



Riding To Run

Article by Sonni Dyer

I once heard Joe Montana, famous quarterback for the 49er's, speak about "setting up a game" for the 4th quarter.

He referred to strategies, for the **first** 3 quarters of the game, like:

1-ensuring that he hadn't had his offensive-linemen on the field too long

2-making sure that the running game was balanced w/ the passing game

3-always trying to be sure that he didn't leave his team's DEFENCE in poor field position

4-and, yet, **ALWAYS** having a play or two.....*that had yet to be used*.....that he could "pull out" at just the right moment to win the game.

Joe Montana would've made a great triathlete.....because good triathletes understand the art of "positioning" themselves for great races. Let me explain.

Often, I'll have an athlete in a clinic or 1-on-1 who lament that his/her "weakness" is the **run**.

To which I respond: "*Tell me about your **cycling***." After a moment of strange looks and uncomfortable silence a smile will break as, now, the athlete stops looking at the "tree" and begins to see the "forest". That is, they begin to see the run as a part of the race as a whole.....and not an isolated leg.

Our athletes have often heard us preach the mantra: "**It's not how fast you run, but how fast you run OFF the BIKE**.".....and now know, that this is simply a practice in 'positioning'.

So how DOES one **position** themselves, optimally, to run out of T2 after a race-effort bike ride??

We teach our athletes 5 ways in which to do this. (Three that are cycling related, and 2 that are run related.) These areas deal with:

1-Bike fit

2-Gear choice

3-Cadence

4-Stride mechanics

5-Pacing

1-Bike Fit:

When I see the "bike fits" (*how one's positioned on their bike*) that some people have, it's quite easy to see that they've been fitted by a well-intentioned **bike** shop. In other words, it IS, in fact, the best bike fit for optimal speed on the **bike**.

"Well," you may ask, "isn't that the point? To be positioned to go as fast as possible on the bike?"

Not hardly.

For example, what if we 'fit' you on your bike in such a way that you could split 30seconds **FASTER** on the bike-portion of a race.....BUT..... this came @ the expense of running 1:15 slower on the run leg? What have we accomplished in **LOSING 45 seconds** of total race time?

Ideal bike fit, for a fast & efficient bike AND run 'combo'-split, ensures that you're seat's position isn't too far back nor too far forward.

With a seat that's jammed back, the knee's travel is real close to the chest while you are in the aero-bars. Not only can this be uncomfortable on the bike.....but it can make for a long, uncomfortable run as well.

It's VERY hard to get 'going' on the run after having your knees push pedals from your chest for several miles prior.

At the other extreme, I've seen triathletes who were jammed too far forward, for the sake of getting a "tri" bike who deter their run efforts just as much. In this example, the workload of pedaling fatigues a **SINGLE** muscle group more than others. In essence, the responsibility for wattage output isn't evenly distributed over a **whole RANGE of muscles**.



Riding To Run

Article by Sonni Dyer

By the time this triathlete gets to the run, they feel good.....**except** for that ONE muscle-group that's long exclaimed: "No more!!"

"**BALANCE**" is the key in one's bike fit. Balance in your fore/aft seat positioning. Balance in your bar-height aggressiveness on the front end of your bike. Even "balance" in how wide or narrow you position your arms on the bike.

It's this **balance** that leads us (the TRImyCoaches) to favor tri-bikes that offer a range of seat fore/aft adjustability. I've trial-&-error'd seat positions at every imaginable degree. Some are faster for the bike.....but hamper the run. Some work well for the run.....but leave you starting that run well behind of "ideal-race-pace" off the bike.

We believe that a good tri-bike should be flexible enough to match the athlete's body and bike-run needs. NOT that one should attempt to mold their body onto a bikes fixed position. In other words, **MATCH THE BIKE TO THE BODY.....NOT THE BODY TO THE BIKE, and you'll "position" yourself for optimal efficiency for a greater percentage of the race.**

2 & 3-Gear Choice & Cadence:

I group these two together because they, really, go hand in hand. If you try to push a gear that's too big.....the cadence will slow. While, if you're cadence is too high.....you're probably not in a big enough gear.

Studies have been done on optimal "footstrikes-per-minute" of some of the worlds greatest runners. The findings show that, almost *regardless of distance*, that the optimal footstrike-per-minute of elite runners is **180 footstrikes per minute**.

Likewise.....optimal cycling cadence (measured in rpm's.....revolutions per minute) is said to be **90rpm's**. Now realize that **one RPM is each foot taking a pedal stroke**. So, in reality, 90rpm's equates out to, you guessed it, **180** pedal strokes.

Hmm..... 180 pedal strokes per minute AND 180 footstrikes per minutes are BOTH optimal. See any correlation?

This is "case in point" for the triathlete who says, "**I like to push BIG GEARS!**" What they don't say is ".....and I do it at 70-75 rpm's". [And, usually, this person has the equipment to prove it. On their bike is a giant 56-tooth chain ring.]

And their bike-split may, in fact, be very fast.....but more often than not, **not** as fast as their gearing/cadence has **COST** them before they ever put on the shoes to run.

• **NOTE:** A recent study at the University of Colorado **proved** that running after "fast-cadence-cycling" were as much as 10% faster than the run times after "slow-cadence cycling"!!

The researchers summarized: "**Running stride frequency is based on neural firing rates, and neural firing rates are dependent on 'prior-task-patterns'. And, in this case, these 'prior-task-patterns' were cycling cadence.**"

4-Stride Mechanics:

"Stride mechanics" refers to what running **FORM** one employs in running off the bike. The tendency is to heel-strike, take big, long strides and match the run-cadence to the cycling-cadence that was used just minutes before.

Instead, realize the objective is to get your "**RUN-LEGS**" underneath you as quickly as possible. Remember your first triathlon? Remember what it felt like to run after riding the bike hard? It was like a different sport altogether.....not running at all!!

The longer the stride you try to take.....the more your footstrike occurs IN FRONT of your body's centerline. And this is called 'putting on the brakes'.

Instead, you want to feel like you're tip-toeing out of T2 on your forefeet taking very short strides. The stride length (& speed) will come.....but **only** in a medium of the ideal footstrike cadence.



Riding To Run

Article by Sonni Dyer

And, again, you can "set-up" that run cadence by choosing the SAME cadence on the bike before the run ever begins. Now your positioning yourself for a great race!!

5-Pacing:

When we discuss the aspect of "pacing" a race, we're not just referring to your pacing during the run.....or even on the bike.....but also the swim. "Pacing" refers to how you "set-up" the **entire race**.

The objective, here, is to spread the effort out as **EVENLY** as possible through the whole event. This is precisely why I DON'T recommend racing with a heart-rate monitor in sprint races.

Obviously, heart-rate is going to be lower early in the race (& on the bike).....which could tell you to push harder at intensities that are, already very high, despite several variables like:

- the course itself,
- the day's conditions, or
- the competition you're racing that day.

Instead, I recommend that you **develop a "feel"** for Sprint and Olympic distance races.....one where your pacing is allowing you to **BUILD** into that final half-mile of the run. More people slip from their "ideal race" in the final minutes than at any other time.

However, I **DO** recommend wearing a heart-rate-monitor in Half-Iron and Iron Distance races. These are race-durations that the monitor can HELP w/ pacing. And "pacing" at these distances is **CRUCIAL** to success!!

- **NOTE:** A research study at the US Army Research Institute concluded that:

*"If you were an athlete that competes in events that last longer than 1 hour, it's clear that you should avoid fast starts completely. Studies carried out with marathon runners suggest that whenever they began races at a pace that was **JUST 2% faster** than their average for the marathon.....they struggle in the final 6 miles of the event."*

Of course, the art of "pacing" in a Tri is much harder. There simply aren't mile markers to tell you to speed-up or slow down. **And you're pacing 3 different events and their relationship to one another.**

This is where developing a '**self-systems-check**' (to be done every 3 minutes of the race) can be handy. In this check.....you can self-assess things like:

- Am I hydrating?
- Am I overheating?
- What's my perceived exertion?
- How do my legs feel?
- Do I have another "gear" left in me?
- Am I setting myself up for a fast finish?

.....and most importantly: **"What would Joe Montana do."**

Coach Sonni Dyer

*****For more information on the **Studio7MultiSport** training programs, you can visit our website at **www.Studio7MultiSport.com** or email Sonni at **Sonni@Studio7multisport.com** .

References:

- 1-Medicine and Science in Sports and Exercise, vol 34 (9), pp 1518-1522, 2002
- 2-Running Research News, vol 12(5), pp 1, 5-7. 1996