

Strength Training for Endurance Athletes

Contributed by Vic Brown
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Popular endurance

activities such as running, swimming, cycling, ultra events and adventure racing all require a combination of speed, strength and stamina. Important, yet often neglected, strength training prepares the body for the rigors of training and racing.

It combats factors that contribute to overuse injuries, encourages bone health and counteracts muscular imbalances. Strength training can enhance aspects of aerobic and anaerobic endurance. It can boost lactate tolerance, delay fatigue and improve running economy, which allows an athlete to use less energy and therefore less oxygen.

All these benefits and strength training is still overlooked when endurance athletes make time to train? A common opinion among endurance enthusiasts is that any additional free time should be devoted to swimming, biking or running. If not time, then knowledge is the obstacle. How do you add a strength training component to your training?

Tradition vs. Function

Depending on which sport you do, it's important to determine what repetitive movements may lead to overuse injuries and build your strength plan around corrective exercises.

What strength movement patterns best serve swimming, biking, or running? Balance, stability and a strong core for all of them; biking and running are single leg movements and require a great deal of leg and hip strength and power; swimming requires a lot of upper body strength and power, but it also uses a great deal of core strength and rotation.

The goal is to perform exercises that simulate the movement you do in your sports such as a walking lunge for running or pull-ups for swimming. Do not isolate or train muscle groups individually. Choose exercises that will link the body's entire kinetic chain.

Perform free-weight exercises while standing on the ground to help work out your stabilizing muscles. For this reason weight machines are not a good idea because they limit the amount of stabilization you need to do to lift the weight, creating weak spots by building muscles without building stabilization muscles. Training with equipment like dumbbells, medicine balls, stability balls and various resistance bands will facilitate balance, stabilization, strength, and flexibility all at once. A split squat with an overhead press, a lateral lunge with a belly press, and a push up with a dumbbell row are a few effective exercises to incorporate into your training plan. To learn more and see how to do these moves, see metrosportsny.com.

As a matter of opinion, many endurance athletes border on over reaching or overtraining. Remember that the effects of fatigue are cumulative. Proper rest is important. Recovery allows the body to adapt to the previous phases of work. Do not lift weights on your rest days or simply add strength training on top of your endurance training. Include strength training when adding up total training hours per week (volume).

A proven method to help athletes achieve peak levels of

fitness and prevent overtraining is periodization. A periodized training plan (outlined in the chart) allows you to manipulate training volume, intensity and specificity during different phases of the training year. A comprehensive strength training program should meet the specific needs and demands of the sport or event you are training for. More importantly is developing a practical approach to meeting your real world logistical responsibilities and concerns. Adhering and making strength training a priority in your program will keep you healthier and put you in position to have your most successful season yet.

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A Practical Approach to Strength Training for Endurance Athletes

Eight ways to make it work with your training schedule

1. MAKE IT A PRIORITY

Schedule strength training sessions into your weekly planner just as you would swimming, cycling, or running workouts and any other appointment or meeting. Writing the workout down gives a sense of accountability making you more likely to do it.

2. CHOOSE AN APPROPRIATE VENUE

Find a gym that will fit your needs. Many fitness centers have a pool, cardiovascular equipment and a strength training area. This provides an opportune venue for linking workouts together and presents a convenient site for establishing time blocks.

3. HOME GYM

Many highly effective exercises can be performed using equipment that can be purchased for a nominal amount: pair of dumbbells, stability ball, barbell, or using one's own body weight. Performing your strength training routine at home eliminates driving time to the gym and lessens the possibility you will miss the workout.

4. PIGGYBACK WORKOUTS

Link your endurance workouts together with strength training. Perform strength work immediately after your aerobic session. Oxygen consumption remains elevated longer when aerobic training precedes strength training providing a greater fat burning benefit.

5. DISTRIBUTE AND ESTABLISH TIME BLOCKS

Time-based programs allow for effective time management. During the off-season, a workout could consist of a 30-minute swim followed immediately by a 30-minute strength training session. When transitioning into pre-season training, this time block may shift to a 45-minute swim and a 15-minute strength training session.

6. TRAIN LIKE AN ATHLETE

Use ground-based multi-joint exercises; exercise performed standing while requiring movement across two or more joints. They provide more muscular stimulation and often link the body's entire kinetic chain from head to toe while engaging your core. Isolation is out. Choose exercises based on the movement patterns of your sport.

7. PAIR OR TRIPLE UP ON EXERCISES

These methods will decrease overall training time and allow you to train a particular movement while simultaneously allowing for rest.

Super Sets: Choose two exercises of opposing movements and perform them back-to-back without any rest. For example, super set push and pull exercises such as a dumbbell bench press lying on a stability ball with a dumbbell row.

Pair Exercises: Pair upper and lower body exercises. For example, perform a lunge matrix (forward lunge, lateral lunge, rotational lunge) immediately followed by pull-ups.

8. MAKE USE OF REST TIME BETWEEN INTERVALS

Perform an exercise during rest between intervals to improve both aerobic endurance and muscular strength and power. During intervals that allow for long rest periods, try performing multi joint exercises. Mix in core or activation exercises during short rest periods.