

The question that pops into every injured runner's mind when considering alternative training is "does it really work?" The answer is a qualified yes. While the best run training is actually running, when this is not possible, the RIGHT exercises done CORRECTLY can dramatically affect your ability to recapture pre-injury fitness levels upon resumption of normal training.

I offer myself as a case in point.

I became a believer of alternative training the first year I won Ironman Canada in late August of 1991. I had hurt my achilles tendon in the 3rd week of June, and was not able to run a step until the last week of July. Prior to getting hurt in June, my fitness was decent, but not earth shattering. My longest run was 12 miles, and I had a general base of track workouts and Olympic distance triathlons---not exactly prime marathon fitness.

I performed water running workouts four times/week for one month. I used a heart rate monitor and patterned workouts similar to the interval workouts I performed on my indoor bike trainer. I was able to resume normal running for 4 weeks prior to my Ironman event, and after a week of getting my stride back worked in modest quality sessions, and two longer runs of 11 and 14 miles.

When I took the starting line of Ironman Canada, I was confident of my swim and bike, but fearful of my seeming lack of adequate run preparation. I expected that the last 10 miles of the marathon might be my undoing. Imagine my most pleasant surprise at finding myself at the end of the marathon course after only 2 hours and 44 minutes with what would prove to be the 2nd fastest time of the day for the run.

Water running---I know what you are thinking---it's boring, I can't get my heart rate up, and it doesn't seem to offer any benefit. After watching the way most people perform this exercise I am not at all surprised that these are common conclusions. But let me ask you, have you ever done it with a tether attached to the back of your vest and anchored to a lane hook?

A simple 5-6 foot tether or a stretch cord with clips on it will dramatically change your perception of the training possibilities that water running offers. By anchoring you in place, the tether accomplishes several things:

- it dramatically increases the resistance of the water
- it allows you to more easily maintain a uniform stride
- it allows you to more easily mimic track workouts and prescribed heart rate intensities
- it will have you walking out of the pool exhausted in only half the time!

I see most people make one of two mistakes when water-running. The first is to have their primary motion be an up-down one where the only resistance they are overcoming is pushing water down with the soles of their feet. The other form error I frequently observe is a too-short stride often which is further truncated by flexing the knee as the leg passes under the hips.

In order to maximize benefit it is necessary to exaggerate your stride in the water by reaching far forward with the leg and drawing it all the way back. The motion is similar to what you envision when you imagine a cross-country skier gliding across a snow-covered field. Concentrate on maintaining a rhythmic, wide-ranging stride as opposed to short rapid turnover. Experiment with drawing your leg back at varying degrees of flexion. The increased effort will become readily apparent.

For those of you who train with a heart rate monitor, you will notice that your heart rate runs lower than your perceived effort. You will find though that with use of the tether it is much easier to elevate and sustain your heart rate than you might have experienced earlier.

What you might want to do is to perform a little test of 4 repetitions of 2.5 minutes progressing in intensity from what you would judge to be your normal running pace effort in the first repetition to a your maximal sustainable effort in the fourth repeat. Rest 45 seconds between repeats. This exercise should help you to establish some useful heart rate parameters, as well as demonstrate yet again that HR zones are sport specific.

A word of caution to the wise: employ a couple of introductory sessions with these new increased resistance exercises. Twenty to thirty minutes with a comfortable rate of perceived exertion is a good starting point. After a couple of sessions, you can perform the heart rate test described above and begin with HR based interval progressions.

Total workout time can range from 30-60 minutes, although one should work up to the longer duration. My experience is that shorter and focused is better than longer and chit-chatting to pass the time.

Remember that although water running is a non-impact exercise and is thus relatively safe, as with any new routine or exercise it is best to observe a certain adaptation period. It is a good idea to spend some time stretching your hamstrings after your water running sessions.

Augmenting your Water Run Sessions:

Two important areas of the run stride which water running neglects are the push-off and conditioning the body to absorb impact. It can be useful to augment your water running sessions with stair sessions. Whereas the majority of running injuries are driven by impact, stairs can be a good substitute because you are lifting yourself up and not pounding.

I first stumbled across this alternative form of run training when I was living in Boston and trying to maintain run fitness with a broken collarbone. Running was not possible as I could neither swing my arm nor tolerate the jarring impact of hitting the ground. Running up the 52 story Prudential Building became my run training.

Three weeks of stair running, and one 4 mile run outdoors to test my collarbone, and I jumped into the Corporate Challenge 5k and was shocked to run what was for me a very fast time.

Suggestions for effective stair running:

- two steps at a time is generally better than one step because it better simulates the stride
- if stadium stairs, incorporate various drills
- a weighted vest can add some spice to your stair workout
- be careful on the toe pushoff as it is easy to overdo this
- stair-masters are best used for magazine reading and for developing tricep muscles

Depending on your injury and the extent to which it is driven by impact, running on an uphill grade on a treadmill can be a very effective means at running through an injury. The steeper the uphill grade, the less the impact. Athletes can basically begin at a grade where the impact is not an issue, and gradually wean the grade down to minimal.

As with any new exercise, a couple of intro adaptation sessions are a good thing to do. Care should be taken not to exaggerate the grade for long periods though as this can cause calf muscles and achilles tendons to complain.