

## 3 Long Run Principles to Remember

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Runner's World

Whether you hope to win your age group in a local 5K or run a sub-2:19 marathon to qualify for the 2012 Men's Olympic Trials, the long run can help you accomplish that goal. How can I be so brash to suggest the long run has such wide-reaching benefits for achievements so diverse? Easy. I see it work every year. I'm convinced the improvement most of my freshmen runners experience in their first year is largely due to the cardiovascular development they acquire from [running long](#).

Long runs deliver a slew of physiological benefits: The heart gets stronger because it works harder to boost blood flow to leg, arm, and core muscles. Our ventilatory capacity—the ability to move oxygen in and out of our lungs—increases as we develop our respiratory muscles.

Muscle strength and endurance improves because mitochondria (the energy-producing structures in cells) and capillaries (tiny blood vessels that transfer oxygen and waste products into and out of cells) become more dense. Long runs also teach the body to use fat rather than glycogen, or stored sugar, as a fuel source. This saves our limited glycogen reserves for fast running at the end of a long run or marathon. Finally, going long calluses you mentally and gives you confidence in your ability to cover many miles.

In order to reap the rewards of the long run—and [avoid injury](#)—keep the following three principles in mind.

### NOT TOO FAST

Think conversational. For slower runners who race at close to their training speed, that's 30 seconds to one minute per mile slower than 10-K race pace. For experienced racehorses, it's about one to 1:30 per mile slower.

### NOT TOO LONG

If you're gunning for a faster [5K](#), your long run will likely last an hour; marathoners should build up to three hours. Run longer than that, and the physiological gains are outweighed by the stress put on your body.

I believe that anything over three hours should be saved for race day—if you've consistently run at the proper pace for two to three hours, and tapered adequately, you'll safely complete 26.2 on race day. Over six consecutive weeks, stair-step your long run as follows: two hours, two and a half hours, three hours, two hours, two and a half hours, and three hours. Taper the run down for three weeks before marathon day.

### NOT TOO FAR

The appropriate distance of your long run is one and a half to twice as long as your normal-length run. Another way to determine distance is to make your longest run 20 to 30 percent of your overall weekly mileage. So if you're running 40 miles a week, you could run eight to 12 miles for your long run.

**GO FAR:** Long runs should last between one and three hours.

## **Just Enough**

TO GAIN THE MOST fitness with the least injury risk, choose whichever nets you the shorter distance—miles or time.

### **800 METERS**

Long Run in Miles: 10 to 12  
Long Run in Hours: 1 to 1.25

### **1500 METERS**

Long Run in Miles: 12 to 15  
Long Run in Hours: 1 to 1.75

### **5K**

Long Run in Miles: 12 to 15  
Long Run in Hours: 1.25 to 1.75

### **10K**

Long Run in Miles: 15 to 17  
Long Run in Hours: 1.5 to 2

### **HALF MARATHON**

Long Run in Miles: 17 to 20  
Long Run in Hours: 1.75 to 2.5

### **MARATHON**

Long Run in Miles: 20 to 25  
Long Run in Hours: 2 to 3