



**JUMP-START**  
Plyometrics can set you up for a top-class run



For each exercise, perform two sets of eight reps, with 60 seconds' rest between sets



**SQUAT JUMPS**

With feet shoulder-width apart, lower into a squat, keeping your thighs higher than your knees. Jump up and land with your legs slightly bent, then lower back into a squat.



**SCISSOR JUMPS**

Start with one foot in front of you and the other behind you; jump with power and land with your feet in the opposite positions.



**DOUBLE-LEG BOUNDS**

Start with your feet about shoulder-width apart; jump forward as far as you can with both legs together. Aim for a controlled landing with each bound.

# BOOST YOUR ECONOMY

*A plyometric warm-up will get your engine purring*

WHEN SPACE AND TIME ARE TIGHT, it's terribly tempting to neglect your warm-up before you start your run. However, recent research published in the journal *Frontiers of Physiology* suggests that plyometrics, explosive exercises in which muscles exert maximum force in short intervals of time – for example jumps, lunges and squats – can increase running economy (RE) in recreational runners. The study analysed the oxygen uptake (VO<sub>2</sub>) of participants at four

different speeds after they had performed a plyometric, resistance or running-only warm-up. After each trial, participants rested for 48 hours. Over all four speeds, the results showed a lower VO<sub>2</sub> in participants who had performed plyometric exercises, which means they were consuming less oxygen and energy while they ran. To boost your running economy on your next run, try these plyometric warm-up exercises (see right).

Try this



**SKIP REPLACEMENT**

Craving a cardio workout but you can't get out and run or ride? Reach for a skipping rope. Research shows that just 10 minutes of skipping can boost cardiovascular fitness as much as 30 mins of running. This bluetooth-enabled rope, the Smart Rope Rookie (£49.95, apple.com), uses sensors in the handles to track your skipping count and calories. It also offers interval-training recommendations.

60

*A moderate volume of plyometric jumping reps (60 per session) is better than a high volume (120).<sup>1</sup>*