



Lindsay Self, ND  
Naturopathic Doctor

www.lindsayselfnd.com  
@DrLindsayND  
facebook.com/LindsaySelfND  
lindsayselfnd@gmail.com

## Nutrition Basics For Runners

Endurance sports have different nutritional requirements than, say, a body builder would. While running certainly requires building muscle, the focus is on maintaining use of that muscle over longer periods of time. Endurance athletes use different muscle fibre types than power sport athletes and so nutritional support must be tailored for optimal performance.

For a tailored nutrition plan and your requirements, come in for a chat!

### The basic building blocks for performance

Tracking your diet on an app such as myfitnesspal can let you know how your daily intake compares to your requirements.

#### Protein

- **1.2-1.4g/kg** of body mass depending on how hard you're training.
- **Animal sources** have complete amino acid profiles, though red meats can be pro-inflammatory so choose these only a few times per week (grass-fed beef and fish are exceptions).
- **Vegetarian sources** have incomplete amino acid profiles, meaning they must be combined together to give all parts of a protein. Combine legumes with grains (beans with rice) and multi-source protein powders if needed. Soy and quinoa are considered complete.
- Keep your protein intake steady each day. Don't increase just because you did a gruelling hill day.
- The body can only absorb approximately 25-30g in one sitting so space it out throughout the day.

#### Fat

- **30% of caloric intake.** There are 9 Calories per gram of fat.
- Choose healthy, unsaturated fats to help decrease inflammation (coconut oil is a saturated exception) such as avocados, olive oil, coconut oil, nuts, and seeds
- **Omega-3:** best source is fish, though also some seeds and nuts. These help decrease inflammation and promote cardiovascular health.
- **Try this:** 1/2 avocado, cocoa powder, honey, milk. Mash together for a healthy chocolate pudding!

#### Carbohydrate

- Remainder of the diet should be fibre-rich, unrefined grains, fruits, and vegetables.
- **Complex carbohydrates** such as whole grains and root vegetables provide quality slow-release energy and are high in fibre. Great for replenishing glycogen.
- **Simple carbohydrates** such as sugar, pasta, breads, cookies, muffins, etc should be kept minimized except on training days. These provide quick energy.
- Replenishment of glycogen stores is done by consuming high-quality carbohydrate 24-48 hours post workout.

#### Water

- Not a macronutrient, but essential for hydration status and glycogen replenishment
- Dehydrated muscles don't work as efficiently (neither does your brain)
  - Additional problems include fatigue, headaches, delayed muscle recovery, heart palpitations, etc.
- A note on electrolyte drinks: think of them like pop. They're very high in sugar, which is good for fuel over long distances such as 10k or higher, but likely not needed for distances less than that. You'll be able to replenish via food.
- Coffee does not affect hydration status, but alcohol will dehydrate.

## What you need and when

During athletic activity, blood is shunted away from the digestive organs and to the muscles. This leaves little activity in the digestive organs to break down food. As a result, food can sit in the stomach and not provide any energy to fuel workouts. Here's some easy tips:

- **Cold** things empty from the stomach faster. The closer you are to a workout, choose something cold.
- **Simple carbohydrate** absorbs quicker than complex carbs, proteins, or fats. For fast energy for fuel during races, stick with simple carbohydrate.
- **Immediate fuel** is different from recovery nutrition. Recovery requires all macronutrients including high-quality complex carbohydrates.
- **Recovery:** replenish what was lost within 45 minutes of finishing your workout. A shake or meal with protein, complex carbohydrate, and fat is ideal.

**Pre-run:** Up to an hour before, consume a mix of protein and carbohydrate, with a little bit of fat. Allow your body to break these down and absorb this. 20 minutes before: quick carbohydrate.

**Recovery:** Important to consume protein, carbohydrate, and a little fat within 45 minutes of your finish. This will help your body recover and build faster.

**Off days:** Total caloric intake doesn't need to be as high as on training days, however keep in mind that glycogen takes up to 48 hours to replenish so continuing carbohydrate intake is key.

- Overall good nutrition will not only help performance and recovery, but weight management, immune function, and prevention of chronic disease.
- DRINK WATER!

**Functional Foods:** Foods that have medicinal properties can help with training.

- **Inflammation:** Turmeric (have with an oil), ginger, pineapple, and omega-3 fats. Cut out sugar and fried foods to prevent an unhealthy or exaggerated inflammatory response.
- **Stomach problems:** chamomile, ginger (including the ginger candies), peppermint. Cut out sugar and pre-packaged foods, and have yourself tested for food sensitivities.
- **Lemon water:** ½ lemon squeezed into 1L of water provides electrolytes and vitamin C.
- **Coconut water:** All-natural sports drink courtesy of Mother Nature!
- **Brightly-coloured fruits and veggies:** provide Vitamin C needed for collagen repair and keeps immune system up!

## After the finish line

- Congratulations are in order!
- Allow yourself a few days of active recovery: go for long walks or easy runs

**Super Important Note:** \*If you sense an injury, ensure you have this looked at by a professional. They should help you to recover as well as give you stretching/strengthening exercise to correct the problem. Running is a repetitive sport which means it often leads to imbalances can cause or perpetuate injuries.

If you're struggling with energy during your runs, or are experiencing lightheadedness, fainting, or digestive issues such as IBS or colitis, have your nutrition evaluated.