

Coach's Corner, Buffalo Stampede

By Brendan Davies

Part 2: The Importance of the Long Run

You've had a tough week; the kids have been keeping you up, it's been raining all week and the hours at work have been long. You've had to skip the odd training session and so be it. Unfortunately this is the nature of life. But if there is one session that you should never miss in your weekly program - it's the long run. It's the one session that will best train the body and the mind to tackle the immense challenges that the Stampede presents. Put simply, it's the essence of what makes us endurance athletes and it's what develops and progresses us as distance runners. I'm sorry, but for me, everything after the long run is the icing on the cake. But you have to have the cake to put icing on first.

What is the long run?

For the purpose of this article and in the context of the Buffalo Stampede races, I think any continuous run over 90 minutes or 20kms should be considered a long run.

Benefits of the Long Run

There's no getting around, we do the long run for many benefits and I know I'll be preaching to the converted here. But thought I'd start with a couple of one's you've probably never considered before.

- **Spreading the running love.** Ever considered how many people have seen you during your long run? What better way of radiating health and vitality to non-runners (well hopefully!) than being seen when training? I know I've had lots of people say to me, "I saw you running when I was going out shopping and you were still running when I was on the way home!" Yes, adults may dismiss it or think we're mad, but trust me, children don't. The moral of the story; you're all encouraging the communities around you by doing what your doing. Positive energy is infectious.
- **It's environmentally friendly.** In the lead up to Western States this year, I'll be incorporating my long run(s) in with my commute to work. So with a bit of careful planning involving ironing a lot of clothes in advance, showering at work and waking up at sparrows...suddenly not only am I saving money on fuel but I'm being good to the environment at the same time. Right then, enough of the hippy stuff. What about the science?

1. Physiological Benefits

Ever wondered why the long runs seem to feel easier over time? Ever questioned why you think you can handle greater distances, training loads and still be getting faster as the program goes on? It's called Endurance, and it's developed mainly through the long run and the associated physiological adaptations that take place in our bodies. The three main adaptations being:

- **Aerobic capacity.** You're heart and lungs flourish in the long run. You're strengthening your heart and expanding your lung capacity. Your capillaries come to life sending energy to your working muscles and getting rid of the bad by products; lactic acid, carbon dioxide etc

- **Your glycogen stores increase.** The mitochondria in our muscles increase in size and number and suddenly we can store (with proper pre and post training nutrition) a greater glycogen load. The result? We can go harder for longer.
- **We learn how to use fat as a fuel source.** Now who doesn't want this? After about an hour, the body shifts from primarily using glycogen to about 50-50 with fat. After 2 hours, the body is primarily using fats. But it has to be trained to do this, and the more you train your body to do it the more efficient it will become at it.

2. Psychological Benefits

We covered this extensively in the previous Coach's Corner. The mental toughness that develops over the long run is crucial. You get to learn how to get through bad patches, fight fatigue and you instinctively pick up all the little strategies that work best for you.

I often get asked questions about the long run. The 3 most common questions with my usual responses are:

1: How long and at what pace should my long runs be?

A couple of rules of thumb apply, the longer the event, the further (or longer in time) the long run. I think getting your longest long run up to three quarters of the race distance (or race goal time) is the target. So for the marathon, try to get up to 32km by the end of your base building phase. Similarly the ultra, 50-55km. Of course this may vary according to the goal of each runner. If you're at the performance focused end, this rule would be seen as perhaps a minimum standard. If you're in it to finish, perhaps this is the stretch goal. Whatever the case, this is a good rule of thumb that applies to anything up to 100km events.

In regards to pace, we often hear about the value of LSD (Long Slow Distance). Pace (or effort) should be quicker than your easy runs. Believers of LSD say you should be at conversational pace; that is you should be at any time be able to chat away. I don't disagree in entirety but I do think that not every long run should be like this. You do need to feel some discomfort in your long run at times or you will never experience what it will truly feel like on race day. So I try to make every second long run I do a 'Steady State' run, that is, just below tempo pace. This is often done in the form of my mid-week long run where I aim for 90 minutes or 20km, whichever is reached first. Often I do this run on the road too, not the trail.

How long before the race should my longest long run?

I think with a gradual build up of distance, following the tried and tested rule of adding 10% of the previous week's distance (or time) , the longest run should be performed a minimum of a month before the race with a gradual reduction as you then enter your sharpening phase and taper.

With the Stampede in mind, how specific should I make my long run?

The Stampede marathon has 3000m of ascent and 2000m of descent and the ultra 4545m of up and down. So as best as you can, the principle of specificity dictates that you should be doing your best to find the same type of route (as a percentage of your long run distance). But how practical in reality is that? Unless you live in the Swiss Alps, we're all going to struggle on that count. So just do

your best to find hilly courses. The flatter midweek long run can be a good way to mix it up and freshen up the legs, especially if you're doing most of your other running over hilly terrain.

As much as possible, run your long run on trails. Not only will your trail skills increase but you are also strengthening your muscles, tendons and ligaments and conditioning your body to withstand the effects of muscular fatigue.

Practise your race nutrition/hydration strategy and wear your race pack on some of your long runs. Treat your longest long run as a dress rehearsal; wear the same gear as you would in the race. If something doesn't work for you; at least you now have the chance now to modify, ditch or replace a component. Better than finding out now than during the race that new shirt causes your nipples to chafe!

Lastly, don't forget to get straight into a high carb and protein meal or drink after completing your long run. Replacing your glycogen starts now and will aid the adaptations. Protein will help you recover quicker and reduce the fatigue factor.

Yours in the long run,

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