A PATIENT GUIDE · PHYSICAL ACTIVITY & SPORTS

Move Right, Kidneys Right

Safe, simple movement for Filipino kidney patients
— **non-dialysis & on dialysis**

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150 min	11–13	2× / week
Moderate activity per week (KDIGO target)	Borg RPE = "moderate" — talk but can't sing	Strength work — the only fix for muscle loss

1 Why Movement Is Medicine for Your Kidneys

Heart & vessels
Lowers blood pressure, relaxes vessel walls, improves insulin sensitivity — slows eGFR decline.

Muscle
Fights sarcopenia (muscle loss). In CKD, muscle predicts frailty, falls, and survival.

Mood & sleep
Lifts energy, mood, and sleep — and regular training helps your body handle potassium *better* over time, not worse.

*Movement is the third pillar of healing — working **alongside** your medicines and nutrition, never replacing them. A single hard workout can briefly nudge potassium or creatinine up, but the effect is short-lived; the long-term trend is protective.*

2 Before You Begin — Know Your Green Light

Ask your doctor first if you have…

- CHECK — Blood pressure over **180/110**, or dizzy spells from low BP
- CHECK — Resting pulse over **100** or an irregular heartbeat
- CHECK — A heart attack, unstable chest pain, or heart-failure flare in the last **4–6 weeks**
- CHECK — A new dialysis catheter or a new fistula/graft (<4–6 weeks)
- CHECK — Fever, a recent very high potassium, or uncontrolled blood sugar

STOP right away — during activity — if you feel…

- STOP — Chest pressure or pain · severe breathlessness
- STOP — Dizziness or feeling faint · racing / irregular heartbeat
- STOP — Severe cramps or sudden swelling · nausea
- STOP — Bleeding or pain at your dialysis access
- STOP — Unusual, bone-deep exhaustion

***Two self-checks keep you safe:** the **talk test** (moderate = you can speak short sentences but not sing) and your own **pulse** (count at the wrist for 30 seconds, double it). You don't need a smartwatch.*

 References: KDIGO 2024 CKD Guideline (Kidney Int) · Global Renal Exercise Network Practical Guide (CJASN 2025) · Renal Association Exercise & Lifestyle in CKD (BMC Nephrol 2022).

3 The Plan, Tailored to Your Stage

Group	Weekly aerobic target	Intensity (RPE)	Resistance	Key adjustment
CKD G1–G3a	≥150 min moderate (or 75 min vigorous)	11–13 (up to 14–16 if cleared)	2–3×/week, submaximal	Near-normal prescription; full sport participation usually fine when cleared.
CKD G3b–G4	≥150 min moderate, matched to heart tolerance	11–13	2–3×/week, no 1-rep-max	Favor lower-impact sport variants; watch your BP response.
CKD G5, non-dialysis	As tolerated; frailty-screen first	11–13, start lower	2×/week, light–moderate	Consider a physical-therapy or frailty screen (e.g. SPPB) before starting.
Hemodialysis	150 min moderate / 75 min vigorous, split across dialysis + off days	11–13	2×/week, spare a catheter limb	Exercise in the **first half** of the session (lower low-BP risk); stand up slowly afterward.
Peritoneal dialysis	Same 150-min target	11–13	2×/week, no full sit-ups / straining	Empty dialysate before vigorous activity when you can; skip open-water swimming.

4 Shape It with FITT-VP

F · I · T · T
Frequency — most days · Intensity — RPE 11–13 · Time — build to 30 min · Type — walk, cycle, dance, sport you enjoy.

V · P
Volume — reach 150 min/week in total · Progression — add ~5 minutes a week. Short bouts add up toward the total.

Golden rule
Warm up, move at a "somewhat hard" pace you can talk through, cool down. If a session feels wrong, stop — there is always tomorrow.

For educational use only. Prescriptions are individualized to your kidney function, heart health, and frailty. The 150-minute weekly moderate-activity target is a Level 1, Grade A recommendation of the KDIGO 2024 CKD Guideline (Kidney Int 2024;105(4S):S117–S314).

Filipino Activity Intensity Heat-Map

Match the sport to your tier — MET values from the 2024 Adult Compendium

Activity	MET	Rating	Best-suited group & note
LIGHT (UNDER 3 MET) — EVERYONE, INCLUDING FRAIL PATIENTS AND CKD G5			
Walking, leisurely (<3 km/h)	2.0	SAFE FOR ALL	*The safest place to start; build up minutes before pace. Great on dialysis days.*
Household chores (sweep, mop)	2.5	SAFE FOR ALL	*"Hidden" activity credit — stack several across a day if you are less mobile.*
Tai chi	3.0	SAFE FOR ALL	*Best for balance and fall prevention — important with renal bone disease.*
MODERATE (3–6 MET) — THE EVERYDAY TARGET FOR CKD G1–G4 AND DIALYSIS OFF-DAYS			
Cycling, leisure (<16 km/h)	4.0	THE TARGET	*Low-impact and joint-friendly; stationary bikes work well indoors and during HD.*
Walking, brisk (5–5.5 km/h)	4.3	THE TARGET	*The workhorse of the 150-minute target; free and available everywhere.*
Pickleball, recreational doubles*	4.8	THE TARGET	*Lower-impact racket option for older/deconditioned patients; mind quick side-steps.*
Basketball, shootaround / half-court	5.0	THE TARGET	*The realistic barangay-court option — non-competitive form for most who love the game.*
Swimming, slow freestyle	5.0	THE TARGET	*Excellent joint-sparing aerobic work. PD patients: avoid open water.*
Badminton, social doubles	5.5	THE TARGET	*Doubles over singles — less lunging and direction change (joint / fall stress).*
VIGOROUS (OVER 6 MET) — CARDIAC-CLEARED, HIGHER-FUNCTIONING NON-DIALYSIS PATIENTS ONLY			
Badminton, competitive match play	7.0	CLEARED ONLY	*Reserve for G1–G3a after cardiac clearance; abrupt lunges raise fall/joint risk.*
Dancing — Zumba / aerobics	7.3	CLEARED ONLY	*Very popular & free — but vigorous. Use a low-impact modification: smaller steps, no jumps.*
Basketball, full-court game	8.0	CLEARED ONLY	*Highest common intensity here; cardiac clearance first. Half-court is the default.*

HOW TO READ THIS PAGE: **LIGHT** <3 MET — everyone **MODERATE** 3–6 MET — the target **VIGOROUS** >6 MET — cardiac-cleared only **MET** = energy cost; 1 MET is resting.

For educational use only. *Pickleball has no official 2024 Compendium code; its value is a careful estimate, not a fixed guideline figure. MET values: Herrmann et al., 2024 Adult Compendium of Physical Activities, J Sport Health Sci 2024;13(1):6–12.

5 The Shape of One Session

1 · Warm-Up
5 min easy — gentle marching, arm circles, slow breathing

→

2 · Conditioning
20–30 min aerobic at RPE 11–13 — walk, cycle, dance, sport

→

3 · Strength
2×/week — bands or bodyweight, submaximal, never a 1-rep max

→

5 min
Cool-down & stretch — walk it off, breathe, hydrate

On dialysis: *gentle pedaling or bands during the* ***first two hours*** *of hemodialysis (intradialytic exercise) is safe and can improve how well dialysis clears toxins. Skip vigorous exercise after the session — post-dialysis is when blood pressure dips.*

6 No-Equipment Home Routine

Chair-based
Frail · elderly · G5 · dialysis days
Sit-to-stands, seated marching, seated leg extensions, wall push-ups. 2 sets of 8–12.

Standing bodyweight
Stronger days
Modified squats, calf raises, step-ups on a low step, wall plank. Add resistance-band rows.

Balance
Fall prevention
Single-leg stand near a wall, tai-chi weight shifts. Vital with renal bone disease & post-HD dizziness.

Flexibility
Every session
Gentle calf, hamstring, and shoulder stretches after the cool-down — hold, don't bounce.

7 Simple Swaps That Keep You Safe

INSTEAD OF…		DO THIS
Full sit-ups (on peritoneal dialysis)	→	**Partial crunches & isometric holds — no straining or breath-holding**
Outdoor exercise 10 AM–4 PM	→	**Sunrise (5:30–7 AM) or early evening (5–7 PM), out of the heat**
Sports / energy drinks	→	**Plain water in small sips, matched to your fluid limit**
Resistance work on a catheter arm	→	**Train the other limb until your team clears the access**
Skipping a day when tired	→	**A gentle 10-minute walk — even a little breaks the inactivity spiral**

8 When to Adjust

HD **Dialysis days:** move in the **first half** of the session; rise slowly afterward (post-HD blood pressure dips); skip vigorous same-day exercise if you are already tired.

HEAT **Philippine heat:** avoid 10 AM–4 PM; go at sunrise or evening; sip plain water to your fluid limit; know heat-exhaustion signs (headache, nausea, clammy skin) and stop early.

DM **Diabetes:** guard against low blood sugar during and after; time activity around insulin/tablets; check your feet before **and** after every session.

HEART **Heart disease:** a recent cardiac event, known coronary disease, or an uncontrolled irregular heartbeat means cardiac clearance — often a stress test — before any vigorous program.

9 Sample Weekly Calendars

Profile	Mon · Wed · Fri	Tue · Thu · Sat	Sunday
CKD G3–G4, working-age	30-min brisk walk or leisure cycle	Band strength routine + social badminton doubles	Rest or gentle stretch
CKD G5, conservative / frail	10-min gentle walk + chair routine	Tai chi / balance, short and seated	Rest
Hemodialysis (Tue–Thu–Sat)	Off-day: 20–30-min walk + light bands	Dialysis day: pedal / bands in the first half	Rest; slow post-HD recovery
Peritoneal dialysis	Walk + standing bodyweight (empty if vigorous)	Pickleball or modified Zumba + partial-crunch core	Rest or gentle stretch

Illustrative only — scale to how you feel and to your own dialysis schedule. Every plan is mostly moderate aerobic minutes, two strength days, a little balance work, and rest.

10 Red-Flag Card — Print & Keep

STOP & rest if you feel

- STOP — Chest pressure · severe breathlessness · fainting
- STOP — Racing / irregular heartbeat · severe cramps or swelling
- STOP — Nausea · access bleeding · unusual exhaustion

Call your nephrologist if

- CALL — New or worsening swelling or breathlessness
- CALL — Your access bleeds, hurts, or loses its thrill/buzz
- CALL — A lab flags a very high potassium

If chest pain, fainting, or bleeding is involved and does not settle fast — get medical help. When in doubt, pause and ask.

 References: KDIGO 2024 CKD Guideline · Global Renal Exercise Network (CJASN 2025) · Renal Association Exercise & Lifestyle in CKD (BMC Nephrol 2022) · 2024 Adult Compendium of Physical Activities (J Sport Health Sci).