WHEAT

Healthy Carb-Loading Maximizes Energy for the Big Race

With the growing popularity of endurance competitions, like triathlons, half-marathons and marathons, runners must choose among countless training and nutrition strategies to best fuel their bodies. Carbloading, or increasing the intake of carbohydrates to maximize the amount of energy stored in the body's muscles, has long been practiced by all levels of runners to improve athletic performance and decrease fatigue.

CARBOHYDRATES = ENERGY

Carbohydrates are the body's primary source of energy. During digestion, foods, like whole and enriched grains, are converted to sugar and stored as energy in the liver and muscles as glycogen. Glycogen burns rapidly to provide quick and efficient energy for exercise of all kinds.

Runners require more than the average amount of total carbohydrates in their diets, especially leading up to a long race. Most research shows that if a runner participates in a high-intensity event lasting over 90 minutes, boosting the amount of glycogen stored in the muscles is critical to increased endurance. When glycogen stores are exhausted, the body must burn stored fat, which is harder to convert resulting in the dramatic fatigue referred to as "hitting the wall."

CHOOSE GRAINS

Eating foods containing whole and enriched grains is a healthy, efficient way to carb-load. Foods like pasta, whole wheat bagels, and grain bars, assist with glycogen stores, and they also contain essential B vitamins which help maintain a healthy nervous system, increase energy, lower cholesterol, and improve heart health. Research shows that adults who eat three servings of whole grains daily have less abdominal fat and avoid unwanted weight gain.

HOW MUCH?

About two to three days before a long training run or the actual race, increase carbohydrates to about 70-85 percent of the body's daily calories – around 4 grams of carbs for every pound of body weight.

That's about 600 grams or 2,400 calories of carbs per day for a 150 lb. runner. Since the amount of training typically decreases as race day nears, the glycogen from the extra carbohydrates will accumulate in the muscles resulting in stored energy for the race.

PUTTING IT ALL TOGETHER

Runners should practice eating more carbs and less fat and protein two to three days before their last long run to see which foods digest better than others. One week before race day, stick to eating those carbohydrates that worked. It's important to eat small amounts of low-fat proteins like eggs, yogurt, turkey, lean beef or chicken.

There is no need to increase overall food intake; just replace some fats and proteins with carbohydrates. Some healthy 50 gram grain foods for a meal or snack include 2 cups of whole grain cereal, a whole grain bagel, 2 slices of multi-grain bread or a cup of pasta.

The night before the race, it's best to eat a small, carb-laden meal early evening. If more is needed, have a carb-heavy breakfast and lunch. The morning of the race eat breakfast, about 150 grams of carbohydrates such as a bagel and yogurt.

Healthy carb-loading may help maintain the stamina to accomplish the entire race while avoiding a huge lag in energy and overwhelming fatigue. Remember to carb-up with delicious grains after those long training runs and the marathon itself. Eating grains to replace glycogen stores and protein to aid muscle recovery is a healthy way to remain energized for the next race!

Wheat Foods
COUNCIL