



#### **FEED RIGHT TO FUEL RIGHT**

Whether you are a recreational athlete, a physically active person, or a competitive athlete, it is important to recognize the impact nutrition has on health and performance. Proper daily nutrition will improve exercise performance, prevent injuries due to fatigue, provide energy during endurance training, facilitate maintenance of an optimal body weight, and enhance overall health.

What does proper nutrition entail? According to the **Canadian Food Guide**, it is eating a variety of healthy foods each day which includes plenty of vegetables and fruits, protein foods, whole grains, and choosing water as the drink of choice. So what should this look like in terms of macronutrient breakdown and meal composition? Let us tell you!

#### **CARBOHYDRATE**

**HOW MUCH?** It has been well documented that endurance athletes need a diet rich in carbohydrates to increase both endurance and intermittent high-intensity performance. Indeed, carbs are the most efficiently broken down and metabolized form of energy for the body. For those engaged in a general fitness program, macronutrient needs can typically consists of 45-55% carbohydrates (3-5g/kg/day), 10-15% proteins (0.81g/kg/day), and 25-35% fat (0.5-1.5g/kg/day). However, for ultra athletes involved in moderate and high volume training, a diet consisting of 5-8g/kg/day of carbs is necessary.

**WHY?** The majority of dietary carbohydrates should come from complex carbohydrates with a low to moderate glycemic index, which includes foods such as whole grains, fruits, vegetables, and legumes. It is important to ensure carbohydrate intake one to two hours before and after training. Eating carbohydrates before exercise keeps you from feeling hungry and sustains optimal levels of energy for the exercising muscles while consuming a carbohydrate snack after training will allow the body to start replenishing glycogen stores in the body which is critical for prolonged periods of exercise.



#### **PROTEIN**

**HOW MUCH?** Adequate protein intake is especially important for athletes as it helps repair and strengthen muscle tissue. An insufficient amount of protein leads to increased protein catabolism and can slow post-workout recovery, overtime leading to muscle wasting, training intolerance, and overtraining. So how much protein do you need to consume? The general rule of thumb is 1.2-1.4 g/kg/day for endurance athletes and 1 .2-1.7 g/kg/day for strength and power athletes. Even more protein may be needed for higher intensity training at longer periods.

WHY? Your diet should consist of high quality proteins. High quality protein sources are ones that have a high biological value, include all the essential amino acids, and are digestible. It is interesting to note that one of the best dietary sources of low fat, high quality protein is **cricket powder!** A protein source should be included in every meal; it is especially important after a workout for greater training adaptations and protein synthesis. The use of nutrient dense protein bars, like **Näak bars**, provide a convenient way for athletes to supplement their diet.



### **LIPIDS**



**HOW MUCH?** The dietary recommendations of fat intake for athletes are similar to or only slightly greater than those recommended for non-athletes. Approximately 30% of your daily caloric intake should be fats. However, for athletes trying to decrease body fat, 0.51g/kg/day is recommended.

WHY? Intake of healthy fats is very important for good physiological functioning of every organism. In particular, consumption of essential fatty acids, especially polyunsaturated fatty acids, are of great importance among athletes. The best sources of essential fatty acids are flaxseeds, walnuts, olive oil, and pumpkin seeds. A good source of fat should be provided at every meal to help the body absorb nutrients, support cell growth, and provide long lasting energy.



### **FLUIDS**

**HOW MUCH?** Athletes generally undergo higher water needs, but given the extreme variability in water needs, there is not an established level of optimal water intake for athletes. Usually, >3.7 liters/day of water for males and >2.7 liters/day of water for females is considered adequate intake.

WHY? Although often overlooked, fluid intake is important to maintain <a href="https://hydration.nd/electrolyte-balance">hydration and electrolyte-balance</a>. Water is the drink of choice over any juices as it is essential for cell homeostasis. Although whole fruits are highly recommended for their fiber and antioxidant content, fruit juices should be overlooked due to the high sugar and low fiber content. The use of sports drinks, which contain electrolytes, should be used on an individual basis depending on the environment and conditioning level of the person

### CONCLUSION

Keep in mind that the first component to optimize training and performance through nutrition is to ensure that enough calories are being consumed to offset energy expenditure. Caloric needs are specific to each individual and are dependent on age, sex, height, weight, and physical activity level. You can roughly calculate your total dailyenergy expenditure using the **Harris-Benedict Equation** or a **TDEE calculator**.





	BREAKFAST	LUNCH	POST-WORKOUT SNACK	DINNER	DESSERT
MOM	Peanut butter & jelly overnight oats	<u>Tofu scramble wrap</u> (make extra portions)	<u>Näak energy</u> <u>bar</u>	Cricket powder Thai curry soup (make extra portions)	<u>Cricket powder</u> <u>brownie</u>
TUE	<u>Tofu scramble</u> <u>wrap</u>	<u>Cricket powder Thai</u> <u>curry soup</u>	<u>Peanut butter</u> <u>banana smoothie</u>	<u>Creamy mushroom</u> <u>pasta</u> (make extra portions)	Vegan chocolate pudding
WED	<u>Cricket powder</u> <u>pancakes</u>	<u>Creamy</u> mushroom pasta	<u>Näak energy</u> bar Choco Banana	Coconut red lentil daal & rice (make extra portions)	<u>Cricket powder</u> <u>brownie</u>
THO	<u>Cocoa granola</u> and berry parfait	Coconut red lentil daal & rice	<u>Green protein</u> <u>shake</u>	<u>Tomato lentil pasta</u> (make extra portions)	<u>Cricket powder</u> <u>oatmeal-raisin</u> <u>cookie</u>
FR	<u>Cricket powder</u> <u>blueberry smoothie</u> <u>bowl</u>	<u>Tomato lentil</u> <u>pasta</u>	<u>Peanut butter</u> <u>banana smoothie</u>	<u>Vegan chili</u> (make extra portions)	<u>Cricket powder</u> <u>brownie</u>
SAT	Peanut butter & jelly overnight oats	<u>Vegan chili</u>	<u>Näak energy</u> <u>bar Mocha Hazelnut</u>	<u>Cricket powder bean</u> <u>burger</u> (make extra portions)	<u>Vegan chocolate</u> <u>pudding</u>
SUN	<u>Tofu scramble</u> <u>wrap</u>	<u>Cricket powder bean</u> <u>burger</u>	<u>Green warrior</u> <u>protein</u> <u>smoothie</u>	<u>Tomato lentil</u> <u>pasta</u>	Cricket powder oatmeal-raisin cookie



	BREAKFAST	LUNCH	POST-WORKOUT SNACK	DINNER	DESSERT
MOM	Oatmeal pancakes	<u>Cricket powder</u> <u>chickpea &amp; black</u> <u>bean salad</u>	<u>Näak energy</u> <u>bar</u>	Kale & black-eyed pea stew	Baked fruit crumble
TUE	Coconut yogurt with cricket powder granola	<u>Kale &amp; black-eyed</u> <u>pea stew</u>	Peanut butter banana chickpea shake	Spicy sesame noodles	<u>Chocolate hazelnut</u> <u>cricket protein cookie</u>
WED	Oatmeal pancakes	<u>Cricket powder</u> <u>chickpea &amp; black</u> <u>bean salad</u>	<u>Näak energy</u> <u>bar Choco Banana</u>	<u>Vegetable lentil soup</u>	<u>Fudgy chocolate cake</u> <u>bite</u>
THU	<u>Coconut chia berry</u> <u>parfait</u>	<u>Spicy sesame noodles</u>	<u>Cricket powder</u> g <u>ranola</u>	<u>Cricket powder</u> <u>chipotle chili</u>	Baked fruit crumble
핊	Tofu scramble with toast	<u>Cricket powder</u> chipotle chili	<u>Peanut butter</u> <u>banana chickpea</u> <u>shake</u>	<u>Vegetable lentil soup</u>	Fudgy chocolate cake bite
SAT	<u>Coconut yogurt with</u> <u>cricket powder</u> <u>granola</u>	<u>Tofu scramble</u> <u>wrap</u>	<u>Näak energy</u> <u>bar Mocha Hazelnut</u>	<u>Creamy rosé pasta</u>	Baked fruit crumble
SUN	<u>Coconut chia berry</u> <u>parfait</u>	<u>Vegetable lentil soup</u>	<u>Näak energy</u> <u>bar Choco Banana</u>	<u>Creamy rosé pasta</u>	Chocolate hazelnut cricket protein cookie



	BREAKFAST	LUNCH	POST-WORKOUT SNACK	DINNER	DESSERT
MOM	Almond chocolate oatmeal	<u>Tofu sandwich</u>	<u>Mixed berry</u> <u>smoothie</u>	<u>Grilled vegetable</u> <u>pasta</u> (make extra portions)	<u>Brownie</u>
TUE	Coconut yogurt topped with fruit & granola (make extra portions)	<u>Grilled vegetable</u> <u>pasta</u>	<u>Näak cookie dough</u> <u>protein bar</u>	<u>High protein lettuce</u> <u>wrap</u> (make extra portions)	<u>Brownie</u>
WED	<u>Almond chocolate</u> <u>oatmeal</u>	<u>High protein lettuce</u> <u>wrap</u>	Blueberry smoothie	<u>Black bean burger</u> (make extra portions)	<u>Brownie</u>
THO	Pancakes topped with coconut yogurt and fruit	<u>Black bean burger</u>	<u>Näak blueberry</u> <u>protein bar</u>	<u>Chipotle chili</u> (make extra portions)	<u>Brownie</u>
FBI	Tofu scramble with toast (make extra portions)	<u>Chipotle chili</u>	<u>Mixed berry</u> smoothie	<u>High protein lettuce</u> <u>wrap</u>	Chocolate hazelnut cookie
SAT	Coconut yogurt topped with fruit & granola	<u>Tofu scramble</u> <u>wrap</u>	<u>Näak apple</u> <u>cinnamon protein</u> <u>bar</u>	<u>Black bean burger</u>	<u>Chocolate hazelnut</u> <u>cookie</u>
SUN	Pancakes topped with coconut yogurt and fruit	Tofu scramble with toast	Blueberry smoothie	<u>Chipotle chili</u>	Chocolate hazelnut cookie



	BREAKFAST	LUNCH	POST-WORKOUT SNACK	DINNER	DESSERT
MOM	Peanut butter & jelly oatmeal	Chickpea & black bean salad (make extra portions)	<u>Lychee raspberry</u> <u>smoothie</u>	<u>Loaded sweet potato</u> (make extra portions)	White chocolate hummus dessert dip with fruit
TUE	Mini quiche with toast (make extra portions)	<u>Peanut tofu buddha</u> <u>bowl</u> (make extra portions)	<u>Näak cookie dough</u> <u>protein bar</u>	<u>Loaded sweet potato</u>	Banana bread
WED	Banana bread with coconut yogurt	<u>Chickpea &amp; black</u> <u>bean salad</u>	<u>Lychee raspberry</u> <u>smoothie</u>	<u>Sushi bowl</u> (make extra portions)	White chocolate hummus dessert dip with fruit
EE	Mini quiche with toast	<u>Sushi bowl</u>	<u>Näak blueberry</u> <u>protein bar</u>	<u>Thai curry soup</u> (make extra portions)	Banana bread
FBI	Peanut butter & jelly oatmeal	Peanut tofu buddha bowl	<u>Mixed berry</u> <u>smoothie</u>	<u>Mini pizzas</u> (make extra portions)	White chocolate hummus dessert dip with fruit
SAT	Pancakes topped with fruit	Mini quiche with toast	<u>Näak apple</u> cinnamon protein <u>bar</u>	<u>Thai curry soup</u>	<u>Banana bread</u>
SUN	Oatmeal topped with granola & fruit	<u>Mashed chickpea &amp;</u> <u>dill sandwich</u>	<u>Mixed berry</u> <u>smoothie</u>	<u>Mini pizzas</u>	White chocolate hummus dessert dip with fruit