

May 24: HYDRATION ON THE RUN

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Hydration is important for everyone –it helps maintain normal fluid balance in the body. Hydration becomes especially important for runners/athletes to keep in mind when competing in Bermuda. With the climate of Bermuda being hot and humid, especially during the time of the annual May 24 marathon, more water is bound to be lost from the body when exercising outdoors. Many athletes often lose more water than they should, leading to dehydration. If severe, dehydration can become a condition that requires medical treatment.

Whether you are training or competing on race day, use the information below as a guideline to ensure you are drinking enough water for optimal sports performance and to help prevent dehydration.

Time Guide	Fluid Needs	Example
4 hours before run	5-7 ml/kg body weight	80 kg person needs 400-560 ml or approximately 1.5-2.5 cups water
2 hours before run	3-5 ml/kg body weight	80 kg person needs 240-400 ml or approximately 1-1.5 cups water
During Run	0.5-1 cup/fluid/hour (0.4-0.8L/fluid/hour) for runs over 1 hour: aim for 0.5-1 cup (150-250 ml) /15 minutes	After 30 minutes of running a ½ cup of water would be beneficial 2-4 L/fluid over the course of the average marathon

Other things to consider:

Before your run

Hydration - Make sure that you are properly hydrated and fueled each time you start an exercise session! Use the table above for further guidance on running and fluid intake recommendations.

Energy - It's always good to practice eating your pre-race meal! This way you can learn how to consume a sufficient amount of carbohydrate, protein and fat that will provide you with sufficient energy while exercise without experiencing any stomach discomfort.

Balancing these nutrients are key, as fat and protein tend to take longer to digest and complex carbohydrates that are high in fiber may often not provide available energy to the athlete if consumed too close to activity. For best advice on what to eat before a run speak with a Registered Dietitian.

During your run

Hydration – It's always good to drink enough fluid that replaces what is lost from sweat. Sweat rates can range from 0.4 litres up to 1.8 litres per hour in a heavily sweating, big bodied person! Sweat rates also depend upon on the weather, the duration of your training session, and your training level. With this in mind, some runners find it difficult to consume enough fluid while running to replace the amount lost in sweat and prevent dehydration. Drinking smaller volumes of water throughout activity minimizes stomach discomfort. It recommended that athletes develop their own strategy for meeting fluid needs during activity.

Energy - Ideally, 15-20 g of carbohydrate per 250 ml fluid is sufficient, with the type of sugar being glucose, sucrose, or maltodextrin with some fructose. Too much fructose, such as that found in fruit juice, has been associated with symptoms of upset stomach, nausea, vomiting, and diarrhea in some athletes; thus use with caution and don't use for the first time pre-race day.

Electrolytes – minerals that are lost through sweat (sodium, potassium, etc.) may also need to be replaced. Guidelines: 125-175 mg of sodium, and 20- 50 mg of potassium per 250 ml is ideal. Gatorade which has 160mg sodium/ 45mg potassium / 21g carbs/ 80 cal per 12oz serving (350mls) is one example of an electrolyte replace beverage.

Lizzy de Angelis, Registered Dietitian at King Edward Hospital, participated in the 2016 Bermuda May 24 half-marathon and offers the following advice to runners: *“To stay well hydrated –whilst running May 24th it may not be possible or practical to drink 150mls-250mls every 15mins so if you are not carrying your own sports bottle try and take a drink at each water station and sip some , even if it is just a few mouthfuls at a time and carry the water bottle/ cup with you for a while after picking it up to make taking small sips easier. Use your training sessions to practice drinking during running and it is also a good idea to practice running when temperatures are similar to race day. Gatorade drinks were also offered last year and can be a useful addition to hydrate as well as water, especially if running over an hour and sweating a lot. Just like the pre-race day meal practice, you can try out Gatorade or a homemade electrolyte replacement beverage to assess how your body reacts vs trying for the first time on race day to make sure that you don't experience any stomach discomfort on the day. People running in a relay for less than an hour should keep focused on staying hydrated with water! Gatorade is less important, as the amount of electrolytes lost through sweat can easily be replaced from the foods consumed after this activity.”*

After your run

Hydration - Replacing fluid and electrolyte losses is not only necessary for rehydrating post-run, but essential for athletes who may be running again the next day. Runners can also practice weighing themselves before and after a training session, and monitoring the conditions of their run in order to recognize and accurately replace fluid loss, and ultimately maximize performance. Generally, aim to drink 1 – 1.5 L of fluid/kg of body weight lost during exercise.

Energy –it is important to fuel yourself after activity with good fuel! A balance of carbohydrate, protein and fat will help to replace your body’s energy stores, repair muscle tissues and keep you feeling energized! To learn more about healthy post workout and race day event fuel, speak with a registered dietitian, who can help further assist, you in choosing food intake to meet your individual health goals.

Source: ‘iRUN - Ottawa Race Weekend Hydration Strategies’

‘Fueling Fitness for Sports performance’ – Dr. Samantha Stear – British Olympic Association