



## Honey's Nutrition and Health Facts

*Honey has been fueling athletes for centuries. According to ancient folklore, Greek and Roman athletes used honey to increase strength and stamina. Today honey can be found on training tables before the big game and in carbohydrate replacements for use during exercise.*

*The National Honey Board continues to pursue research that explores the potential roles of honey in health and fitness, as well as lending support to many diverse health and athletic organizations including those involving youths.*

### HONEY'S NUTRITIONAL PROFILE

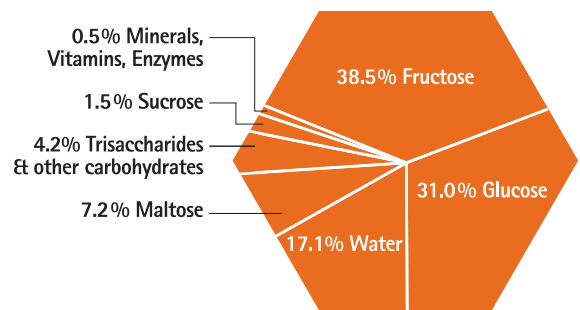
Honey is composed primarily of carbohydrates and water, and also contains small amounts of a wide array of vitamins and minerals, including niacin, riboflavin, pantothenic acid, calcium, copper, iron, magnesium, manganese, phosphorus, potassium and zinc.

Of recent interest is the antioxidant content of honey. Honey contains a variety of flavonoids and phenolic acids which act as antioxidants, scavenging and eliminating free radicals. Generally, darker honeys have higher antioxidant content than lighter honeys.

### FUELING EXERCISE WITH HONEY

It is well-known that carbohydrate ingestion prior to, during, and after exercise enhances athletic performance and speeds recovery. Honey is a natural source of readily available carbohydrates providing 17 grams of carbohydrates per tablespoon.

Honey's unique carbohydrate composition (approximately equal amounts of fructose and glucose) may render it the perfect pre-exercise food. Recent research published in the Journal of Applied Physiology suggests that carbohydrates that are lower on the glycemic index (GI) may reduce the incidence of rebound hypoglycemia and provide sustained carbohydrate availability during exercise. In addition, preliminary data from the University of Memphis Exercise and Sports Nutrition Laboratory suggest that honey is as effective as glucose for carbohydrate replacement during endurance exercise.



Average Composition of Honey