

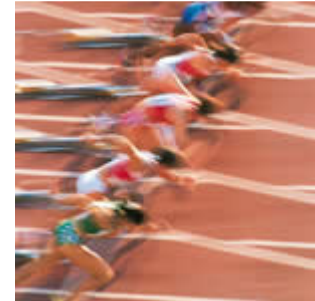
Run more efficiently: Add speed work

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If a runner can reduce the time it takes to take one step by as little as one-hundredth of a second, it will reduce times in the following races: 40 yard dash (approximately 20 steps) -- by two tenths of a second; 100 meters (approximately 50 steps) -- by five tenths of a second; one mile -- by ten seconds; a marathon -- by three to five minutes.



However, speed work is not just about running faster. It's about moving as efficiently as possible. Many experts agree that improved speed, even in some body movements, will result in measurable improvement in all other movements as well.

Even if you're not competing, moving more efficiently and therefore faster, means that you pack more work into any given time spent exercising. Cardiovascular improvement and muscular power are additional benefits of increased speed that every runner can appreciate, whether racing or not.

Of course, for competitive runners, every tenth of a second shaved from their finish times is of no small significance.

Here is a list of tips along with their explanations to improve running efficiency and speed.

- **Focus:** Keep eyes straight ahead on a horizontal plane. Avoid tilting your head up or down, right or left.
- **Fix:** Keep your elbows bent so that your arm is at a 90° angle.
- **Rotate:** Rotate the shoulders so that your hand moves down and backward past the hip with force.
- **Hammer:** At the end of the arm rotation, have your wrist relaxed and on a hinge so that the hand can follow through as though it is wielding a hammer.
- **Squeeze:** Keep your arms close to your chest so there is no space between the arms and upper body.
- **Pinch:** Pinch your shoulder blades together to keep your back straight.
- **Arch:** Curve the lower back slightly.
- **Punch:** Punch your knee out and forward in the initial movement from the ground.
- **Cycle the foot:** When the foot leaves the ground, bring the heel to the hip, followed by punching the knee out and forward. These movements should be made in as much of a straight line as possible.
- **Snap:** Pull the foot down and back until the back of the leg is straight.

Practice these running techniques by concentrating on one of them, and practicing the elements of running form that the term represents. Practice only one or two terms at a time for short periods or distances. Then repeat the practice or move on to another term or element.

After just a little investment, most runners will see a payoff.

As their running form improves, so will their running times.