

Exercise Prescription for Arthritis (OA & RA)

Specific / Clinical Objectives	↔ ↑ Joint function / Mobility and ROM; ↓ B.F% (possibly); ↑ Muscular strength; ↑ Balance / Co-ordination; ↑ General fitness; ↑ QOL / Management of condition.
Modes	
Aerobic	NWB / PWB / low impact / large muscle group activities: e.g., Walking, Cycling, Swimming ¹ or Aqua-aerobics ¹ ; → X-training, Rowing, Group-based aerobics; (↑ ability to perform ADLs & emphasise daily mobility).
Resistance	Circuit-based (speed controlled: slow to begin with); Machines → Free Weights (progression based on client competence and ability); Calisthenics and resistance bands.
Contraindications	<ul style="list-style-type: none"> • Do not overstretch joints; • High repetition / High resistance / High impact; • During flare-ups for RA.
Frequency	
Aerobic	3-5 d.p.w.: (OA: Late AM / Early afternoon, generally); (RA: Late afternoon / Evening, generally).
Resistance	2-3 d.p.w. (time of day: as above, and generally when the client feels least pain, stiffness and tiredness).
Duration	
Aerobic	Prolonged warm-up. 5 → 30+ min main section (intermittent: Start, Stop...); Thorough cool-down.
Resistance	Prolonged warm-up; 3 sets of 2-3 reps → 10-12 reps; Thorough cool-down.
Intensity	
Aerobic	Low-Moderate (pain free): Observation, Talk Test, RPE ² , HR, METs
Resistance	Low-Moderate (rep range / RPE): As a guideline, but use pain tolerance as a marker, also.
Progression	Frequency (little and often), Duration, Mode / Intensity
Comments	<ol style="list-style-type: none"> 1. Warmer water is preferable. 2. Accuracy of RPE may be affected by condition / medication (pain killers). <ul style="list-style-type: none"> • Be aware of entry/exit ability on equipment; • Steroids can increase risk of stress fracture;
Specific Testing Modalities	ROM; Flexibility

Exercise Prescription for Joint Replacement

Note that the type of replacement and details of patient/client will need to be considered.

Specific / Clinical Objectives	<ul style="list-style-type: none"> • Normalise BF / Weight; ↑MSE specifically with an ADL bias; • ↑CV conditioning ∴ ↓ CHD risk profile; Advice on healthy eating; ↑QOL / self-confidence; ↑ Volitional PA levels and reduce sedentary behaviours.
Modes	
From 12 weeks (post-operative) Aerobic	<p>Non Weight Bearing / Partial Weight Bearing / low impact / large muscle group activities:</p> <ul style="list-style-type: none"> • e.g., Walking, Cycling, Bowls, Swimming or Water Aerobics. • → Group-based aerobics. • (↑ ability to perform ADL).
Resistance	<ul style="list-style-type: none"> • Circuit-based (↑ ability to perform ADL); • Machine → Free (watch kinetic pathway on machines and set range of motion restrictions to preclude extremes of range).
Contraindications	<ul style="list-style-type: none"> • Extremes of motion around the replaced joint • Jarring or high impact activities and sports with the potential for high impacts • Avoid crossing of legs (relative)
Frequency	
Aerobic	<ul style="list-style-type: none"> • 2-5 d.p.w. (off-peak) progressing to daily, out of the gym
Resistance	<ul style="list-style-type: none"> • 2-3 d.p.w. (off-peak)
Duration	
Aerobic	<ul style="list-style-type: none"> • 5-10 → 40-60 min main section (use pain or swelling as a time guide) • Thorough warm-up and cool-down.
Resistance	<ul style="list-style-type: none"> • 1-3 sets of 10-15 reps (watch range, do not go to extremes) • Thorough warm-up and cool-down.
Intensity	
Aerobic	<ul style="list-style-type: none"> • Low-Moderate (all low impact): • Observation, Talk Test, HR, RPE, METs, pain or swelling;
Resistance	<ul style="list-style-type: none"> • Low-Moderate (rep range / RPE)
Progression	<ul style="list-style-type: none"> • Duration, Frequency, Mode / Intensity
Comments	<ul style="list-style-type: none"> • Consider all other conditions/co-morbidities, particularly in the older patient/client <p>You must have a thorough, recorded, falls prevention assessment annually.</p>
Specific Testing Modalities	<ul style="list-style-type: none"> • CV capacity; task-specific timed activities, BMI; Self esteem