

STANDARD CHARTERED KL MARATHON RUNNING CLINICS SUMMARY

CLINIC 3 – NUTRITION AND HYDRATION

Nutrition

a) Food groups

CARBOHYDRATES

When training, 60% of your total calories should come from carbohydrates, particularly complex carbohydrates as opposed to simple carbohydrates.

Complex carbohydrates include fruit, pulses and vegetables as well as potatoes, wholemeal and multi grain bread, wild and brown rice, oat bran cereal, muesli, yoghurt, skimmed milk, soy milk. Why are they good? They are processed much more slowly in your body to release energy over a longer period. Also, as they release more energy, they allow more vitamins and minerals to be absorbed by your body.

Simple carbohydrates include sugar, corn syrup, fruit juice, candy, cake, white bread, white pasta, fizzy drinks and most packaged cereals. Why are they not so good? It is because they release energy quickly – THE BUZZ. They give you a short burst of energy and then you crash. Also, as the energy is released quickly, few vitamins and minerals can be absorbed by your body.

CARBOHYDRATES MAKE GLYCOGEN (ENERGY) FOR YOU TO USE. HOWEVER, IF THE GLYCOGEN IS NOT USED, IT WILL CONVERT TO FAT (Hence the Atkins Diet and no carbohydrates)

PROTEIN AND FAT

15-20% of your food intake should come from protein such as chicken and fish. Protein is important especially after training, to repair minor tears in muscles that you get from running.



20-25% of your total calories should come from unsaturated fats such as avocados, nuts and vegetable oils such as canola, and olive oils. Meat products contain both saturated and unsaturated fats. The purpose of fats is to help store and use energy, padding of the organs, hormone production, as well as helping normal processes in the body.

b) Carbohydrate (Glycogen) Loading

(Only do so for marathon and half-marathon, if your predicted time is over 2 hours)

With the marathon/half-marathon on Sunday, you should start Carbohydrate Loading on the Thursday before the race (300-500g of carbohydrates depending on your size and gender). The idea is that when you run, your body gets its energy from burning a mixture of carbohydrates and fat (80%-20%). As 80% of our energy comes from carbohydrates, we want to store as much carbohydrates as we can three days before the marathon/half-marathon. THE WALL is where the carbohydrates run out and our body starts utilizing more energy from our fat sources, which is a more inefficient form of energy.

Large portions the night before a race can, however, be detrimental to race-day performance if the digestive system has not had the time to adequately process the food (If there is a pre-race night meal, don't eat too much).

Hydration

You know you're well-hydrated if you void large volumes of pale urine at least six times a day. In the days leading up to your race, drink plenty of water and non-alcoholic fluids. Alcohol dehydrates you and it can prevent you from getting a good night's sleep. During training, weigh yourself before and after each run and get your body weight back to the weight it was before the run by drinking water or isotonic drinks within the first few hours after the run (on average, you lose about 1kg of weight per 10km).



Pre-race Advice on Nutrition and Hydration

Choose your pre-race food and hydration wisely. Eat a meal at least two hours prior to the start of the race. Carbohydrate ingestion less than 2 hours prior to aerobic exercise triggers elevated levels of insulin in the blood, which may dramatically decrease glucose levels. This can limit aerobic performance, especially in events lasting longer than 60 minutes. This is known as transient or reactive hypoglycemia, and can be a limiting factor in performance.

For that pre-race meal, choose something high in carbohydrates and lower in fat, fiber and protein. Stay away from rich, fatty or high-fiber foods, as they may cause gastrointestinal distress. I always have a plain bagel and a non-carbonated energy drink. An hour before you start your run, try to drink 500ml to 750ml of water or other non-caffeinated fluid. And then, stop drinking at that point so that you can void extra fluids and prevent having to stop for the toilet during your run. To make sure you're hydrated before you start running, you can drink another 120ml to 240ml right before you start.

Advice for Nutrition and Hydration during the Race

- Drink before you get thirsty.
- Water for the first hour and then alternate between water and isotonic drinks at each drink station thereafter.
- Take your first energy gel after the first hour (practice taking them in your training and watch out for caffeine as it can make you vomit).
- Aim to take a gel every 45 minutes to 1 hour (Too many will make your body react to too much sugar).
- If you are a slow runner, walk through the drink stations. If you are faster than 2 hours in halfmarathon, then practice drinking from the drink stations. However, in this heat, you'll see me stopping at every drink station.
- Isotonic Drinks Most of these drinks are high in simple carbohydrates (carbohydrates offer a fast and efficient source of energy). In addition to carbohydrates, these drinks have electrolytes, as well as minerals such as sodium, potassium, chloride and calcium, which tend to reduce as you sweat through exercise.



Nutrition and Hydration Tips for All

- To restore energy following a workout, eat carbohydrate-rich foods such as fruit, veggies, energy bars or pasta within an hour after you're done. If you wait a few hours or attempt to "diet" by delaying eating, you'll feel your energy sag after the workout or even the next day. (This does not have to be a meal. Your meal WHICH SHOULD CONTAIN PROTEIN can come later in the evening)
- Drinking black tea or green tea can reduce muscle soreness and damage. The antioxidants in black tea and green tea, are beneficial in reducing inflammation.
- It takes 2 hours for water to get into muscles, so pre-race hydration is more important than during the race hydration as all this does is quench the thirst.

Nutrition and Hydration Tips for the Girls

Blood loss from your menstrual period puts you at a high risk for iron-deficiency anemia. Therefore, I recommend that you:

- Don't drink coffee or tea with meals as it prevents iron absorption.
- Try to eat lean red meat or dark poultry 2 or 3 times a week.
- Have vitamin C foods/drinks with meals to increase iron absorption.