

VIBEMOTION LABS · ATHLETE RECOVERY

SPECIFIC INJURY PROGRAMME

Low Back Injury

Recovery Programme

Free

Complete programme for athletic low back pain — covering disc-related, facet, and non-specific low back pain. From acute pain management through core stability, strength, and return to elite sport. Always have your injury assessed by a clinician before beginning this programme.

RECOVERY TIMELINE

PHASE	TIMELINE	FOCUS	GOAL
Phase 1	Days 0–14	Pain reduction, gentle mobility	Pain ≤ 3/10 at rest
Phase 2	Weeks 2–6	Core stability, neural mobility	Walk 20 min pain-free
Phase 3	Weeks 6–12	Strength, hip hinge, load	Deadlift bodyweight × 1 pain-free
Phase 4	Weeks 10–16	Power, sport movement	Loaded sport movements pain-free
Phase 5	Month 4+	Full athletic performance	Full sport clearance

SAFETY RULES

1. Avoid prolonged sitting in acute phase — get up and move gently every 30 minutes. 2. Pain during exercise must stay ≤ 4/10. Centralisation of pain (moving from leg to back) is a positive sign. 3. Never flex (bend forward) at the spine in Phase 1 — protect the disc. 4. No heavy loading, deadlifts, or squats until Phase 3. 5. Seek urgent medical attention if you experience bladder or bowel changes, saddle numbness, or sudden severe bilateral leg weakness.

PHASE 1

Acute Pain Management and Gentle Mobility

Timeline: Days 0–14 · Goal: Reduce pain, restore basic movement, prevent fear-avoidance

IMPORTANT: Movement is medicine for low back pain. Bed rest beyond 48 hours is harmful. The goal is pain-free movement — not avoidance.

01 McKenzie Press-Up (Extension Bias)

Lumbar Extension
/ Disc
Centralisation

SETS	REPS/TIME	LOAD	TEMPO	REST
3	10 reps	Bodyweight	2 sec up / 2 sec down	60 sec

HOW TO PERFORM

1. Lie face down (prone) with your hands positioned just below your shoulders as if for a push-up.
2. Keeping your hips and pelvis on the floor, press up through your arms — extending your lower back.
3. Extend only as far as comfortable — do not force the movement.
4. Hold for 2 seconds at the top, then slowly lower back down.
5. The key indicator: does your leg or buttock pain move back toward the centre of your lower back? This is centralisation — a strongly positive sign.
6. If leg pain increases or spreads further down the leg, stop and consult your physiotherapist.
7. Perform every 2 hours in the acute phase for best results.

COACHING CUES

- *Centralisation of symptoms means this direction of movement is therapeutic — continue.*
- *Peripheralisation (pain moving further down the leg) means this exercise is wrong for your presentation — stop.*
- *Perform frequently — 6–8 times per day in the first week for maximum effect.*

PROGRESS WHEN

When leg pain has completely centralised and back pain is $\leq 3/10$ during the press-up.

■ *Stop if bladder or bowel function changes, or saddle numbness develops — seek emergency care.*

02 Diaphragmatic Breathing and Core Activation

Deep Core /
Nervous System

SETS	REPS/TIME	LOAD	TEMPO	REST
3	10 breath cycles	Bodyweight	4 sec inhale / 6 sec exhale	N/A

HOW TO PERFORM

1. Lie on your back with knees bent, feet flat. Place one hand on your chest, one on your belly.
2. Inhale slowly through your nose for 4 counts — belly rises, chest stays still.
3. At the top of the inhale, gently draw your lower abdominals inward — like pulling your navel toward your spine at 20% effort.
4. Exhale slowly through pursed lips for 6 counts — maintain the gentle abdominal draw.
5. This activates your transverse abdominis — your deepest core stabiliser.
6. Perform this before any other exercise and during all exercises in Phase 1.

COACHING CUES

- *This is the foundation of all back rehabilitation — do not dismiss it as 'just breathing'.*
- *The 20% abdominal draw is a light stabilising contraction — not a hard brace.*
- *Research shows this pattern is disrupted in chronic low back pain — restoring it is critical.*

PROGRESS WHEN

Practice every day permanently — there is no graduation from this exercise.

03 Walking Programme

General Mobility /
Pain Reduction

SETS	REPS/TIME	LOAD	TEMPO	REST
Daily	See schedule	Bodyweight	Comfortable pace	N/A

HOW TO PERFORM

1. Day 1–3: Walk 5–10 minutes at a comfortable pace. Stop if pain exceeds 4/10.
2. Day 4–7: Walk 10–15 minutes. Aim for a slightly faster pace than previous days.
3. Week 2: Walk 15–20 minutes. Begin on flat surfaces — avoid hills and uneven ground.
4. Walk with a natural arm swing — do not restrict movement to protect your back.
5. Walking is one of the most evidence-based treatments for low back pain. Do not undervalue it.
6. If pain increases significantly after walking, reduce duration by 50% and build more slowly.

COACHING CUES

- *Upright posture — avoid the temptation to lean forward or hunch.*
- *Natural stride length — do not shorten your steps to protect yourself.*
- *Every pain-free walk builds confidence and reduces fear-avoidance — this is the point.*

PROGRESS WHEN

When 20-minute walk is pain-free — increase to 30 minutes and add gentle hills.

PHASE 2

Core Stability and Neural Mobility

Timeline: Weeks 2–6 · Goal: Build deep core endurance, restore hip and nerve mobility

04 Dead Bug

Deep Core
Stability /
Anti-Rotation

SETS	REPS/TIME	LOAD	TEMPO	REST
3	10 reps per side	Bodyweight	4 sec lowering / 2 sec return	75 sec

HOW TO PERFORM

1. Lie on your back with arms pointing straight to the ceiling. Hips and knees both at 90° (tabletop position).
2. Gently brace your core and press your lower back firmly into the floor — maintain this throughout.
3. Slowly lower your right arm overhead and your left leg toward the floor simultaneously.
4. Lower over 4 seconds — stop before your lower back lifts from the floor.
5. Return to start over 2 seconds.
6. Switch sides — left arm and right leg.
7. The rule: your lower back must stay flat on the floor. If it lifts, you have gone too far.

COACHING CUES

- *The lower back pressing into the floor is the single most important cue.*
- *Slower = harder = more effective. Do not rush this exercise.*
- *If your lower back arches before full extension, shorten the range and build from there.*

PROGRESS WHEN

When 3x10 per side is pain-free with lower back flat throughout — add ankle weights.

05 Bird Dog

Core Stability /
Hip Extension

SETS	REPS/TIME	LOAD	TEMPO	REST
3	10 reps per side	Bodyweight → 1 kg ankle weight + 1 kg wrist weight	4 sec extension / 2 sec return	75 sec

HOW TO PERFORM

1. Begin on hands and knees — wrists under shoulders, knees under hips. Spine in neutral (not arched, not rounded).
2. Brace your core lightly. Simultaneously lift your right arm forward and your left leg backward.
3. Reach both limbs to horizontal — no higher. Hips must stay level — do not rotate.
4. Hold for 4 seconds at full extension.

5. Return to start over 2 seconds and switch sides.
6. Think: draw a straight line from your extended fingertips to your extended heel.

COACHING CUES

- *Hips level — imagine a glass of water balanced on your lower back.*
- *Reach through the heel of the extended leg — this activates the glute.*
- *If you feel the exercise in your lower back instead of your core, reduce range and focus on bracing.*

PROGRESS WHEN

When 3x10 per side with ankle and wrist weights is pain-free and balanced.

06 Neural Flossing — Sciatic Nerve

Neural Mobility /
Sciatica Relief

SETS	REPS/TIME	LOAD	TEMPO	REST
2	10 reps per side	Bodyweight	Slow and rhythmic	45 sec

HOW TO PERFORM

1. Sit upright in a chair. Begin with both hips and knees at 90°.
2. Simultaneously: extend (straighten) your knee while tilting your head backward (ear to ceiling).
3. You should feel a gentle stretch or tension down the back of the leg — this is normal.
4. Hold for 1 second at the end range.
5. Return to starting position: knee bends, chin drops to chest simultaneously.
6. This 'flosses' the sciatic nerve through its sheath, improving neural mobility and reducing radiating leg pain.
7. Use ONLY if you have sciatica or radiating leg symptoms — skip if back pain only.

COACHING CUES

- *The sensation should be a stretch or mild tension, never sharp electric pain.*
- *If symptoms intensify significantly, stop — you may need a different neural technique.*
- *2–3 sets twice daily produces best results for sciatic nerve mobilisation.*

PROGRESS WHEN

When leg symptoms have resolved or reduced significantly — discontinue.

- *Stop immediately if symptoms intensify or spread further down the leg.*

PHASE 3

Strength and Hip Hinge

Timeline: Weeks 6–12 · Goal: Deadlift bodyweight, squat to parallel, planks 90 sec

07 Romanian Deadlift (Hip Hinge Foundation)

Posterior Chain / Lumbar Stability

SETS	REPS/TIME	LOAD	TEMPO	REST
3	10 reps	Start: bodyweight only · Progress: barbell or dumbbells	3 sec hinge / 1 hold / 2 up	90 sec

HOW TO PERFORM

1. Stand with feet hip-width apart. Begin without weight to perfect the pattern.
2. Place your hands on your thighs. Push your hips backward — NOT downward.
3. Let your hands slide down your thighs as you hinge — keep the spine perfectly neutral.
4. Lower until you feel a strong hamstring stretch (typically torso near parallel).
5. Drive hips forward to return to standing — squeeze glutes firmly at the top.
6. When bodyweight is perfect: hold two dumbbells (start 20 lb each) and repeat.
7. Progress to a barbell when dumbbell form is consistent.

COACHING CUES

- *Hip back, not down — this is a hinge, not a squat.*
- *The back must stay completely flat — any rounding under load is a red flag for disc health.*
- *Film yourself from the side — it is the only reliable way to check your hinge pattern.*

PROGRESS WHEN

When 3x10 at bodyweight x 0.75 (barbell) is pain-free with perfect form.

■ **Stop if you feel pain radiating into the leg during the lift — seek assessment.**

08 Plank Progression

Core Endurance / Anti-Extension

SETS	REPS/TIME	LOAD	TEMPO	REST
3	30 → 60 → 90 sec	Bodyweight	Static hold	60 sec

HOW TO PERFORM

1. Begin in a forearm plank: elbows under shoulders, body in a straight line from head to heels.
2. Brace your core firmly — 50–60% contraction, not a light touch.
3. Squeeze your glutes. Pull your elbows toward your feet (without moving) — this increases core tension.
4. Maintain neutral spine — do not let hips sag or pike up.

5. Start with 3×30 sec. Progress to 3×60 sec. Then 3×90 sec.

6. Advanced: add a light plate on the back or progress to a 3-point plank (one foot raised).

COACHING CUES

→ *Breathing must continue — you should be able to speak during the plank.*

→ *Hips level with shoulders — measure with a stick laid across your back if unsure.*

→ *Quality over duration — a 30-second perfect plank beats a 90-second poor one.*

PROGRESS WHEN

When 3×90 sec is pain-free — progress to palf press and anti-rotation work.

PHASE 4

Power and Sport-Specific Movement

Timeline: Weeks 10–16 · Goal: Explosive movements pain-free, loaded rotational control

09 Trap Bar Deadlift (Load Progression)

Full Posterior
Chain / Lumbar
Load

SETS	REPS/TIME	LOAD	TEMPO	REST
4	5 reps	60–80% 1RM — build weekly	3 sec eccentric / dead stop / 1 explosive	3 min

HOW TO PERFORM

1. Stand inside the trap bar with feet hip-width, toes pointing forward.
2. Push hips back and bend knees to grip both handles — neutral spine throughout.
3. Set your back: chest tall, shoulders packed down, 360° brace.
4. Pull the slack out of the bar before lifting — feel the tension before the bar breaks the floor.
5. Push the floor away from you — drive through legs while keeping the chest tall.
6. Lock out at the top — hips and knees fully extended, glutes squeezed.
7. Lower with control — 3 seconds — to a dead stop on the floor before each rep.

COACHING CUES

- *The trap bar reduces spinal loading compared to a conventional deadlift — ideal for back rehab.*
- *Always lift from the higher handle position until you have confirmed pain-free mechanics.*
- *If you feel back pain (not muscle fatigue) during the lift, stop and reassess your form.*

PROGRESS WHEN

When 4x5 at 80% 1RM is consistent and pain-free for 3 weeks — transition to sport-specific loading.

PHASE 5

Return to Elite Athletic Performance

Timeline: Month 4+ · Goal: Full sport participation, permanent prevention programme

10 Long-Term Back Health Maintenance Programme Prevention / Permanence

SETS	REPS/TIME	LOAD	TEMPO	REST
Daily + 3x per week lifting	Ongoing	Various	As prescribed	As prescribed

HOW TO PERFORM

1. Daily (5 minutes): Diaphragmatic breathing 10 cycles + Cat-Cow mobility 10 reps + Hip 90/90 stretch 60 sec per side.
2. 3x per week: Hip hinge (deadlift variation) — 3x8 at moderate load.
3. 3x per week: Dead bug or bird dog — 2x10 per side.
4. 2x per week: Loaded carry (farmer's carry with dumbbells) — 3x30 metres.
5. 1x per week: Heavy slow resistance deadlift — 3x5 at high load.
6. If you miss more than 2 weeks of training — restart from Phase 2 exercises for 2 weeks before returning to heavy loading.

COACHING CUES

- *A strong posterior chain and deep core is your long-term insurance policy against back injury.*
- *The research is clear: the best predictor of future low back pain is past low back pain. Prevention is active, not passive.*
- *Share this programme with your strength coach — it integrates seamlessly with athletic training.*

PROGRESS WHEN

This programme continues permanently — it evolves with your training demands.

RETURN TO SPORT — FINAL CLEARANCE CHECKLIST

- Resting pain 0/10 for at least 3 consecutive weeks
- Leg symptoms (if any) fully resolved
- Trap bar deadlift: bodyweight × 1.5 pain-free for 3×5
- Plank: 3×90 sec with neutral spine
- All sport-specific movements pain-free at full speed for 2 consecutive sessions
- Clearance from physiotherapist or sports medicine physician
- Long-term back maintenance programme integrated into weekly training