健康。

低磷质饮食

什么是磷质?

磷质是身体所需的一种矿物质来制造体力与维持骨骼的健康。

肾衰竭的情形

正常健康的肾脏能够将多余的磷排出体外以维持体内磷的平衡。在初期肾衰竭，通过甲状旁腺激素(PTH)的信号，肾脏仍然能够继续将体内多余的磷以尿液排出体外以维持身体里的磷的水平。但在末期肾衰竭，再多的甲状旁腺激素，肾脏也无法排除体内多余的磷。甲状旁腺激素使骨骼释放矿物质，导致骨骼的结构越来越脆弱。

高磷含量将会降低血液里的钙质水平，导致骨骼释放更多的钙质进入血液，这可导致骨骼的结构更为脆弱并容易折裂。高磷含量的一般症状包括发痒、骨头疼痛和红眼。

磷的正常水平是0.77至1.38mmol/L，或2.0至4.0mg/dl。通过简单血液检测就可以测量磷的含量是否过高。

如何控制血液中的磷含量?

您必须知道如何控制饮食中的磷摄取及药物的服用以帮助您维持正常的磷水平。

医生可配给您磷结合剂的药物。磷结合剂需要在您用餐时，与食物一起吃。这样磷结合剂就能够吸收食物中的磷质。磷结合剂包括氢氧化铝、碳酸钙和碳酸镧，即称为Alutab、Calcichew、Tums和Fosrenol。这些药物必须和食物一同进食，否则就达不到效果。

透析疗程虽然能够排除您的血液中一些磷，但并不是很有效。

什么食物有高磷含量?

磷主要是存在于乳制品、高蛋白食品及各式坚果/豆类。以下是您必须避免的一些食品：

高磷食品 (最好能避免食用)

乳制品：

牛奶、乳酪、乳酸、冰淇淋。

肉类、家禽、鱼及海鲜：

内脏、肉、骨髓、江鱼仔、沙丁鱼、贝壳类、海鲜、牛肉、羊肉。

坚果和豆类：

茄汁豆、豌豆、扁豆、黄豆、南瓜籽、葵花籽、杏仁、腰豆、核桃、花生、胡桃、可可。

谷类：

谷糠、麦麸片、燕麦、麦胚、全麦面包、含有大量焙粉和酵母的食品

酵母和蔬菜萃取：

啤酒、葡萄酒、牛油汁、菜汁。

饮料：

有汽可乐、豆奶、啤酒、可可、麦制饮料如好立克、阿华田、美禄。

其他：

蛋黄、豆干、椰子、椰制食品、巧克力与巧克力食品。

什么食物可以吃?

有一些食物含有磷质是可以吃的。如家禽和鱼类的磷含量虽然稍微高了一点，但是可以允许的食物选择，因为它们含有丰富的蛋白质。

低磷食品

家禽，鱼类：

鱼肉、鸡肉

谷类：

白米饭、意大利面、白面包、脆玉米片

饮料：

咖啡、茶、蔓越莓果汁、苹果汁

其他：

蛋白、爆米花、无添加口味饼干

提点

- 限制磷的摄取至最低份量或避免高磷含量的食品。
- 记得在进食时服用磷结合剂，不可擅自停止服用。您如果感觉不妥或产生副作用，就应向您的医生、营养师或护士询问。
- 有些食品也许同时含高钾含量，所以必需谨慎选择。
- 若对任何食品有疑问，可向您的医生、营养师或护士询问是否适合。

遵照医生指示服用磷结合剂及避免摄入高磷含量的食品。这将能帮助您控制体内的磷含量。



欲知详情，可参阅以下的网址：

<http://www.kdf.org.sg/health.aspx>

<http://www.davita.com/>

<http://www.uptodate.com/patients/index.html>