

Managing Weight and Rehab

How Body Weight Affects Recovery — and What You Can Do

1 Weight, Load, and Your Joints

Body weight directly affects how much load passes through the joints, tendons, and plantar tissues with every step you take. The forces involved are not trivial — even everyday walking multiplies your body weight several times over at the knee. Every kilogram you carry adds mechanical stress to structures that are already working hard to recover.

- Every 1 kg lost reduces knee joint load by approximately 4 kg per step — even modest reductions in body weight produce meaningful reductions in joint loading across thousands of daily steps.

Rehabilitation and weight management work together — even small, sustainable changes in both areas produce meaningful improvements in pain, function, and recovery speed.

2 How Excess Weight Affects Recovery

Effect	What it means for rehab
Increased joint load	Tendons, cartilage, and plantar fascia experience greater force with every step, slowing tissue adaptation and raising flare-up risk.
Systemic inflammation	Adipose tissue (body fat) produces pro-inflammatory signals that slow tissue healing and can amplify pain sensitivity.
Reduced aerobic capacity	Higher cardiovascular effort is required for the same activity — fatigue limits the amount of rehab you can sustain in each session.
Sleep disruption	Excess weight increases the risk of sleep apnoea. Poor sleep slows tissue repair and reduces the benefit of each rehab session (see Sleep resource).

3 Exercise During Rehab When Managing Weight

The goal is not to exercise maximally for calorie burn. It is to build consistent, sustainable movement that supports both your rehabilitation and long-term weight management — without overloading healing tissues.

Exercise approach	Why it works	How to start
Low-impact aerobic (swimming, cycling, walking)	Reduces joint load compared with running while building cardiovascular fitness and supporting a caloric deficit.	20–30 min daily; build gradually over 2–3 weeks.

Resistance training	Preserves muscle mass during weight loss and maintains the joint stability needed for safe rehab progression.	2–3× per week; start with seated or supported exercises.
Incidental movement	Daily step count and movement between formal sessions contributes as much to overall energy balance as structured exercise.	Set a step goal; break up sitting every 30–60 minutes.

4 Practical Nutrition During Rehab

Principle	Why	Simple step
Adequate protein	Prevents muscle loss during rest periods or when in a caloric deficit — muscle mass is essential for joint support.	Include protein at every meal: eggs, fish, meat, legumes, or dairy.
Vegetable volume	Fills the plate without excess calories; provides fibre, vitamins, and anti-inflammatory micronutrients.	Aim for half your plate as vegetables at main meals.
Limit ultra-processed foods	Calorie-dense, low-satiety foods that are also pro-inflammatory — they work against both weight management and tissue healing.	Cook from whole ingredients where possible; read labels.
Avoid extreme restriction	Very low calorie diets impair tissue healing, reduce muscle retention, and are difficult to sustain alongside an active rehab programme.	Aim for gradual, sustainable reduction — not dramatic cuts.

5 Key Takeaways

KEY TAKEAWAY 1

Small changes, compounded every day, make a real difference. You do not need to reach a target weight before rehab works. Every modest, sustainable step — a little more movement, a slightly better meal choice, a consistent night of sleep — reduces joint load, eases inflammation, and accelerates your recovery. Progress in both areas at once.

KEY TAKEAWAY 2

Weight management during rehab is about support, not restriction. Crash diets and punishing exercise routines are not the answer — and they can actively harm tissue healing. The aim is to nourish your body well, move within your capacity, and build habits you can sustain long after your rehab is complete.

KEY TAKEAWAY 3

You are not defined by a number on the scales. Recovery is about regaining function, reducing pain, and getting back to the activities that matter to you. Weight is one factor — not the whole picture. Work with your clinician to set goals that are compassionate, realistic, and meaningful to your life.