

## Tip #5 – FUELING TO GO THE DISTANCE

As you build up your long run mileage, you will begin to need carbohydrate replacement gels, candies or another source of carbohydrate replenishment. Carbohydrates are a source of glucose, the majority of which is stored in our muscles and liver as glycogen. Your body can only store a limited amount of glycogen; once depleted you feel physically and mentally drained. When you hit the wall during a marathon, it is because your glycogen stores have been depleted. By taking carbohydrate energy gels, you will minimize glycogen depletion and maintain an adequate blood sugar level.

Most runners need to begin taking a carbohydrate replacement for runs of 75-90 minutes or longer. This means not even our marathoners, but most half marathoners need to plan on consuming a carbohydrate replacement. This is a delicate balance; if you don't take enough, you will collide with the wall sooner; if you take too much during the course of your run, your stomach won't be able to digest all the carbohydrates, and you will feel bloated or cramped. The best time to experiment with the right formula of intake, as well as the best form for you is during your training runs.

Fueling should be begin 30 – 60 minutes into the run (some even take an energy supplement at the start of a half or full marathon), and then continue to fuel in small doses that range from 100 – 250 calories per hour. A smaller runner may need only 100 calories, whereas a larger runner may need 250. A faster pace also burns glycogen at a faster rate and those who are at a lower fitness level will also burn through glycogen faster. Picture an automobile burning gasoline. An 8 cylinder SUV may only go 18 miles on a gallon of gasoline, whereas a 4 cylinder economy car may be able to go 30.

Many runners rely on sports drinks (Gatorade, Powerade) and energy gels and candies (PowerBar Gel, GU, Clif Shots) for their carbs, but some find other forms of carbohydrate replenishment works well for them including Gummi bears, Twizzlers, or even candy bars. Runners need to experiment to determine what works best for them, and we encourage you to practice during your training runs.

Source: Runner's World website: http://www.runnersworld.com/article/0,7120,s6-242-301--12826-0,00.html