

How to Build Your Base for Peak Performance

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Top coaches and experienced runners know that you simply can't train the same way all the time and hope to reach your best results. Instead, you'll run better and reach higher levels by building your training through a series of phases, with each phase building on the previous one.

The beginning of this cycle is what runners refer to as base training. Famed New Zealand coach Arthur Lydiard was the first to recommend base training, where the goal is to building an aerobic base before gradually transitioning to more intense training. The goal of base training is to gradually build your aerobic fitness and muscular strength to the point where you are ready for the more difficult, race-oriented training.

In this article I'll talk a bit about the benefits of base training and then discuss how to plan your base training for the most effective results.

4 Benefits of Base Training

Base training has a number of beneficial effects on the body and these benefits generally stay with you for a relatively long period of time. Here are some of the changes brought about by base training:

1. **It improves your ability to process oxygen.** Endurance sports are dominated by those who can take in and utilize oxygen most effectively. Done properly, base training increases the number and size of the mitochondria in your muscle fibers and allows your muscles to use the oxygen your lungs are bringing in.
2. **It increases muscular strength.** Base training is relatively easy on your body and does a good job of building functional strength in your running muscles. This helps them prepare for the rigors of the faster, more race oriented training that follows the base building period.
3. **Physical and mental regeneration.** Hard, race oriented training is tough to do all year round. Attempting to do so often leads to injury and burnout. Taking a couple of months to build a proper base gives you a chance to emphasize gentler, more enjoyable training that builds your physical and mental energy reserves, rather than depleting them.
4. **Improved ability to handle and adapt to more specific training.** Running with a strong foundation of aerobic training can safely handle and adapt to a larger volume of race-specific training. The better your base, the more you seem to get out of the hard workouts that come later.

Base Building 101

Hopefully now you're sold on the idea that building a stronger base can make you a better runner, now let's look at some of the specifics of how best to accomplish this goal. Here are the key elements to include in your base training:

Weekly mileage: The biggest aspect of building a base is to simply get out there every day (or as often as you can) and put in the miles. The more you run, the better you'll run, up to the point where you start getting injured or burned out.

It's a bit of a fine line, but the best way to gauge whether you're doing too much is simply your level of enjoyment. You should be looking forward to getting out for your daily run more often than not. We all

have occasional days where we'd rather stay home on the couch, but if running consistently becomes a struggle and a grind, rather than something you look forward to, you're probably doing too much.

Long runs: Long runs (about 1.5 times longer than your usual daily run, up to 2 hours or so) can help accelerate the base building process. Long runs are very helpful in building the capillaries, the mini blood vessels that actually deliver oxygen to your working muscles. The more capillaries you have per muscle fiber, the more oxygen you can get to that fiber and the more work it can perform without fatiguing. Long runs also help you burn fat, store more glycogen (your muscles' preferred energy source) and are great for keeping your body weight down.

Tempo runs: Tempo runs are runs of about 20-40 minutes at a comfortably fast pace. These runs improve your ability to maintain a fast steady pace over time. Be careful not to turn these runs into a de facto time trial, trying to run a set distance as fast as you can. Run hard but relaxed, don't strain, and try to run with good form and light, quick strides. If you start to struggle, slow down a bit or cut the run short.

Speed work: Some runners will be surprised at the concept of doing speed work while building a base, and I certainly don't recommend doing a lot of high intensity interval training during the base period. However, as Lydiard said, it's a good idea to work on your speed all year round. During the base phase, your speed work should include a series of short sprints with full recovery (some call them strides, striders or accelerations). This lets you keep in touch with faster running without the strain of intense interval training.

Strength and flexibility: The base period is a great time to work on other elements of being a better athlete, such flexibility, muscular strength and core training. Stronger muscles make a faster runner by allowing you to generate more force with each stride, plus a solid core and flexibility help you prevent injury. You don't need to go overboard on this sort of training, but a twice weekly routine focusing on general strength and flexibility can make you a better athlete.

Other than the occasional striders or tempo run, your daily running should be a comfortable pace at which you can easily maintain a conversation. Base training isn't the time for beating yourself up with brutal training, it's the time for gradually building your aerobic fitness in preparation for the race specific training to come.

Here's an example of how you could structure a typical base training week:

Monday: Rest or easy aerobic run.

Tuesday: Easy aerobic run with 4-5 acceleration runs of 60-100m

Wednesday: Easy aerobic run, followed by a strength and flexibility program.

Thursday: Tempo run of 20-40 minutes with an appropriate warm up and cool down.

Friday: Easy aerobic run with 4-5 acceleration runs of 60-100m.

Saturday: Easy aerobic run followed by a strength and flexibility program.

Sunday: Long run, about 1.5 times your average daily distance at a comfortable pace.