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CHRONIC KIDNEY DISEASE · STAGE 5

Stage 5: diet and care

Kidney failure (eGFR < 15 mL/min). With or without dialysis, diet and medicines are key to feeling well.

5
eGFR < 15 mL/min

🔎 What does it mean?

Your kidneys filter less than 15% of normal. Symptoms may appear (tiredness, nausea, itching, swelling). Diet rules **change when you start dialysis** — follow the right column and your team's and dietitian's advice.

✅ The most important things

🧂 **Salt < 5 g/day** (less thirst and swelling). **Protein changes with dialysis**: less before dialysis; more on dialysis.

🍌 **Potassium and phosphorus** controlled; binders always with meals.

💧 **Fluids**: keep to the limit you have been given.

💊 **Medicines: take extra care.** Many diabetes tablets and other medicines are not suitable at this stage. Do not use anti-inflammatories or natural products; always talk to your doctor.

🍽️ Your nutrients: not on dialysis vs. on dialysis

Nutrient	Not on dialysis	On dialysis
🧂 Salt	< 5 g/day	< 5 g/day — helps control thirst and weight gain between sessions
🍗 Protein	≈ 0.6–0.8 g/kg/day, with a dietitian (or very low + keto-analogues, if advised)	**Increases**: 1.0–1.2 g/kg/day (dialysis removes protein). Include good-quality protein at every meal.
🍌 Potassium	Usually limit potassium-rich foods, according to tests	Limit potassium-rich foods; take extra care before the longest gap between sessions
🧀 Phosphorus	Limit + binders with meals, if prescribed	Limit + binders with meals (dialysis removes little phosphorus)
💧 Fluids	As advised; limit if swelling or breathlessness	Individual daily limit, set by your team (depends on how much urine you still pass)
⚡ Energy	Eat enough. Poor appetite, weight loss or weakness: tell your doctor (risk of malnutrition).	

🚦 Food traffic lights

🟢 Choose

- Lower-potassium vegetables, boiled in 2 changes of water (lettuce, cucumber, carrot, cauliflower, green beans)
- Apple, pear, pineapple, blueberries (small portions)
- Fresh egg, fish and white meat (larger amounts if on dialysis)
- Rice, pasta, low-salt bread
- Olive oil, herbs, garlic, lemon

🟡 In moderation

- Milk, yoghurt, fresh cheese: depending on phosphorus
- Soup: small bowl (counts as fluid and contains potassium)
- Pulses: small amounts, well soaked and boiled
- Potassium-rich fruit: only occasionally
- Ice, jelly and juicy fruit count as fluids

🔴 Avoid / rarely

- Cured and smoked meats, sliced ham, sausages, poorly soaked salt cod
- Cured and processed cheeses; cola drinks
- Chips/crisps, nuts, dried figs, chocolate
- Fruit juices, tomato paste
- "Light" salt, stock cubes, ready meals

🍲 **To reduce potassium in vegetables and potatoes:** peel, cut small, soak and **boil in 2 changes of water** (throw the first water away halfway and finish in fresh water). Don't use it for soup or sauces.

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🗓️ Treatment options — deciding together

- **Kidney transplant** (from a deceased or living donor) — may be possible even before starting dialysis.
- **Peritoneal dialysis** (at home, every day) or **haemodialysis** (usually 3 times a week, at a unit or at home).
- **Conservative care**: care without dialysis, focused on symptoms and quality of life.
- **Protect the veins** of your fistula arm (or non-dominant arm): no blood tests, drips or BP readings on that arm.

🏃 Lifestyle

🚭 Smoking
One of the most effective measures. Ask for help to quit.

🍷 Alcohol
The less the better: < 100 g a week (≈ 8 small glasses of wine).

🚶 Exercise
≥ 150 min/week of moderate activity, adapted to you. Avoid long sitting.

⚖️ Weight
Aim for a healthy weight; if overweight, losing weight helps.

🩺 Blood pressure
Measure at home. Usual target: systolic 120–130 mmHg, if tolerated.

🩸 Diabetes
Individual HbA1c target (usually 6.5%–8%).

💊 Medicines and products: take care!

- 🚫 **Anti-inflammatories (NSAIDs)** — ibuprofen, diclofenac, naproxen, nimesulide…: avoid. For pain, ask your doctor (paracetamol is generally safer).
- 🧂 **"Light" salt / salt substitutes**: contain potassium chloride — dangerous if your potassium rises.
- 🩻 **Contrast dye** (CT, catheter, MRI): say you have kidney disease; if the scan is needed, don't refuse it — for MRI, "group II" gadolinium.
- 💪 **Protein supplements, gym shakes**: avoid (too much protein overloads the kidneys).
- 🩸 **Diabetes tablets**: many are not suitable at this stage (eGFR < 15 mL/min) — talk to your doctor. With insulin, the risk of hypoglycaemia is higher.
- 🌿 **Herbal remedies, "detox" teas, supplements**: may harm the kidneys or interact with medicines. Only on medical advice.
- 🚽 **Phosphate laxatives/enemas** (including some colonoscopy preparations): avoid. **Magnesium-based** ones (milk of magnesia, antacids): not for regular use.
- 📏 **Doses adjusted to the kidneys**: antibiotics, diabetes medicines, anticoagulants, gabapentin, allopurinol… When you see other doctors, always take your kidney test results with you.
- 🤒 **Sick days** (vomiting, diarrhoea, fever): contact your doctor — you may need to pause metformin, "-gliflozins", "-prils", "-sartans", diuretics.
- 🦴 **Calcium, vitamin D, iron, bicarbonate**: only those prescribed, at the prescribed dose.

📞 Contact your doctor if…

- Swollen legs/face or rapid weight gain
- Shortness of breath, especially lying down
- Passing much less urine than usual
- Vomiting, diarrhoea or fever that stop you drinking
- Persistent nausea, loss of appetite, severe itching, confusion or marked drowsiness
- Severe muscle weakness or palpitations (may be high potassium)

💧 Thirst and fluids: practical tips

- **Little salt** = less thirst; small cups, sip slowly.
- These count: soup, milk, ice, jelly, watermelon, melon.
- Ease thirst: ice (it counts), lemon, sugar-free gum.
- On dialysis: weigh yourself every day.

🏷️ Hidden salt, potassium and phosphorus on labels

- **Salt** = sodium × 2.5; per 100 g: > 1.5 g is high, ≤ 0.3 g is low.
- **Potassium**: E508, E326, "light"/low-sodium salt.
- **Phosphorus**: E338–E343, E450–E452 (sliced ham, sausages, processed cheese, cola).

References (sources of these recommendations):

1. KDIGO 2024 Clinical Practice Guideline for the Evaluation and Management of CKD. Kidney Int. 2024;105(4S):S117–S314.
2. KDIGO 2021 Clinical Practice Guideline for the Management of Blood Pressure in CKD. Kidney Int. 2021;99(3S):S1–S87.
3. KDIGO 2022 Clinical Practice Guideline for Diabetes Management in CKD. Kidney Int. 2022;102(5S):S1–S127.
4. KDIGO 2017 Clinical Practice Guideline Update for CKD–Mineral and Bone Disorder (CKD-MBD). Kidney Int Suppl. 2017;7:1–59.
5. KDIGO 2012 Clinical Practice Guideline for the Evaluation and Management of CKD (ch. 4: medication safety, phosphate-containing bowel preparations). Kidney Int Suppl. 2013;3:1–150.
6. KDOQI/NKF Clinical Practice Guideline for Nutrition in CKD: 2020 Update. Am J Kidney Dis. 2020;76(3 Suppl 1):S1–S107.
7. 2024 ESC Guidelines for the management of elevated blood pressure and hypertension. Eur Heart J. 2024;45:3912–4018.
8. ESUR Contrast Media Safety Committee Guidelines (v10) / ACR Manual on Contrast Media — as referenced by KDIGO 2024 (4.4).
9. Direção-Geral da Saúde (Portuguese Directorate-General of Health) – PNPAS: Food Wheel and salt reduction recommendations (≤ 5 g/day, WHO).
10. Lok CE et al. KDOQI Clinical Practice Guideline for Vascular Access: 2019 Update (vein preservation). Am J Kidney Dis. 2020;75(4 Suppl 2):S1–S164.

This leaflet is for information only and does not replace individual advice from your doctor or dietitian. Targets should be personalised. Do not change or stop any medicine without talking to your doctor.