



## Fuel Rules when Training for a “-Thon”

Are you are training for a duathlon, sprint triathlon, or an Iron Man? Hats off to you! Training for any type of marathon takes dedication, structure, and significant training. Whether your goal is to beat your best time or simply finish the race, the way you fuel your body can have a significant impact on your training up to the race and your performance on the big day. Your nutrition training does not need to be complex, no supplements or fancy pills required, simply follow the Fuel Nutrition Rules below;

### **Food is Fuel**

Your healthy eating routine should be very simple. Food is Fuel. Everything you put into your mouth provides you with energy for activity.

### **Fill up on “Premium” Fuel**

Healthy meals and snacks provide optimal fuel. “Premium” fuel includes;

- *lean meats and meat alternatives*- chicken, turkey, beef, pork loin, fish, eggs, legumes
- *lower fat dairy*- low fat cheese, skim milk, 1-2% MF yogurt, 1% cottage cheese
- *brightly colored fruits and vegetables*- berries, apples, citrus fruits, spinach, peppers
- *high fibre carbohydrates*- whole grain bread, whole wheat pasta, brown rice, cous cous
- *healthy fats*- olive oil, nuts and seeds, avocado, fish oil (from salmon or supplements)

### **Balance Meals and Snacks**

A balanced meal provides you with a food choice from each of the 4 food groups in *portion sizes* recommended by Canada’s Food Guide. Each food group provides different nutrients we need. <http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/index-eng.php>

Snacks should consist of approximately 150-200 calories and provide your body with *both protein and carbohydrate* for maximum long term energy. A balanced snack is a protein choice and a carbohydrate choice.

**Protein** is found mainly in the meat and alternative group and the milk product group. Protein builds and repairs tissues and builds antibodies for immunity.

**Carbohydrates** are found mainly in grains and the vegetable and fruit group. Carbohydrates supply instant energy and also build up our energy stores in our muscles and liver for energy between eating.

Balanced snack examples;

- 12 almonds and a piece of fruit
- peanut butter sandwich on whole grain bread



### **Don't skimp on healthy fat**

Fat supplies energy and is required to absorb fat soluble vitamins such as vitamin E and D. Healthy fats keep skin, hair and tissues healthy. Choose olive, canola, and fish oils. Nuts and seeds contain healthy fats and are a great source of energy.

### **Keep energy levels high and blood sugar stable**

One of the worst things people can do is miss meals and snacks, only to overeat at the later meals. Your body has built in fuel tanks, namely your muscles and your liver. When you eat a balanced meal the energy you consume fills up your liver and muscles with glycogen (chains of carbohydrates). This is then released by your metabolism as your body needs it to keep blood sugar stable and to get you through your training sessions. If you overeat (sugary, fatty foods or big meals) your tanks fill up, and the rest of the energy must be stored as fat. If you don't eat for hours or skip meals/snacks, your tanks become empty and you feel fatigued, lethargic, sleepy or dizzy.

The trick is to eat 3 balanced meals and 2-3 balanced snacks during the day. From the time you wake up you should be *eating every 3 hours*. To avoid overeating, *choose small portions* at meals and snacks so you are continually filling up your tank and then using the energy. This allows for constant energy and stable blood sugar levels throughout the day.

### **Hydrate**

We need approximately 2 litres of fluid daily. When training for a race, add at least 500ml water each day. If training sessions last longer than 1 hour, drink 5 oz of sports drink for electrolytes every 30 minutes. For training sessions longer than 2 hours, you can experiment with the training energy gels that are available after 2 hours. It is good to experiment with these during your training so you are not surprised with tummy troubles during the actual race!

### **Nutrition pre/post Training Sessions**

Always make sure you have eaten something in the 2 hours before a training session. If you haven't eaten in 3 or more hours, choose a light protein/carb snack before you begin to fill up your tank. This allows you to train harder and longer.

If you feel hungry after your session and the next meal is still hours away, have a balanced snack within 20 minutes of finishing. A protein/carb combo has proven to be the best post exercise fuel for muscle repair.

Chocolate milk or fruit yogurt are great choices as they contain both protein and carbohydrates naturally.

### **Pre-race Nutrition**

#### **2 nights before the race**

- Eat balanced meals and snacks through out the day.
- Choose a supper high in complex carbohydrates (whole wheat varieties) and lean protein. Think whole wheat pasta with turkey meatballs, or fish and brown rice. (400-450 calories) You want to build up your energy stores in your liver and muscles.
- Stay away from sugary foods, gassy high fibre foods (beans/lentils) , and high fat foods. No soda pop.
- Limit caffeine and have at least one cup of water at each meal and snack.
- Make sure you have a balanced *high* protein snack 1 hour before bed.



### **1 night before the race**

- Again, balance meals and snacks throughout the day. Eat small portions every 3 hours.
- Choose a supper similar to the one the night before, high in complex carbs and lean protein. (450-500 calories) Prioritize carbohydrates at this meal (ie. add 1/2 cup grain over your usual meal portion)
- Instead of an evening snack, drink 2 -8oz. glasses of water to hydrate your body. You ate extra energy at supper, so the key here is to hydrate. Do this at least 90 minutes before bed so you do not wake up in the middle of the night to head to the bathroom, you need your rest!

### **Race morning**

- Drink 2 -8oz glasses of water right when you wake up to replace losses filtered to your kidneys overnight
- For races 1-3 hours long, choose a 200-250 calorie snack, high in carbohydrate and a little protein (low in fat, sugar and fibre). Eat 1-2 hours before race.

Examples;

- 1 cup smoothie made with 1/3 cup fruit yogurt, 1/2 cup skim/soy milk, and 1/3 cup berries
- If you regularly drink caffeine in the morning, have your regular fix to avoid withdrawal during the race. A skim milk latte with a whole grain waffle would work well
- 1 egg scrambled and 1 1/2 pieces whole grain toast
- Races longer than 3 hours require 300-350 calories 2-3 hours before the race. Add another serving of carbohydrate to the examples above. (Extra yogurt and berries in the smoothie, 2 waffles with the latte)

### **20 minutes before race time**

If race will last longer than 1 hour, consume 6 oz of sport drink high in maltodextrin.

### **During race**

Drink 5 oz sports drink every 30 minutes. You may hydrate with water in between. For races lasting longer than 1 hour, hydrating with water only will not replace your electrolytes. If the race is longer than 2 hours take a sports gel at this time. (Make sure you try these *during training* so you know how your gastrointestinal tract will react!)

### **Happy Training!**

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