

# Base training

by Mark Allen

You can either try to race with an engine the size of a lawnmower, or you can build your engine up with a good base so that you are racing with a huge-turbo charged jet engine.

There are many factors that will influence your racing. Nutrition, tapering, speed work, rest, and mindset are some of them. But the biggest physical factor is the base you build in the beginning of the season. A good base period when you develop your body's ability to burn stored fat for fuel is what determines the size of the internal engine that the other things have to work with.

A well-designed base period enables you to take good nutrition, speed work, rest, and positive thoughts and transform them into your best race possible. The choice is yours. You can either try to race with an engine the size of a lawnmower or you can build your engine up with a good base so that you are racing with a huge-turbo charged jet engine.

The catch is that most people do not have the patience to build a base correctly. The reason is that for the first 12 weeks or so of your season, you will have to strap on a heart rate monitor and put your ego aside. What the heart rate monitor will signal to you is when you are working out at heart rates that are aerobic (fat burning).

These are in the lower training zones well below your maximum heart rate. The higher heart rates are anaerobic (carbohydrate burning) and shouldn't come until your base has been built. The reason is that the improvement you can get in performance from developing your aerobic fat burning system is huge compared to the improvement in performance you can get from doing the high-end anaerobic carbohydrate burning workouts. And our bodies cannot develop both systems very well at the same time. Which means that to build a base properly, an athlete has to have the patience to work the aerobic system exclusively for a huge block of time.

In the beginning of the season just about everyone will have lost a lot of their aerobic base, especially if in the season before you did little aerobic and mostly anaerobic training. What this means in your workouts is that you have very little ability to burn fat as a source of fuel for exercise and your heart rate will jump up very high at a relatively slow pace in an attempt to kick your metabolism into carbohydrate burning. And to keep from going over your aerobic limit you will have to slow your pace down, often significantly.

This is where most athletes do not have the patience to stick with the aerobic training. You may have to slow down several minutes per mile from your normal everyday training pace just to keep your heart rate from going above the aerobic maximum. Your perceived effort can be very, very low while you are developing your aerobic engine.

And this is when one's patience is tested. Workouts will feel the opposite of the mentality that says training should be painful and muscles need to burn to get benefit. This may be true later during the speed phase of the season. But right now, this is absolutely not correct. You will be getting huge benefit that will show up months down the road.

When I started back each season, I had always lost a lot of my aerobic capacity. This meant that I had a small internal engine. During those first few months of training, I would literally have to walk up even the easy hills on my runs to keep my heart rate from going too high and kicking my body into carbohydrate metabolism.

But slowly, over those next 12 weeks, my body would develop the enzymes necessary to break down stored fat for energy and my pace would speed up. And by the time it came to do my interval training, I was able to run close to a 5:30 mile at my aerobic maximum heart rate of 150!

Here is an example of the base building training prescription:

Give yourself 5-15 minutes to warm up, slowly elevating your heart rate as you go. Then during the bulk of the workout, try to keep your heart rate in a range that is at least 80% of your maximum aerobic heart rate but not higher than that number. So for example, if your maximum aerobic heart rate is 150, try to work out the main part of your training session in a range that is from 120-150. - Do the workouts in this range, all of them the same. No cheating. No going over just a little in each workout. - Walk the hills. Put the chain in a smaller gear. Do whatever it takes to keep from going over your maximum number. Once your base has been built you will have plenty of opportunity to work in the more "painful" heart rates.

You now have the secret to building a good base, and more importantly training correctly in the early season to have your best race when it counts!