

Does Weight Training Benefit Trained Cyclists?

By Peter Cummings, MHP, NNP

For untrained cyclists, studies have consistently shown that weight training can improve maximum endurance performance in lab tests. However, when it comes to trained cyclists, the evidence is less clear. Scientists generally claim that there are no studies showing that weight training helps "trained cyclists" improve their maximum endurance performance. While I don't disagree with that statement, I believe the issue may lie more with the studies themselves than with the actual benefits of weight training.

The Case for Weight Training

Despite the lack of scientific studies, I believe that weight training benefits trained cyclists. My belief is based not only on my observations but also on feedback from my athletes. Many have told me they felt stronger on the bike when they were regularly hitting the gym. While this isn't scientific evidence, it's worth considering that practical experience often precedes scientific validation—after all, people once believed the world was flat.

I'm confident that future studies will eventually show what many of us already believe to be true: that weight training, when done correctly, can indeed benefit cyclists. The current lack of supportive studies may be due to the inadequacy of the weight training routines used in those studies.

Flawed Studies and Misguided Routines

The studies I've seen are, frankly, lacking. For example, one study used plyometrics over several weeks and then tested endurance performance. Others employed routines with 5 exercises, 3 sets, and 5 reps to assess improvements in cycling endurance. These types of routines are hardly representative of what a cyclist needs. In fact, such approaches are so far removed from cycling-specific training that it's like testing someone's IQ after having them bench press for 10 weeks.

Why did these studies use such routines? Much of the weight training information used in these studies has been heavily influenced by those specializing in bodybuilding or powerlifting. While these disciplines have their merits, they are not well-suited for endurance sports like cycling. As someone who has spent countless hours in gyms, I've seen firsthand that until recently, the focus in most gyms has been on bodybuilding and powerlifting, not on sports-specific endurance training.

If you were a scientist in the 1980s and you asked someone with a background in these fields to design a routine for a cycling endurance study, it's no surprise you didn't get a workout plan that emphasized long-duration, cycling-specific exercises. A more appropriate routine would have included exercises like those suggested by Tudor Bompa in his *'Periodization Training for Sports'*, where he recommends performing 10 minutes of nonstop work for certain exercises with only 2 minutes of rest between sets.

The Right Approach to Weight Training for Cyclists

I firmly believe that weight training routines, when properly designed using sound periodization principles and tailored to the physiological needs of cyclists (e.g., converting maximum strength improvements into muscular strength endurance), can benefit even highly trained cyclists. Hopefully, future studies will support this belief and put an end to this ongoing debate.