

Fueling for the Richmond Marathon



Outline

1. Pre-fuel
2. Fueling during your long runs
3. Post fuel
4. Energy drinks, supplements – what to avoid
5. Tina's tips

Fueling Yourself Daily

If you are serious about training for the half marathon and want to stay healthy and have a good race it's important for you to fuel properly. This means no SPECIAL DIETING except for the one that is individualized for your needs. You MUST take in a combination of **carbohydrates**, **protein**, **fat** and **water** to fuel correctly.



Protein

Beef, pork, chicken, turkey, fish, tofu, cheese, cottage cheese, tempeh, organic dairy, bison, wild game

Serving Size for Women: depends based on body weight/height/activity level.

Serving Size for Men: depends based on body weight/height/activity level.

Carbohydrates

- Complex versus Simple
- **Simple:** sugar, honey, fruit, brown sugar etc.
- **Complex:** Whole grains, or gluten free grains, brown rice, barley, bulgur, wild rice, beets, sweet potato, beans, vegetables, quinoa
- Higher in fiber, the more full you feel, but for a race or a long run decrease fiber the day before.

Complex Carbohydrates



Fats

Avocados

Butter

Cream cheese or cheese

Earth or smart balance

Nuts – almonds, walnuts, pecans, brazil, macadamia,
hazelnuts

Oils: olive, grape, coconut, macadamia, walnut, almond,
sunflower, safflower, peanut, sesame

Olives



Individualized Nutrition Plan

- Calories will vary depending on individual
- Calories will also vary depending on your day to day needs and training needs. Example: office job, low activity, running, plus strength training plus swimming
- You may find that your calories vary depending on the day, however you always need a baseline with the goal being to try not to eat less than your baseline calories.

Carbohydrates/Proteins

- It's important to consume a protein with a carbohydrate at each meal. This helps to stabilize your blood sugar and also aids in repairing muscle breakdown as well as lost glycogen stores.

Example: Greek yogurt with a fruit, eggs with toast and fruit, turkey sandwich with veggies and skim milk.

Protein

- Protein intake will vary depending on your training for the day. At a minimum you should take in at least 1 gram per kg. of body weight possibly up to 1.3 grams or more.
- You must take in enough carbohydrates to utilize protein efficiently.

Carbohydrate Intake

- This will depend on your total mileage during the week, your height and weight as well as other activities.
- The most important point is that you do not want to follow a low carbohydrate diet when training for the marathon.

We are what we...

Communicate to our cells!



Antioxidant Nutrients/Minerals

In addition to the carbohydrates, protein and fat runners also have high needs for **antioxidant nutrients**.

Running and any exercise produces free radicals from the extra intake of oxygen runners should make sure they are taking in at least **8-12 fruits/vegetables a day**.

While the body's cells are equipped with enzymes to protect the body against free radical damage they do only part of the job.



Antioxidant Nutrients

Antioxidant nutrients from food help provide the rest of the defense:

Vitamins and Minerals: Iron, calcium, manganese, vitamin C, E

Green leafy vegetables, citrus fruits, meat, carrots, red/orange/yellow peppers, vegetables, melon, bananas, etc.

Fatty Acids: fish intake or flax with algae or chia, walnuts

Pre/Probiotics

A recent study indicated the microbiome of an athlete changes due to decreased fiber intake.

This causes changes to the GI tract.
Could cause GI distress if you are not careful.

Pre-Fuel

General rule for pre-exercise fuel:

3-4 hours for a large meal to digest

2-3 hours for a smaller meal

1-2 hours for a blended or liquid meal

Less than an hour for a small snack

If you are eating within an hour of your run
carbohydrate intake should be about .5 grams
per pound of body weight.

Eating within an hour before run

- Body weight: 120 (55kg) – 60 grams of carbohydrates – **Bagel**
- Body weight: 180 (82 kg) – 90 grams of carbohydrates – **Oatmeal, banana, juice**

It's not a great idea to consume a gel right before you run. Your body does not have enough time to counteract the insulin release which could cause hypoglycemia and could affect your performance by causing muscle fatigue.

Pre race/pre long run

- Bagel with a thin layer of peanut butter and some jam
- Toast with honey and a little butter, banana
- Oatmeal, honey, raisins, banana
- Pancakes with maple syrup, banana
- Waffles, a little butter, jam or honey, banana

Depending on your body you will need to experiment with low glycemic versus high glycemic index foods.

Long run

A practice run of 1 hour or more. You need to practice nutrition before the marathon.

Water along the way, get use to whatever sport drink is on the course, and if not then plan on carrying your own. **YOU MUST PRACTICE DURING THE TRAINING**

What will you fuel with if you are running more than 10 miles for practice.

Richmond Half Marathon fuel



Fuel During Your Run

For your long runs which are more than 1 ½ hours and for the marathon you should consume a highly digestible carbohydrate with little or no fat and protein.

Examples: Gu's, gels, Swedish fish, jelly beans, sport beans, pretzels, fig newtons, bananas

**Goal: 30-60 grams of carbohydrates per hour
TO PREVENT BONKING!**

Fluids/Hydration

Fluid intake should match losses.

Runner's would have an idea of how much fluid they are losing by weighing before and then after a long run.

For every pound of weight loss you should take in and extra 12-24 oz. of fluid over the course of the day.

Fluids/Hydration

Runners should take in between **4 and 12 oz. of fluid every 15 minutes when running.**

Some runners consume only sport drink when running a marathon. If you do you need to make sure you have the right amount of carbohydrates, sodium and potassium.

Post Exercise Needs

- Carbohydrates for recovery: every two hours for six hours following your run

Body weight		Carbohydrate	
Lbs	(kg)	grams	calories
120	(55)	60	240
140	(64)	70	280
160	(73)	80	320

(.5 grams of carbohydrate per pound of body weight (kg))

Post Exercise Needs

Protein needs are to have at least 20 grams of protein within **30 minutes** of your run.

Example: protein powder, chocolate milk, yogurt, turkey sandwich, protein bar

Tips for Taper

- It's important to start cutting back on calories when you start tapering. Again this depends on the person, but approximately 100 kcalories for every mile removed from training.

Day Before the Marathon

- You must consume plenty of fluids the day before.
- Carbohydrate intake may be up to 70% of your calories.
- Keep fiber at a minimum.
- Eat carbohydrates throughout the day.
- Eat something the night before that is agreeable with your stomach.

Energy Drinks

ENERGY DRINKS ARE NOT RECOMMENDED PRIOR TO RUNNING.

Energy drinks that are marketed as providing mental or physical stimulation, that contain stimulant drugs, chiefly caffeine (between 70 and 200 mg. per container) 5-hour Energy, Red Bull, Energy Fizz, Red Rain Energy Shot, Full Throttle

The amount of emergency room visits linked to energy drink consumption has doubled in 4 years!

Symptoms: rapid heart rate, breathing rate, increased blood pressure, panic attack symptoms, cardiac rhythm irregularities.

Tina's Tips For Healthier Eating

- Take $\frac{1}{2}$ body weight and drink this amount for water in ounces as a minimum.
- Take in 15-20 % of your calories from protein
- 60-70% of your calories from carbohydrates
- 2-4 hours before choose your solid food intake carefully.
- 1 hour before consume liquids and if you can handle a solid food make sure you have practiced before the marathon.
- Replace carbohydrates within 30 minutes/protein 20 grams

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