



Nutrition for Runner's

Basic Nutrition For runner's:

Carbohydrates: whole grains, vegetables and fruit, milk products

Protein: meat, poultry, fish, meat alternatives, milk products

Vitamins and minerals: fruit and vegetables, whole grains, meats & alternatives, milk products or alternatives

Fluid: water

Carbohydrates:

- Provide the calories that fuel your muscles and brain
- Best source of food energy for physical activity
- Should make up 55-60% of daily intake

Protein:

- Role: build, maintain and repair tissues, antibodies to fight infection, minor role as a energy source
- Should make up 15-20% of daily intake
 - 0.8-1.0 g/kg for recreational runner
 - 1.2g-1.4g/kg endurance athlete
- **Sources:**
 - 3.5 oz beef, chicken, fish: 22-25 grams protein
 - 1 cup milk, yogurt: 8 g protein
 - ½ cup kidney beans: 9.3 grams protein
 - tuna canned (1/2 can): 30 grams pro
 - one egg: 6 grams
 - regular hamburger patty: 21 grams
 - 1 cup cottage cheese: 33 grams

Nutrition tips for training:

Pre-event eating:

- Eat foods high in carbohydrate
- Keep fat and protein low
- Avoid high fiber foods
- Eat 3-4 hours before your event: include carbohydrate and protein eg. Toast+ peanut butter+ fruit, cereal+ 1 cup milk + fruit, yogurt+ English muffin and fruit

- Have a snack 1-2 hours before event
- Examples of pre-event meals/snacks (1 hour before): eg. Low-fat muffin, 1 pc toast + jam, 1 small piece of fruit or 1 cup real fruit juice

During event:

Stay Hydrated!

- **Fluid:**
- Our bodies contain 60% water
- Water is used:
 - As a lubricant for joints and tissues
 - for transport of nutrients
 - regulate blood volume
 - to regulate our body temperature
- How do you know if you are dehydrated?
 - Feel thirsty during run
 - Headache
 - Dry mouth
 - Cramping,
 - Faster breathing,

*Urination: urine should be clear to pale yellow and you should urinate within ½ hour of race/ training

Tips to keep you hydrated:

- 1) Drink lots of water the day before your run
 - 2) Always monitor your urine output and color- make sure that you urine is clear to pale yellow and you are urinating often
 - 3) Drink 2 cups of water 2 hours before your race/run and increase this amount if you are dehydrated or hot
 - 4) 150ml-300ml every 20 minutes during exercise
 - 5) For exercise less than 60 minutes in length, water best source of fluid
- **Electrolytes:**
 - Necessary for contain compartmental water and to maintain proper fluid balance within the body: eg. Sodium, potassium, calcium and magnesium
 - **Carbohydrate:** during event: 40-60g per hour of long race or run (over 90 minutes)
 - **Sports drinks:**
 - For endurance events 60-90 minutes or greater
 - Source of fluid, electrolytes and glucose (sugar)
 - 2.5-10% glucose (6-7% range best tolerated and absorbed)

- **Sports bars:**
 - Can be used for pre-race snack or during long distance race if desired- may be harder to digest than gel or sports drink
 - Check ingredients, type of carbohydrate and compare cost for cheap alternative
- **Sports gels:**
 - Used as quick energy source before or during a race that lasts longer than 90 minutes
 - Most are safe and provide contain simple sugars that provide “quick energy”
 - Make sure to drink water with the gel
 - Use the same brand during your race as you used in training

Post Event eating:

***It is very important to have a meal within 2 hour of event that contains both carbohydrate and protein. Why:**

Carbohydrates:

- You need to replace the muscle glycogen (carb stores) that you have just depleted- important for your next workout!
- Eat a source of carbohydrate right after your race or run when your muscles are the most receptive to refueling

Protein:

- Rebuilding and repair of tissues such as muscle that is damaged during run
- Within 2 hours of finishing race/run

Antioxidants:

- Antioxidants: Vitamin E, Vitamin C, Beta-Carotene, Selenium, zinc, iron, manganese, copper, co-enzyme Q10
- Where do they come from? Vegetables, fruits, nuts, seeds, herbs, some meats and fish
- Detoxifies free radicals which cause cell damage
- Repair oxidative damage
- Exercise produces more free-radicals, therefore, need for antioxidants increases