

Carbohydrates: the fuel source of champions.

A lot of focus is placed on race day nutrition. We all know that fuelling adequately during an event can be the difference between dropping out before the finish and celebrating with your friends once you cross the line. But what about preparation leading up to the event? What should you consume when pounding the pavement in preparation for this grand finale?

The answer is simple - CARBOHYDRATES!

Marathon runners undertake intense training and require a significant amount of energy to fuel their muscles and brain. Carbohydrates are the body's preferred fuel source for exercise of longer duration or higher intensity. For this reason it is imperative for athletes to consume sufficient carbohydrate to fuel the body during training and recovery.

Carbohydrates are the body's preferred fuel for a number of reasons.

Carbohydrate for muscle contraction

Carbohydrates are the body's main source of glucose, the fuel used by the body for muscle contraction. Carbohydrates are stored in the muscles and liver as glycogen. When an athlete begins a marathon, the body calls on these stores for energy. When these stores run out, you will feel flat and your running becomes a lot less enjoyable. Consuming an energy gel every one-hour of running will ensure your carbohydrate stores are being topped up.

Carbohydrates for immune protection

Carbohydrates will not only ensure you have the energy to cross the finishing line but they will also ensure that you are healthy approaching the start. Intensive training suppresses the immune system. This may be the reason that you suffer from the common cold more often than your unfit and perceived unhealthy work colleague.

However, it is not all doom and gloom. It has been proven that carbohydrates are a nutritional immune protector. By ensuring that you consume sufficient carbohydrates during and after prolonged exercise you will reduce the negative impact that intense training may have on your immune system. Taking on energy gels during the later half of your longer runs reduces the impact and strain on the immune system and minimises the chance of respiratory tract infections.

This is very important, as consistency in your training is the key to having a strong and enjoyable marathon race. The more training days you can link together the better the muscles will be conditioned for such a long race.

Carbohydrates for recovery

A common misconception within the exercise world is that the only nutrient required post-training is protein. Whilst protein is important, carbohydrate is even more so. By consuming carbohydrate post training you are giving your body the opportunity to refuel and repair in preparation for the next training session. Muscle glycogen is the main fuel used by the body during moderate and high intensity exercise. An inability to adequately replace glycogen stores will compromise performance in subsequent training sessions as well as on race day.

Up until now the message has been easy: Consume sufficient carbohydrates for exercise of longer duration or higher intensity!

Now let's discuss how...

Energy gels, in particular Shotz Energy Gels have been designed by a team of food technologists with your best interests at heart. Shotz Energy Gels are a ground breaking, great tasting gel that fuels your mind and body. Thanks to some of the latest developments in nutritional science, Shotz Energy Gels dissolve quickly into the blood stream supplying your muscles with a super concentrated dose of carbohydrate. Besides for the practicality and digestibility of energy gels, Shotz energy gels have a number of other benefits.

Shotz Energy Gels are fructose free (as well as gluten and dairy free)

Shotz Energy Gels are fructose free. This is important for two reasons. The first is that fructose affects the time taken to digest the gel. Fructose, once ingested, needs to be metabolized through the liver and converted into glucose. This process takes time; time that is better spent getting you to the finish line. Shotz Energy Gels are made with maltodextrin, a chain of glucose molecules that can be readily utilized by every cell in the human body.

The second problem with fructose is the ever-increasing prevalence of fructose malabsorption. Fructose malabsorption can cause various gastrointestinal symptoms including bloating, wind, stomach pain, diarrhoea and or constipation. These are all symptoms that you do not wish to experience whilst running a marathon.

Shotz Energy Gels tastes great

Years of scientific research have enabled Shotz to provide a product that is a liquid gel consistency. This makes it easier to consume on the run (literally) and does not leave a tacky feeling in the mouth.

Shotz Energy Gels come in a variety of both caffeinated and non-caffeinated flavours including: berry banana, cola, wild berry, mango passion, lemon lime, wild bean (caffeinated) and cola vanilla (caffeinated). Due to the duration of the event, the range of flavours offers a great tasting selection.

Shotz Sports Nutrition is proud to be The Official Energy Gel of the Standard Chartered Marathon Singapore. Since 1995 we have been designing sports nutrition products to help athletes realise their goals. With proper conditioning combined with a sound nutrition strategy you can realise your goal, whether it be a personal best time or just wanting to finish. Using Shotz Energy Gels in your training and competition will help you will feel better, stronger and your running will be even more enjoyable.