

INJURY PREVENTION PROTOCOL · FREE DOWNLOAD

# The 15-Minute Runner's Durability Circuit

Build the structural chassis that protects your aerobic engine. No weight room. No equipment. Done on the track — every time.

**15**

MINUTES / SESSION

**3**

PHASES

**10**

EXERCISES

**0**

EQUIPMENT NEEDED

**▲ THE PROBLEM**

Aerobic fitness adapts in weeks. Tendons and bone require months to years. This gap is where careers end.

**🔬 THE SCIENCE**

Glute med weakness prospectively predicts shin splints. The soleus reduces tibial bending force on every stride.

**📄 THE PROTOCOL**

Mobility → Activation → Load. The sequence is physiological, not aesthetic. Order matters. Do not skip Phase 2.

**🗓️ THE HABIT**

Immediately post-practice, on the track, before anyone gets in a car. Non-negotiable, like the warm-up.



PHASE 1 · DYNAMIC MOBILITY

Open the System

3 Minutes

**Hip 90/90 Rotations**

6 reps per side

Sit with both knees bent 90°. Rotate hips side to side, lowering both knees toward the floor. Feel the internal and external hip rotation open up — not a stretch, a controlled rotation.

**Ankle Circles + Dorsiflexion CARs**

8 reps per side

Full slow ankle circles, then actively dorsiflex (pull toes up) and plantarflex through full range. Wake up the ankle complex before calf loading in Phase 3.

**Thoracic Rotation in Quadruped**

8 reps per side

On hands and knees, place one hand behind your head. Rotate your elbow toward the ceiling, opening the upper back. Opens the thorax so the core doesn't borrow from the low back during Phase 3.

**Leg Swing Progressions**

10 reps per direction / side

Forward/backward first, then lateral. Support yourself on a fence. Controlled, active movement — not ballistic. Actively lengthens hip flexors and adductors before single-leg loading.

**Why this phase:** Loading tight, restricted joints reinforces the compensation pattern. Three minutes of targeted dynamic mobility shifts the system from the 'run' position to the 'load' position — ensuring glutes fire in Phase 2 instead of TFL and hip flexors.



## PHASE 2 · MUSCLE ACTIVATION

### Wake Up the Stabilizers

4 Minutes

#### Clamshells

15 reps per side · slow

Side-lying, hips stacked at ~45° flex. Open the top knee while feet stay together. Feel the burn in the lateral hip, not the quad. If you feel it in the quad, reduce range and refocus. This is glute medius isolation.

#### Single-Leg Glute Bridge

10 reps per side · 2-sec hold

Supine, one foot flat. Drive through the heel, not the toe. Squeeze glutes at the top and hold 2 seconds. The pause activates the posterior chain — rushing through uses lumbar extensors instead.

#### Dead Bug

8 reps per side · controlled

Supine, arms vertical, knees at 90°. Pin your lower back flat and extend opposite arm and leg simultaneously. Never let the low back arch. Activates deep core stabilizers (transverse abdominis) before single-leg loading.

#### ⚠ Don't Skip This Phase

KEY REMINDER

The glute medius is notoriously inactive in runners. Bypass activation and athletes default to quads in Phase 3 — the injury risk remains. This phase is the bridge between mobility and loading.

**Why this phase:** *The glute medius is notoriously 'asleep' in running-only populations. Jump straight to split squats and athletes default to quads and lumbar extensors. Four minutes of targeted activation changes which muscles show up for Phase 3.*



## PHASE 3 · FOUNDATIONAL STRENGTH

### Load the Frame

8 Minutes

#### Single-Leg Deadlift (RDL)

3 × 8 per side

Hinge at the hip, flat back, arms reaching toward the ground, free leg extends behind. Loads the entire glute complex (Max, Med, Min) and hamstrings simultaneously. Control the descent — the eccentric matters.

#### Bulgarian Split Squat

2 × 10 per side

Rear foot elevated on bench or track rail. Front knee tracks over 2nd toe. Sink straight down. This is where you find asymmetries that become injuries under mileage. Add a 2-second pause at the bottom once ready.

#### Single-Leg Bent-Knee Calf Raise

3 × 12 per side · 3-sec down

Stand on one foot with knee slightly bent (15–20°). This loads the SOLEUS, not just the gastrocnemius. 3-second eccentric. The soleus reduces tibial bending force on every stride. Do not rush. This is your stress fracture insurance.

#### Copenhagen Plank

3 × 20 sec per side

Side plank with top foot on a bench. Bottom leg hovers — don't let it touch the ground. Challenges adductors and hip stabilizers in a way no other exercise matches. Research shows dramatic injury reductions with consistent Copenhagen plank use.

**Why this phase:** *This is where structural adaptation happens — the mechanical stress that signals bone remodeling, tendon collagen synthesis, and neuromuscular adaptation. Done consistently over 12–14+ weeks, these movements fundamentally change your athlete's load capacity.*

## 📅 ANNUAL PERIODIZATION — WHEN TO RUN THIS CIRCUIT

### SUMMER / PRESEASON

#### Base Build Phase

Frequency **3–4× / week**

Load **Full circuit**

Priority **Highest**

### XC / TRACK SEASON

#### Competitive Phase

Frequency **2× / week**

Timing **Never pre-race**

Priority **Maintain gains**

### POSTSEASON

#### Recovery / Reset

Frequency **1–2× / week**

Focus **Identify gaps**

Priority **Low, but do it**

### WINTER / OFF-SEASON

#### Structural Build

Frequency **3× / week**

Load **Add resistance**

Priority **Critical window**

## 📋 FORM CUES & COMMON ERRORS

### 👉 On Clamshells

Athletes rotate at the spine instead of the hip, letting the pelvis roll back. Cue: "Keep your belly button pointing at the ceiling. Only the top knee moves." Burn should be in the lateral hip — not the low back.

### ⚖️ On Split Squats

Athletes shift to the front foot when fatigued. Cue: "90% of your weight is on your front leg at all times. The back foot is just a kickstand." If you wobble, good — that's the adaptation.

### 👉 On Calf Raises

Athletes want to go fast to 'get it done.' The 3-second eccentric is the whole point — that's where soleus tendon loading occurs. If they're not feeling it, slow down further. Treat it as your stress fracture prevention move.

### 👊 On Copenhagen Plank

Start with the foot on a low surface. Common error: sagging at the hips. Cue: "Your body is a straight plank from ankle to shoulder." Bottom leg must hover — no cheating by resting it.

### 📧 On Progression

Structural adaptation takes 12–14+ weeks of consistent stimulus. Resist the urge to change the circuit constantly — master the movements first. Add resistance (vest, dumbbell) only after 6 weeks of solid form.

### 💡 On Buy-In

Tell athletes about the structural gap before introducing the circuit. "Your aerobic engine is ahead of your frame's ability to carry it" lands harder than "do your exercises." Understand the mechanism, train with intention.

### WEEKS 1–3

#### Learn the Movements

Focus on form. Use mirrors or partner feedback. Expect wobbling on SL deadlifts — that's normal.

### WEEKS 4–7

#### Build the Habit

Circuit becomes automatic. Start tracking completion. Athletes begin feeling the difference on race day.

### WEEKS 8–12

#### Structural Adaptation

Tendon collagen density improving. Glute med measurably stronger. Reduced injury complaints emerging.

### WEEKS 12+

#### Load the Frame

Add resistance vest or dumbbells. Increase volume. Athletes building the chassis that carries the engine.