

Chronic Kidney Disease

Stage	GFR (mL/min/1.73m ²)	Protein ^a (g/kg/d)	Calories ^b (kcal/kg/d)	Sodium	Fluid	Potassium	Phosphorus	Calcium	Vitamins ^f
1	90	0.8	25-35	1-4g/d, based upon blood pressure and fluid balance	No restriction	No Restriction til se.K is >5.5mg/dl, then 3 - 4 g/d	Restrict if serum level is > 4.6	1.2-1.5g/d; maintain serum Ca on lower end	DRI
2	60-89	0.8	25-35	Stage 1	Stage 1	Stage 1	Same as Stage 1	Same as Stage 1	DRI
3	30-59	0.8	25-35	Stage 1	Stage 1	Stage 1	8-12 mg/g of protein or 800-1000 mg/d	Same as Stage 1	B complex + C: DRI, Individualize Vit D, Zn, Fe
4	15-29	0.6	30-35	Stage 1	Output +1000ml	Stage 1	Same as stage 3 ^d	≤ 2000 mg ^e	Same as Stage 3
Hemodialysis		1.2		≥ 1 L output = 2-4g Na; ≤ 1L output/anuric = 2g Na	≥ 1L output = 2L; ≤ 1L output = 1.5L, anuric = 1L	2-3g/kg IBW, adjust per serum levels	800-1000 mg ^d	≤ 2000 mg ^e	B Complex + vitamin C, Individualize Vit D, Zn, Fe
Adults < 60 y			35						
Adults > 60 y			30-35						
Obese			30-35						
Peritoneal Dialysis				2-4g	1-3L	2-4 g	800-1000 mg ^d	≤ 2000 mg ^e	Same as HD vits rec's; replace dialysate losses of vit B complex + Vitamin C, Individualize Vit D, Zn, Fe
Adults < 60 y		1.2-1.3	35 ^c						
Adults > 60 y			30-35 ^c						
Obese			30-35 ^c						

^a50-75% high biological value protein

^b Based on energy expenditure

^c Includes dialysate calories

^d Phosphate binding medications may be needed

^e Total calcium from diet and phosphate bindings medications

^f Fat soluble vitamins should be avoided as kidney function declines. Vitamin A often elevated in kidney failure

Conversions:

Sodium:

45 mEq Na = 1gNa

90 mEq Na = 2gNa

90-150mEq Na = NAS

Potassium:

40 mEq K = 1.5g K

60 mEq K = 2.5g K

90 mEq K = 3.5g K

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Approved by Nutrition Committee: