

Interval Training

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Every runner has different needs, and you should tailor your speedwork program to both your ability and your training goals. Seems like common sense, but juggling the variables of distance, repeats and rest intervals can be a confusing business.

First, as a general rule, be conservative. While speedwork is the best and fastest way to improve, it is also the best and fastest way to injure yourself. Increase the intensity and duration of your workouts only gradually. Push yourself, but as always, don't overtrain. Listen to your body and don't be afraid to quit a session if you feel you've reached your limit. If, for example, you are running track intervals and you find it impossible to maintain the same pace through all your repeats, you should strongly consider calling it quits for that session and adjusting your pace the next time around.

How Far?

In general, you should run shorter repeats if you're preparing for shorter races and longer repeats if you're preparing for longer races. The longer the distances, the fewer repeats you should run.

The total mileage of a speed workout, excluding your warm-up, will be one or two miles for beginners and as much as five or six for experienced speedsters. You are of course welcome to run a variety of interval distances, even within a single workout, but if you are just beginning you might want to keep things simple by running one distance at first. How long that distance should be depends on your needs:

200 metres

To train for short distances (5K and under) and to sharpen speed.

400 metres

To improve aerobic conditioning at slower paces and to improve speed in the last stages of preparation for short races (5K and under).

800 metres

To train for distances 10K and under for speed. For distances above 10K the distance helps sharpen your sense of pace and improve aerobic conditioning.

1600 metres

To develop ability to hold onto a strong pace for significant distances, particularly for those training for longer races (10K and up, including the marathon). Like 880s, miles help sharpen your sense of pace.

Short Hills

Yes, running hills is a form of speed work, ideal for building strength and good form. Short hills should be steep enough to give you pause, but not so steep that your form falls apart. Look for inclines between 50 and 150 metres long.

Long Hills

To develop strength, stamina, and at least as important, confidence. Hills should be about 1/4 mile long and not quite as steep as your short hills.

How Much Rest?

The amount you rest during the intervals between repeats is just as important as the amount you run. You need more rest when you run longer distances, faster paces or more repeats. Beginners to speedwork will need more rest than more experienced runners.

The idea here is to give yourself an opportunity to recover, but not completely -- just enough so that you can complete the next interval at the same pace. Depending on the speed and distance of your intervals, rest time will last between 30 seconds and three minutes. If you find that you can't recover in this amount of time, you are running the distance too fast -- slow down. Likewise, if you don't need so much recovery time, you're probably running too slow (or not running enough intervals).

In hill workouts, your rest time is determined by how long it takes you to run back down the hill (or get to the next one). You should run up the hill at or near race pace and back down at or near your easy training pace.

How Fast?

Your speed workouts will come in two flavours: on pace and fast. Your on-pace workouts will be run at race pace to get you comfortable with the pace at which you'll run your race. Every interval in an on-pace workout is run at the same pace, preferably within just a few seconds of each other. This helps you sharpen your sense of pace and teaches you to hold back at first to save energy for the end of your workout -- just like in a race.

The "race pace" you are running is not your target pace for your next race; it should be the pace you think reflects your current level of fitness and your present ability to run the race distance. Over time, this pace should gradually become faster as your workouts improve.

In contrast, fast workouts are run faster than your race pace. Brace yourself, these are meant to be a little uncomfortable. The payoff is that they make you tougher, better able to keep up your target pace on race day.

Your pace will vary depending on the distance of the intervals you run and the amount of rest you get between them. Depending on your goals (improving race speed, adjusting to your race pace, improving strength, developing stamina, etc), you will run your intervals anywhere between a near-sprint and your 10K race pace.

Here are some quick-and-dirty guidelines for figuring out which pace might be most appropriate for you:

Near-sprint

This is the pace that it would take you to run one or two miles at maximum effort (around 20 seconds per mile faster than 5K pace, 30 seconds per mile faster than 10K). This is a pace that should be used only by very experienced runners doing 220s or, at most, 440s. Running at this blistering pace will make for an anaerobic workout that can do wonders to sharpen your speed.

Fast intervals

This is the pace you should run for most of your fast workouts (as opposed to your on-pace workouts). It's a shade slower than the near-sprint, about 10 seconds per mile faster than 5K pace, 20 seconds per mile faster than 10K. This pace will help you increase your race speed and improve your aerobic capacity.

5K on-pace intervals

Run your intervals at your 5K pace. If you're training for a 5K race, this will help you get acquainted with your pace and condition you to run it comfortably. If you're a 10K runner, this pace will sharpen your speed and help you get used to toughing out a fast pace.

10K on-pace intervals

This pace is good for those training for 10K and higher races, making you familiar with your pace and helping you to get comfortable with it. This is also a good pace for those new to speedwork.

Begin with distance

Specifically, begin by increasing the number of intervals that you run, while keeping the distance and speed of those intervals the same. Add no more than one or two intervals at a time. Remember that you should be able to run all of your intervals at the same pace. If you are not able to maintain your speed, you are probably not yet ready to increase the number of intervals; go back to the original number for a few more workouts.

After you have done several workouts and added a few intervals to your routine, try increasing your pace slightly. This should be on the order of 5 to 10 seconds off your mile pace. As you do this, decrease the number of intervals that you run. As you get comfortable with this new pace, gradually increase the number of intervals as you did with your original pace.

The idea, of course, is to build up your speed gradually and in steps. Be patient. It will take some time for your body to respond and adapt to tougher workouts. If you are new to speedwork, you will very likely make rapid gains in the first few weeks. Over time, however, it will become more and more difficult to become faster. Don't be surprised or disappointed if it takes several months to increase your per mile pace by even a few seconds.

Some Specifics

Now that the general principles have been laid out, here are more specific suggestions for the parameters of your speed workouts based on your ability and goals.

Beginners

The charts below can help to give you a general idea of the appropriate speeds and distances you might use in your speedwork sessions. Because training for the 5K demands workouts different than those for the 10K or marathon, we have presented a separate chart for the shorter distance.

These workouts are intended for beginning runners. This means that for men, 5K time is 24:00 and up, and 10K is 48:00 and up. For women, 5K time is 26:00 and up, and 10K is 54:00 and up.

Both charts are divided into two sections, for on-pace speedwork and fast speedwork. Both sections include suggestions for pace, number of repeats, and the appropriate amount of rest during intervals for five types of workouts. Keep in mind that the race paces referred to are not your goal pace but the pace you expect you could run today. In other words, if you are training for a 7:00 5K pace but can only run at a 7:10 pace now, the 7:10 pace is the speed at which you should run your repeats.

5K Speed Training

<i>On-pace Intervals</i>	<i>400s</i>	<i>800s</i>	<i>Miles</i>	<i>Hills</i>	<i>Long Hills</i>
Repeats	4-6	4-6	3	4-5	3-4
Pace	5K	5K	5K	5K	5K
Rest (minutes)	2-3	3	3	Jog Down	Jog Down

<i>Fast Intervals</i>	<i>400s</i>	<i>800s</i>	<i>Miles</i>	<i>Hills</i>	<i>Long Hills</i>
Repeats	4-5	3-4	--	--	--
Pace	5K minus 10 sec	5K minus 10 sec	--	--	--
Rest (minutes)	3	3	--	--	--

10K to Marathon Speed Training

<i>On-pace Intervals</i>	<i>440s</i>	<i>880s</i>	<i>Miles</i>	<i>Hills</i>	<i>Long Hills</i>
Repeats	4-6	4-6	3	4-6	3-5
Pace	5K-10K	5K-10K	5K-10K	5K-10K	5K-10K
Rest (minutes)	2-3	3	3	Jog Down	Jog Down

<i>Fast Intervals</i>	<i>440s</i>	<i>880s</i>	<i>Miles</i>	<i>Hills</i>	<i>Long Hills</i>
Repeats	3-4	--	--	--	--
Pace	5K minus 10 sec	--	--	--	--
Rest (minutes)	3	--	--	--	--

Intermediates

The charts below can help to give you a general idea of the appropriate speeds and distances you might use in your speedwork sessions. Because training for the 5K demands workouts different than those for the 10K or marathon, we have presented a separate chart for the shorter distance.

These workouts are intended for intermediate runners. This means that for men, 5K time is between 20:00 and 24:00, and 10K is between 40:00 and 48:00. For women, 5K time is between 22:00 and 26:00, and 10K is between 44:00 and 52:00

Both charts are divided into two sections, for on-pace speedwork and fast speedwork. Both sections include suggestions for pace, number of repeats, and the appropriate amount of rest during intervals for five types of workouts. Keep in mind that the race paces referred to are not your goal pace but the pace you expect you could run today. In other words, if you are training for a 7:00 5K pace but can only run at a 7:10 pace now, the 7:10 pace is the speed at which you should run your repeats.

5K Speed Training

<i>On-pace Intervals</i>	<i>400s</i>	<i>800s</i>	<i>Miles</i>	<i>Hills</i>	<i>Long Hills</i>
Repeats	5-8	5-6	3-4	5-6	4-5
Pace	5K	5K	5K	5K	5K
Rest (minutes)	2	2-3	3	Jog Down	Jog Down

<i>Fast Intervals</i>	<i>400s</i>	<i>800s</i>	<i>Miles</i>	<i>Hills</i>	<i>Long Hills</i>
Repeats	4-6	4	--	--	--
Pace	5K minus 10 secs	5K minus 10 secs	--	--	--
Rest (minutes)	3	3	--	--	--

10K to Marathon Speed Training

<i>On-pace Intervals</i>	<i>400s</i>	<i>800s</i>	<i>Miles</i>	<i>Hills</i>	<i>Long Hills</i>
Repeats	8-12	6-10	4-5	6-10	6-8
Pace	5K	5K-10K	5K-10K	5K-10K	5K-10K
Rest (minutes)	1-2	2-3	3	Jog Down	Jog Down

<i>Fast Intervals</i>	<i>400s</i>	<i>800s</i>	<i>Miles</i>	<i>Hills</i>	<i>Long Hills</i>
Repeats	6-8	4-6	--	5-6	4-5
Pace	5K minus 15 secs	5K minus 15 secs	--	5K minus 15 secs	5K minus 10 secs
Rest (minutes)	2	3	--	Jog down	Jog down

Advanced

The charts below can help to give you a general idea of the appropriate speeds and distances you might use in your speedwork sessions. Because training for the 5K demands workouts different than those for the 10K or marathon, we have presented a separate chart for the shorter distance.

These workouts are intended for advanced runners. This means that for men, 5K time is between 17:00 and 20:00, and 10K is between 34:00 and 40:00. For women, 5K time is between 19:00 and 22:00, and 10K is between 36:00 and 42:00.

Both charts are divided into two sections, for on-pace speedwork and fast speedwork. Both sections include suggestions for pace, number of repeats, and the appropriate amount of rest during intervals for five types of workouts. Keep in mind that the race paces referred to are not your goal pace but the pace you expect you could run today. In other words, if you are training for a 6:00 5K pace but can only run at a 6:10 pace now, the 6:10 pace is the speed at which you should run your repeats.

5K Speed Training

<i>On-pace Intervals</i>	<i>400s</i>	<i>800s</i>	<i>Miles</i>	<i>Hills</i>	<i>Long Hills</i>
Repeats	8-12	6-8	4	6-10	6-8
Pace	5K	5K	5K	5K	5K
Rest (minutes)	1-2	2	3	Jog Down	Jog Down

<i>Fast Intervals</i>	<i>400s</i>	<i>800s</i>	<i>Miles</i>	<i>Hills</i>	<i>Long Hills</i>
Repeats	6-8	4-6	--	5-6	4-5
Pace	5K minus 15 secs	5K minus 15 secs	--	5K minus 15 secs	5K minus 15 secs
Rest (minutes)	2	3	--	Jog down	Jog down

10K to Marathon Speed Training

<i>On-pace Intervals</i>	<i>400s</i>	<i>800s</i>	<i>Miles</i>	<i>Hills</i>	<i>Long Hills</i>
Repeats	8-12	6-10	4-5	6-10	6-8
Pace	5K	5K-10K	5K-10K	5K-10K	5K-10K
Rest (minutes)	1-2	2-3	3	Jog Down	Jog Down

<i>Fast Intervals</i>	<i>400s</i>	<i>800s</i>	<i>Miles</i>	<i>Hills</i>	<i>Long Hills</i>
Repeats	6-8	4-6	--	5-6	4-5
Pace	5K minus 15 secs	5K minus 15 secs	--	5K minus 15 secs	5K minus 10 secs
Rest (minutes)	2	3	--	Jog down	Jog down

Competitive

The charts below can help to give you a general idea of the appropriate speeds and distances you might use in your speedwork sessions. Because training for the 5K demands workouts different than those for the 10K or marathon, we have presented a separate chart for the shorter distance.

These workouts are intended for competitive runners. This means that for men, 5K time is under 17:00, 10K is under 34:00. For women, 5K time is under 19:00, and 10K is under 36:00.

Both charts are divided into two sections, for on-pace speedwork and fast speedwork. Both sections include suggestions for pace, number of repeats, and the appropriate amount of rest during intervals for five types of workouts. Keep in mind that the race paces referred to are not your goal pace but the pace you expect you could run today. In other words, if you are training for a 5:00 5K pace but you're running at a 5:10 pace now, the 5:10 pace is the speed at which you should run your repeats.

5K Speed Training

<i>On-pace Intervals</i>	<i>400s</i>	<i>800s</i>	<i>Miles</i>	<i>Hills</i>	<i>Long Hills</i>
Repeats	8-12	6-10	4-5	8-12	6-10
Pace	5K	5K	5K	5K	5K
Rest (minutes)	1-2	2-3	2-3	Jog Down	Jog Down

<i>Fast Intervals</i>	<i>400s</i>	<i>800s</i>	<i>Miles</i>	<i>Hills</i>	<i>Long Hills</i>
Repeats	6-8	6-8	--	6-10	5-6
Pace	5K minus 15 secs	5K minus 15 secs	--	5K minus 15 secs	5K minus 10 secs
Rest (minutes)	2	3	--	Jog down	Jog down

10K and Marathon Speed Training

<i>On-pace Intervals</i>	<i>400s</i>	<i>800s</i>	<i>Miles</i>	<i>Hills</i>	<i>Long Hills</i>
Repeats	8-12	6-12	4-6	8-12	6-10
Pace	5K	5K-10K	5K-10K	5K-10K	5K-10K
Rest (minutes)	1-2	2-3	2-3	Jog Down	Jog Down

<i>Fast Intervals</i>	<i>400s</i>	<i>800s</i>	<i>Miles</i>	<i>Hills</i>	<i>Long Hills</i>
Repeats	6-8	6-8	--	6-10	5-6
Pace	5K minus 15 secs	5K minus 15 secs	--	5K minus 15 secs	5K minus 10 secs
Rest (minutes)	2	2-3	--	Jog down	Jog down