

Renal (Kidney) Diet

Control potassium, phosphorus, sodium and protein when kidneys can't.



MAINLY USED FOR

Chronic kidney disease, dialysis

CORE RESTRICTION

Sodium, potassium, phosphorus; protein adjusted by stage

EFFORT

5 of 5

01 How it works

Healthy kidneys excrete potassium, phosphate, sodium and the nitrogen waste from protein. As filtration falls, those build up. High potassium can stop the heart; high phosphate pulls calcium from bone and calcifies arteries; sodium drives fluid overload and blood pressure.

Targets change with stage and with dialysis. Pre-dialysis CKD often restricts protein moderately to slow progression. On haemodialysis, protein requirements go up, because dialysis removes amino acids.

Phosphate additives in processed food are absorbed at nearly 100%, versus 40-60% from natural protein sources. Reading labels for 'PHOS' ingredients often achieves more than cutting dairy.

02 Nutrition at a glance

Renal targets change with CKD stage, lab results and whether you are on dialysis, so these are ranges rather than rules.

Sodium	Under 2000 mg/day	The single highest-impact change
Potassium	2000-3000 mg/day	Only if blood levels are high
Phosphorus	800-1000 mg/day	Additives first – they are almost fully absorbed
Protein pre-dialysis	0.6-0.8 g/kg	Moderated to slow progression
Protein on dialysis	1.0-1.2 g/kg	Requirements go up, not down
Fluid	Individualised	Often restricted on dialysis

Nutrients that often run short: Protein (on dialysis) · Calories · Water-soluble vitamins · Iron · Vitamin D.

A word on electrolytes

This is the diet where electrolytes are the prescription, not a footnote. Potassium, sodium and phosphorus limits come from your latest bloods and change as kidney function changes. Never add a salt substitute — most are potassium chloride, which can be genuinely dangerous in kidney disease. If you have kidney disease, heart failure or high blood pressure, or you take a diuretic, ACE inhibitor or ARB, set your targets with your clinician — and avoid potassium-based salt substitutes unless told they are safe for you.

03 Key cautions

The things that most often catch people out — worth raising at your next appointment.

TALK TO A CLINICIAN

Never self-prescribe a renal diet

Targets depend on eGFR, potassium, phosphate, PTH and dialysis schedule. A renal dietitian sets them from your bloods, and they change over time.

TALK TO A CLINICIAN

High potassium is a cardiac emergency risk

Salt substitutes are usually potassium chloride and can be genuinely dangerous in advanced CKD. Read every 'low sodium' label.

WORTH TESTING

Malnutrition outranks most lab values

Cutting protein and calories on dialysis drives protein-energy wasting, which predicts mortality more strongly than a single high phosphate reading.

KEEP AN EYE ON

Phosphate additives hide in plain sight

Anything with 'PHOS' in the ingredients is absorbed at nearly 100%, versus 40-60% from natural sources. Labels beat food lists here.

04 Conditions it is used for

- Chronic kidney disease stages 3-5
- Haemodialysis and peritoneal dialysis
- Hyperkalaemia from any cause
- Kidney transplant recipients, with different targets again
- Diabetic nephropathy

05 Your food lists

Eat freely

Low potassium vegetables

- Cabbage
- Cauliflower
- Green beans
- Onion
- Cucumber
- Lettuce
- Bell pepper
- Leached and boiled potato

Low potassium fruit

- Apple
- Berries
- Grapes
- Pineapple
- Cranberry
- Peach (tinned, drained)

Eat with care

Portion and lab dependent

- Protein – the target depends on your stage and whether you dialyse
- Dairy, which is high in phosphorus and potassium
- Whole grains and brown rice, higher in phosphorus than white
- Fluid, if you are on a fluid restriction
- Potatoes, which can be double-boiled to leach potassium

Best to skip

High potassium

- Banana
- Orange and orange juice
- Potato (unleached)
- Tomato and tomato sauce
- Avocado
- Spinach
- Dried fruit
- Beans
- Salt substitutes containing potassium chloride

Low phosphorus staples

- White bread
- White rice
- Pasta
- Cornflakes
- Rice milk (unenriched)
- Unsalted butter and olive oil

Flavour without salt

- Herbs
- Garlic and onion powder without salt
- Lemon juice
- Vinegar
- Black pepper

High phosphorus

- Cola drinks
- Processed cheese
- Milk in quantity
- Nuts and seeds
- Whole grains and bran
- Organ meats
- Any label listing phosphoric acid or 'PHOS' additives

High sodium

- Processed and cured meat
- Tinned soup
- Instant noodles
- Fast food
- Soy sauce
- Salted snacks
- Most restaurant food

06 Three days of meals

Day 1

Breakfast: Cornflakes with rice milk, half an apple.

Lunch: Chicken breast portioned to target, white rice, green beans.

Dinner: Baked fish, double-boiled potato, cabbage sauteed in olive oil, herbs and lemon.

Snack: Grapes.

Day 2

Breakfast: White toast with unsalted butter and a small egg.

Lunch: Pasta with olive oil, garlic powder, roast pepper and a portioned chicken thigh.

Dinner: Pork loin, white rice, boiled cauliflower with black pepper.

Snack: Tinned peaches, drained.

Day 3

Breakfast: Rice porridge with cinnamon and blueberries.

Lunch: Chicken salad sandwich on white bread with cucumber and lettuce.

Dinner: Beef stir fry with cabbage and pepper over rice, no soy sauce.

Snack: Fresh pineapple.

07 Getting started

- This is the one diet on the site you should not self-manage. Ask for a referral to a renal dietitian — targets come from your bloods, not from a website.
- Bring your latest potassium, phosphate, albumin and eGFR results to every diet conversation.
- Learn label reading for phosphate additives; they are the highest-yield change most people can make.
- Never use a potassium-based salt substitute unless your renal team has cleared it.
- Double-boil potatoes and root vegetables: cube, boil, drain, boil again in fresh water.

08 Common mistakes

- Cutting protein while on dialysis, which drives malnutrition — a bigger mortality risk than most lab values.
- Assuming healthy foods are safe. Avocado, spinach, banana and nuts are excellent foods and dangerous here.
- Using 'lo-salt' products full of potassium chloride.
- Ignoring fluid limits between dialysis sessions.

- Following a generic renal list instead of your current stage's targets, which change over time.

09 Questions people ask

Why is protein sometimes restricted and sometimes increased?

Pre-dialysis, lower protein reduces the filtration burden and may slow progression. On dialysis, the treatment itself removes amino acids, so requirements rise substantially.

Are plant-based renal diets viable?

Yes, and increasingly recommended. Plant phosphorus is poorly absorbed, and plant-dominant patterns can help with acid load — but they need careful potassium planning.

Does cooking reduce potassium?

Yes. Cubing and double-boiling can remove a substantial share of potassium from potatoes and root vegetables.

10 How it overlaps with other diets

- Conflicts badly with keto: standard keto is high in protein, phosphorus and potassium-rich vegetables.
- Overlaps with DASH on sodium, but DASH's high potassium emphasis is exactly wrong for advanced CKD.
- Low oxalate and renal diets share the kidney focus but restrict different foods — get both reviewed together.

This guide is educational and is not medical advice. Therapeutic diets can change how medication works and can leave gaps in nutrition, so please plan any of this with your doctor or a registered dietitian.