

Nutritional Supplements in Chronic Kidney Disease Pop it or Drop it ?



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Nutritional Supplements

The supplement landscape has become a sophisticated version of Willy Wonka's candy shop, vibrant, diverse, and ever expanding range of formulations designed to support every wellness goal.



However, the majority of the population DO NOT need to take additional nutritional supplements if they are having a healthy balanced diet.



Taking supplements may be indicated in those with vitamin or mineral deficiencies (advised by a health professional), a medical conditions or those with specific dietary needs.

Always consult with your GP or kidney team if you are unsure.



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Vitamin C



Drop it

The recommended daily dose of Vitamin C in kidney disease is around 60-90mg /day depending on the CKD staging. This amount is easily attainable from diet. Taking additional large doses some of which can be upto 10 times the recommended dose at 1000mg per tablet are not advised as these may lead to kidney stones

Vitamin D



Pop it

Vitamin D is recommended for all individuals over the age of 1 in the UK usually 10ug or 400IU between the months of October and March. Higher doses may be prescribed to individuals with CKD depending on the staging.

If you are taking multivitamins do check to see if it contains Vitamin D as well.

Cod liver oil



Drop it

Cod liver oil may have anti inflammatory benefits for joints but it contains high levels of Vitamin A, which may cause harm to people receiving dialysis or with a low kidney function so not recommended. Do talk to your health professional for alternative options if you are concerned with joint pain.

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B Complex Vitamins



Pop it as advised

B Complex vitamin tablets are generally safe to take in CKD and support those that are struggling with a poor appetite. B12 and Folate (B9) are commonly prescribed in CKD and safe to take. Professional guidance is required to ensure the right type and dose if bought over the counter. **NB** High levels of B7 can interfere with troponin levels, so always let a health professional know of any vitamins you take

Magnesium



Drop it

If you have been advised of low levels then a supplemental dose may help restore your deficit. Unnecessary high dosing often promoted for improved sleep or muscle cramping can lead to serious side effects. Some antacids and some phosphate binders can also increase magnesium levels. Magnesium is easily achieved from a well balanced diet if you you have a good appetite. Kidney dietitians can advise you based on your current blood test results

Herbal supplements



Drop it

Despite the misconception that herbal supplements are safer to take, they may interact with prescribed medicine and affect the way medicines work. Those with CKD should always avoid any herbal type remedies despite recommendations from those that use them already. Medical background differ and so caution is needed when considering them. Do discuss this with your health professional first and always disclose what you take or have taken.

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Tumeric



Pop it as advised

Tumeric is thought to acts as an anti oxidatant and anti-inflammatory agent and may help gut problems and joint pain. It is safe in tea and in curry, but taking high dose supplements over long periods of time may increase the chance of kidney stones. The risk all depends on the stage of the kidney disease and dosing, professional guidance is indicated.

Iron



Pop it as advised

Iron deficiency is a common complication of CKD and may lead to iron deficiency anaemia. It often manifest clinically as fatigue, weakness and shortness of breath. Over the counter tablets or liquids supplementation may not be sufficient to treat a deficiency. High dose tablets that are managed by a kidney team may be required along with monitoring and guidance. In some cases IV Iron infusions are required.

Creatine



Drop it

Creatine is one of the most researched supplements and does not affect healthy normal functioning kidneys. However, If you have known CKD regardless of your staging you should **NOT** take creatine as this is converted to creatinine and inadvertiy reduces your kidney function. Over long periods this can impact function

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Collagen



Drop it

The internet is saturated touting the benefits of collagen, majority of which are aimed at reducing wrinkles and improving skin texture. However, there is a notable lack of research to support the majority of the beauty claims made. Collagen by definition is an animal protein derived from bovine (cows) porcine (pigs) poultry (chickens) and marine (fish). Proline, glycine and hydroxyproline are the main amino acids in Collagen. They are fundamentally an expensive specialised protein supplement and the amino acid hydroxyproline is metabolised and converted into oxalates so if you have known CKD and / or a history of kidney stones then this may increase the risk of kidney stone reoccurrence.

The only robust evidence although limited is the use of Collagen for knee / joint pain and stiffness.

Supplements can help with function and deficiencies, but they can't replace the metabolic and microbial complexity that comes from whole-foods diversity and fibre.



Do consult with your GP or pharmacist before taking any supplements. Remember supplements may also interact with medicines that you may be currently taking.



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