### **Importance of the Run Long**

The long run may be the most important piece of the marathon training program. However, there is no hard science that dictates the ideal distance, pace, or how far out from the race the long run should be

## Some of the benefits of the long run:

- Prepares the muscles, tendons, ligaments, and joints for a long duration impact type exercise
- Trains the muscles to become efficient, especially when fatigued (becoming comfortable being uncomfortable)
- · Builds mental toughness, physical resilience, and confidence
- Each longer run becomes a new milestone for many of you
- Prepares you to handle bad run days- some of these runs will be a real struggle, which end up being a character and confidence builder
- You will be amazed at how well the body adapts to the long runs, even after a month

### How hard should the long runs be?

- These runs should not be run fast or hard! The difficulty is in the duration spent running. Occasionally, it is ok to push these, but generally they should be easy-moderately paced
- You should be able to carry on a conversation without being winded, for most of your long run
- The first few weeks of your long runs, the pace will be fairly similar to your weekday runs. As these runs increase, you will vary the pace from: some really easy miles, some moderate, some faster.
- On a 16-mile-long run, here is a sample breakdown:
  - o 2 real easy miles
  - 6 miles at marathon race pace +30-45 seconds
  - o 4 miles at marathon race pace
  - 2-3 miles faster than marathon race pace
  - 1 mile real easy

# How long should your longest run be?

Maybe the single most asked question in the sport of distance running and there isn't a perfect answer

- It depends on several factors:
  - What is your current longest long run
  - What is your goal
  - Injury status going into your long run
  - How much running do you do weekly in addition to your long run
- In general, a longest long run range of 16-22 miles is the goal, or 2.5-3.5 hours of running
- You don't want to be running for more than 3:15-3:20, max 3:30 on your longest long run. This will beat your body up too much.
- If your primary goal is completing the marathon, you can run 16 as your longest run in training and do fine on race day. This may mean you add in walking breaks.
- Here is a sample of a very effective race day walk/run strategy
  - o Run 10 minutes at 10 min pace
  - Walk 5 min at 15 min/mile pace
  - Repeat for the entire race, you end up running 17 miles, walking 9, and breaking 5 hours.
- If you are a more advanced, seasoned marathoner, you may do a couple 20-22 milers
- Novice to intermediate runners do well with 1-2 18-20 mile-long runs.

## When should the last long run be?

- For beginner to intermediate runners- ideally the last real long run should be 4 weeks from race day
- For more advanced runners- 4 or 3 weeks
- For elite runners- 2-2.5 or 3 weeks

## Running Technique- How important is form?

- Ideally, you want to maximize stride efficiency and minimize wasted energy
- For runners that pay attention to their stride rate or cadence (SPM), a rate of 160-180+ seems ideal for most runners, although there is

some data that suggests that you adjust to a stride rate that your body feels comfortable and efficient at

# **Some Technique/Form Tips**

- Relax the upper shoulders, forearms, and fists while running
- Try to keep your elbows from flaring out too much
- Maintain a slight forward lean
- Land softly, try to minimize the time your foot is on the ground
- Breathe through a combination of your nose and mouth
- Find a comfortable length for you- avoid over striding