

ROADMAN CYCLING / PRINTABLE PLAN

STRENGTH TRAINING FOR CYCLISTS OVER 50

An evidence-bounded 10-week starter plan that fits around the riding week.

Two non-consecutive sessions is a practical starting point - not a universal law.

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Full evidence guide: roadmancycling.com/blog/strength-training-cyclists-over-50

How to use this plan

This is a conservative starting framework for healthy cyclists over 50. It is not a medical clearance and it is not the single protocol proved by a cyclist study. Choose variants that fit your competence, equipment and joint comfort. Progress only while the riding week remains productive.

The Roadman rule

Gym progress counts only when the whole programme improves. If lifts rise while every priority ride becomes flat, reduce gym volume or change its placement.

What current evidence can support

Question	Practical answer	Boundary
Should I lift?	Resistance training improves strength in older adults; cyclist-only evidence suggests performance benefits.	The cyclist review was low certainty and did not report an over-50 subgroup.
How often?	Two non-consecutive sessions is a workable starting structure.	No review proves one universal cycling-performance optimum.
How much?	Begin with two work sets per main pattern.	Add work only when priority riding and recovery remain stable.
How heavy?	Learn the movement first, then progressively load it.	A heavy-study definition is not a novice day-one prescription.
Race season?	Reduce sets and accessories as competition load rises.	There is no universal one-session maintenance law.

Before starting

- + Seek qualified guidance for known cardiovascular, orthopaedic or neurological conditions, osteoporosis, recent surgery or unexplained pain.
- + Stop and seek urgent help for chest pain, fainting, unusual breathlessness or rapidly worsening neurological symptoms.
- + A new lifter does not need a one-repetition-maximum test. Technique and tolerance come first.

The two-session template

These are example movement options, not mandatory lifts. A machine can be the right choice. A single-leg exercise is not automatically more cycling-specific because it resembles pedalling.

Session A

Exercise pattern	Starting work	Boundary
Goblet squat or leg press	2 x 6-10	Leave 2-3 good reps in reserve
Romanian deadlift or supported hinge	2 x 6-10	Stop before spinal position changes
Row or pull-down	2 x 8-12	Use controlled shoulder movement
Standing or seated calf raise	2 x 8-15	Progress only with tendon comfort
Carry or Pallof press	2 controlled efforts	Trunk control, not exhaustion

Session B

Exercise pattern	Starting work	Boundary
Split squat or step-up	2 x 6-10 each	Use support if balance limits loading
Hip thrust or kettlebell deadlift	2 x 6-10	Controlled lockout; no pain
Push-up or dumbbell press	2 x 8-12	Choose a shoulder-tolerant range
Standing or seated calf raise	2 x 8-15	Adjust the knee position if needed
Side plank or dead bug	2 controlled efforts	Finish before form breaks

How hard should a set feel?

For most work, finish with one to three controlled repetitions available. Stop when technique changes or pain appears. Muscle effort and joint pain are not the same signal.

Your substitutions

Pattern	My selected exercise	Starting load	Notes
Knee-dominant			
Hip hinge			
Single-leg			
Upper body			
Trunk / carry			

The 10-week progression

Weeks	Frequency and work	Progression test
1-3 Learn and tolerate	1-2 sessions; 1-2 work sets; leave 3-4 reps available.	Technique stays controlled and joint comfort is stable for 24-48 hours.
4-6 Build	Move toward 2 sessions; 2 work sets; mostly 6-12 reps.	Add one rep or a small load only when all planned work is clean.
7-10 Progress	2 sessions if recovered; 2-3 sets on selected main patterns.	Priority rides stay productive and fatigue resolves before the next hard day.
Race / peak weeks	Keep familiar lifts; remove accessories; reduce sets first.	No novel soreness and no loss of race-specific work.

Fit the gym around the bike

Option	How it works	Use it when
Separate demanding sessions	Place strength and the priority ride on different days or provide a longer gap.	Either session repeatedly loses quality when combined.
Consolidate stress	Complete the priority bike work first, lift later, then keep the next day easy.	Time is limited and both sessions remain productive.

Weekly placement worksheet

Day	Bike priority / duration	Strength	Recovery note
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Saturday			
Sunday			

Review the programme, not one session

- + Did the key ride complete its intended work?
- + Did soreness change movement, cadence or normal daily activity?
- + Did joint discomfort appear or worsen?
- + Did the selected lifts progress across several exposures?

Readiness with guardrails

One low HRV reading, one poor sleep score or one sore morning is not a diagnosis. Use a cluster and consider the next important ride.

Signal	Green direction	Caution direction
Sleep	Normal opportunity and continuity	Repeated short or fragmented nights
Energy / mood	Normal for this rider	Material drop across several days
Muscle soreness	Mild and improving	Changes movement or worsens
Joint comfort	Stable	New, sharp or progressively worse pain
Resting HR / HRV	Near personal trend	Sustained change plus other warning signals
Next bike session	Low priority or well separated	Race, test or key intervals are close

Adjustment order

1. Remove optional accessories.
2. Reduce three sets to two.
3. Keep familiar exercises and useful load.
4. Reduce frequency only when the week still does not recover.

Session log

Date	Exercise	Load	Reps x sets	Reps left	Next-day note

STRENGTH THAT FITS YOUR CYCLING

Roadman's upcoming iPhone app will place 30, 45 or 60-minute cyclist-specific strength around existing rides, then use readiness guardrails to hold or reduce working-set volume with a plain-language reason.

Join the single early-access list at roadmancycling.com/app

Evidence notes and sources

This plan uses group-level evidence to set conservative boundaries. It does not claim one over-50 cycling protocol has been proven. Read the full Roadman guide for the complete interpretation and correction policy.

Primary sources

- + Cyclist-only heavy strength meta-analysis: 17 controlled studies, 262 cyclists, low outcome certainty. PMID 40632222.
- + Concurrent training in healthy adults aged 50-73: 15 studies, 566 participants. PMID 36222981.
- + Concurrent versus single-mode training in adults over 50: 49 studies, 2,587 participants. PMID 35728627.
- + Resistance-training volume in older adults: network meta-analysis of 151 randomised trials. PMID 39405023.
- + Healthy older-adult dose-response review, with poor study quality and substantial heterogeneity. PMID 26420238.
- + Cycling and bone-health systematic review. PMID 23256921.

Links

Full guide: roadmancycling.com/blog/strength-training-cyclists-over-50

Strength-session planner: roadmancycling.com/tools/strength-session-planner

Recovery screen: roadmancycling.com/tools/recovery-screen

App early access: roadmancycling.com/app

Safety boundary

This document is educational. It does not diagnose, treat or clear an individual for resistance training. Seek appropriately qualified help for relevant health conditions, pain, recent surgery or concerning symptoms.

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