

RACE PREP

OUT OF GAS? Don't stop!

The right cooldown plan can build strength and speed.

By Lisa Marshall

IMAGINE A TRAINING TOOL that helps you race faster, build endurance, and develop the mental grit needed to push beyond your comfort zone—all without adding another workout to your week. That secret weapon is the cooldown. And if you've been blowing it off, you're making a mistake. Coaches consider the cooldown an indispensable part of a workout that can provide potent training adaptations.

"It's time to change the way we think of the cooldown," says exercise physiologist Steve Magness, author of *The Science of Running*. "If people realized it can actually increase fitness, they'd be more likely to push through it."

Conventional wisdom has long held that postrun jogging brings down heart rate and body temperature and helps flush metabolic by-products like lactic acid. However, three recent studies found that cooling down does little to prevent soreness, and Magness says heart rate and body temperature would return to normal within 30 to 60 minutes regardless.

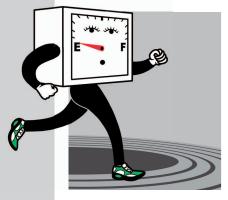
Continuing to exercise while fatigued and nutritionally depleted, though, forces the body to recruit muscle fibers it wouldn't tap when fresh and can boost its fuel efficiency, says Magness. Plus, says running coach Greg McMillan, "it toughens you up mentally by providing another opportunity to run tired."



After a race-pace workout, or a tune-up 5K or 10K on the way to a half or full marathon, run an additional 30 to 40 minutes. Don't worry about pace, but make sure to run tall and softly: Poor biomechanics will boost injury

risk. Running slowly on low fuel teaches your body to burn more fat and utilize glycogen more efficiently, says McMillan.

RACE-DAY PAYOFF You can run longer before needing to take in midrun calories, and you'll avoid bonking in longer races.

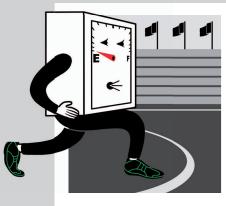


FINISH UP AT TEMPO PACE

After a high-intensity track workout (short repeats like 200s or 400s), start your cooldown with one or two laps at tempo pace. Then ease into one or two laps of jogging. Running at a fairly brisk pace, with loads of lactic acid on board,

trains your body to recycle that lactic acid into glucose for fuel, says Magness. That's important because lactic acid buildup kicks off a chain of events that impede muscle contraction.

RACE-DAY PAYOFF You can run faster for longer before fatiguing.

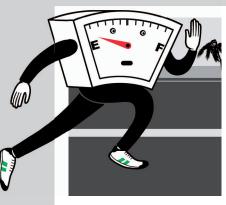


FINISH UP WITH STRENGTH MOVES

After slower, longer repeats (like mile repeats at half-marathon pace), cool down with a five- to 10-minute circuit of squats, lunges, jumping jacks, or burpees. (Try sets of 10 to 15 with 30-second rests in between.) Asking

your muscles to perform while tired prompts recruitment of fast-twitch muscle fibers, allowing you to strengthen them without adding more speedwork.

RACE-DAY PAYOFF Fasttwitch fibers can serve as backup late in a long race, when slow-twitch muscles are kaput.



FINISH UP WITH 5K-PACE STRIDES

After a half-marathon- or marathonpace run, finish with five 20- to 30-second strides at 5K pace with 60 to 90 seconds of jogging in between. Strides force you to run with higher knees and pumping arms, working different muscle groups after miles of slower running, says Denver-based coach Jay Johnson. They're also another way to utilize fasttwitch muscles in a fatigued state.

RACE-DAY PAYOFF You'll be used to kicking (and activating untapped muscle groups) while tired.