Find this page online at: http://www.coolrunning.com/engine/2/2_3/105.shtml

The Runner's Building Blocks

A firm training foundation is built on several core types of workouts. Try our tips for building a balanced routine.

By Josh Clark
Posted Monday, 8 April, 2002

Variety may be the spice of life, but it's the bread and butter of running, the key to improved speed and performance. Unfortunately, most recreational runners do the same workout day in and day out. While the majority of your running should remain in the realm of endurance training, the addition of building-block speed and strength workouts injects freshness into what may be a stale routine.

And it will almost certainly improve your performance. The reason is confirmed by common sense: Varied workouts teach your body varied lessons. The long run teaches endurance, track work trains "fast-twitch" muscles, hills teach strength, etc. A well-rounded mix of workouts will help you improve your running form, condition your body to handle the discomfort of faster speed, give you a sense of appropriate pace, and build your end-of-the-race kick to the finish.

While the specifics of every training program should be adapted to the specific needs of the individual, the runner interested in improving performance should have a well-rounded program that includes some, if not all, of the following six building blocks:

- Fartlek (for speed and pace)
- Hills (for strength)
- Tempo Runs (for speed and pace)
- Intervals (for speed)
- The Long Run (for endurance)
- Easy run (for recovery)

Do you **have** to do all these specialized workouts? Of course not. You will find, however, that at least some regular speed and strength workouts will improve your performance, with the most dramatic improvement occurring when you first begin. Every single one of these building-block workouts will improve some facet of your running, and the more you incorporate into your routine the more improvement you will see. That said, be aware that the benefits of speedwork will not show up immediately in your races, since it often takes over a month for your body to become used to changes in training. Even then, it usually takes about two weeks for your body to absorb a speed workout and translate it into a resource to be tapped during a race. Be patient, and don't expect every session to show an improvement in times. The fitter you get, the more difficult that becomes. Always build conservatively.

Fundamentals>

If you are a beginning runner, you may want to hold off on introducing speedwork into your routine. You should have an established base of at least 20 miles per week before incorporating these "quality runs" into your schedule. It's also best to have at least a year of running experience under your belt. The reason for both is that speedwork adds considerable strain to your muscles and connective tissues. Without the necessary mileage foundation, you may wind up injured rather than fast.

As with all your runs, you should start and finish your specialized sessions with easy running, preferably longer than the typical ten or fifteen minutes you might do before your normal training run. With all of these workouts, you're pushing your body close to its limits, and it's unwise either to start or stop suddenly. Stretch well and give yourself 10 minutes of easy running, both before and after the workout.

Also keep in mind that it's important to keep moving between the "hard" portions of your workout. All of the workouts discussed here involve the alternation of hard and easy efforts. "Easy" means a slow pace, maybe a jog. But it does not mean walking, stopping, or collapsing to the track and wheezing. If you need to do any of those things, you're running the hard portion of the workout too fast. The old adage of "no pain, no gain" is simply wrong. The idea is to push only a little bit harder than your normal training pace to get the benefits; there will be some modest discomfort but certainly no pain. You should always have the energy after each interval to continue running slowly during the rest periods. By doing this, you keep your heart rate up, and as a result, you prevent blood from pooling in your legs. Keep running, even if slowly: it's good for you.

Ideally, you should run each of the hard portions of the workout at approximately the same pace per session. You should not feel exhausted by the end, but neither should you feel like you're still full of energy. This helps teach you the value of pacing yourself in a race by being aggressive but realistic in your starting pace.

The Building Blocks>

This section focuses on the three basic varieties of speed workouts (fartlek, intervals and tempo runs), along with the benefits of each and the most productive ways to use these tools. Meanwhile, don't forget to review our [pointers for hill workouts](#).

Before we begin, though, a plug for the all-important cousin of the speed workout: the easy run. Recovery (i.e. the easy run) is probably the most important piece of a good training program, and it should not be dismissed. Too many runners, hellbent on increasing speed and mileage, completely overlook the importance of the easy run, often running themselves into injury. Your body needs a chance to rest, so make sure that somewhere between those killer hill workouts and gutsy interval sessions you manage to squeeze in some rest -- and plenty of it.

Fartlek>

It's true: fartlek is almost as fun to do as it is to say. "Fartlek" is Swedish for "speed play" and consists of bursts of speed in the middle of a training run. Essentially, it's an unstructured interval session, the track without the rules. Fartlek gets your legs used to a variety of paces and in the process gives you an enhanced awareness of your ability to keep up those paces at various distances.

After warming up, run at an easy training pace, throwing in bursts of speed for various distances throughout the run. Vary the speed and times of the speed sections, from as short as 15 seconds to as long as two or three minutes. Between these bursts, allow yourself enough recovery time to match roughly 2/3 of the effort time. The recovery pace, though, should be faster than the recovery jog you might do during intervals on the track; keep it moving at an easy training pace.

It's a good idea to pick out a landmark -- a tree or a fire hydrant or a bend in the path -- where a speed section will end before you start picking up the pace. In other words, you have to know how far you are running for each section. Because the idea is to keep up a constant pace until you reach that landmark, it is important to pace yourself at the beginning. Don't tear off so fast that you can't keep up the pace through the end of each speed section.

A fartlek session can be as easy or as difficult as you wish to make it. Use fartlek for anything from a light recovery run to a grueling workout. As always, however, start out easy. Your first fartlek sessions should contain distances and paces that you feel comfortable with and that you feel you can gradually increase in future sessions. A twenty to thirty-minute fartlek session should be adequate for most runners. There is very little reason for them to go as long as an hour.

Intervals>

The track. While most elite runners get their start there, the great majority of runners came to the sport by way of local roads, sidewalks and forest paths. For the average runner, the track seems all too intimidating, almost scary. Fact is, though, the track is not simply the domain of the elites. Any runner at any level can improve her performance with a little help from the 400-meter oval. This is what intervals are about.

Interval sessions are the most formal of speed workouts in that the distances and target paces are precisely fixed before you run. The idea is to run a series of relatively short repetitions over distances from 220 yards to one mile, with rest periods of slower running in between. Because of their very nature, intervals involve a shorter period of effort than your usual run of, say, 45 minutes at a steady pace. This allows you to run much faster than you usually do, adapting your body to higher demands and your leg muscles to faster turnover. Over time, you become more physiologically efficient.

Because of the clearly measured distances, the track is an ideal place to do intervals, but some may find the never-changing scenery to be, well, maybe just a little dull. In that case, you should feel free to do your intervals on the road, using permanent landmarks to measure distance.

The various distances, as you might guess, are each best suited to runners with specific goals. The 220-yard run (1/2 lap, or 200 meters) is best for short-distance training (5K and under) to improve speed. The 440 (one lap, or 400 meters) helps improve overall conditioning at slower paces, and at faster paces is good final race preparation. The 880 (two laps, or 800 meters) is used to develop speed when training for races 10K and under and to condition form and pace when training for longer races. Finally, the mile is used most often to train for longer races, from 10K to marathon, to help improve pace judgment and overall conditioning.

Tempo Runs>

This is hands-down the least complicated variety of speedwork. There are no distances to keep track of, no split times to remember, no hassles. All you have to do is run faster than your usual training pace, somewhere right around your 10K race pace. Unlike most speedwork which consists of relatively short bursts of high effort, tempo runs call for a single sustained effort. The result is that your body learns race economy: running at a fast pace for relatively long periods of time. Tempo runs will give your top speed a boost, too. By running nearly at race pace, your body becomes accustomed to running close to its upper limit (though not exceeding it). In doing so, you actually increase that upper limit, and you become gradually faster.

After your usual warmup routine, run at your easy training pace for at least ten minutes. Then pick up the pace. As mentioned above, this speed should be right around your 10K race pace (around 80%-85% of maximum heart rate, if you use a heart rate monitor). The time, distance and pace of your tempo run, as with all phases of your running, depends on both your ability and your goals. For the distance you choose (3 and 5 miles are popular tempo distances), find a pace that is not so fast that you cannot sustain it for the distance, but not so slow that you do not feel challenged toward the end. Tempo runs should be tough, but not impossible. Depending on how you feel on any given day, how much spring is in your legs, and how far you are running, your tempo pace may vary from session to session. That's fine. The consistency that counts is the pace within each session. Try to keep your speed level for the full length of each tempo run.

Don't worry too much about figuring out the exact distance of your tempo run. It's really not terribly important. Three to six miles is probably a good range. The one value of knowing how far you are running, though, is that you are able to gauge your improvement over time. Still, this is easily done by doing most of your tempo runs on the same route. You may not know the specific distance, but you can still compare your times for that same fixed route.

Putting It All Together>

Now put this basic knowledge of speed workouts to work with our [speed training recommendations](#) for various levels of ability and experience.