

Chronic Kidney Disease Interventions

Chronic kidney disease is the permanent loss of kidney function that occurs gradually over months or years. As kidney function continues to decline, a patient's diet and medication regimen must be modified in order to correct deficits and prevent further imbalances. When the kidneys can no longer function on their own, a kidney transplant or dialysis treatments may be necessary.



PLAY PICMONIC

Interventions

Daily Weights

[Daily Weight-scale](#)

An increase in a patient's weight can be an indicator of fluid retention, related to chronic kidney disease. Patients should be weighed at the same time everyday, while wearing minimal clothing.

Strict I/O

[Strict-stick I-and-O-scale](#)

Patients with diseased kidneys cannot efficiently maintain the body's fluid balance. Decreased urine output, when coupled with unrestricted intake of fluids, can result in fluid retention, leading to edema, hypertension and fluid overload. Changes in breath sounds and worsening edema may be signs that a patient is retaining fluid.

Renal Diet

[Kidney Food](#)

Patients with chronic kidney disease must modify their diet in an effort to maintain fluid and electrolyte balance and to prevent buildup of waste products. The "renal diet" includes foods that are low in protein, sodium, potassium, and phosphate. Dairy products should be limited due to their high phosphorous content.

Strict Medication Regimen

[Strict-stick Med-bottle Regiment](#)

Patients should consult their doctor before beginning any new medications or supplements, including over the counter medications. Medications should be prescribed to correct various deficits or imbalances caused by decreased kidney function.

Erythropoietin

[Earth-red-Putin](#)

Damaged kidneys do not produce enough erythropoietin (EPO) naturally to stimulate adequate red blood cell production. This leads to anemia. To stimulate red blood cell production, patients may be given synthetic EPO.

Manage Hyperkalemia

[Managing Hiker-banana](#)

Inability to excrete excess potassium can lead to a state of hyperkalemia in patients with renal failure. Hyperkalemia can be managed using sodium polystyrene sulfonate (Kayexalate). This drug causes removal of excess potassium through the bowel.

Manage CKD-MBD

[Managing Mineral-miner with Bones Disordered](#)

Chronic kidney disease-mineral and bone disorder (CKD-MBD) can be managed with the use of phosphate binding agents. Elevated phosphate levels, related to kidney disease, cause a decrease in calcium levels, ultimately stimulating the secretion of parathyroid hormone. Because excess parathyroid hormone can lead to destruction of bone, control of hyperparathyroidism is essential. Calcium and vitamin D supplementation may also be recommended.

Dialysis**Dial-machine**

Peritoneal dialysis or hemodialysis are used to remove waste products from the blood when the kidneys are not functioning efficiently. Removal of waste products can correct various electrolyte imbalances, and improve neuropathies.

Kidney Transplant**Kidney Train-plant**

In patients with chronic kidney disease, a kidney transplant is the only definitive treatment option to restore natural kidney function.