






GATORADE SPORTS SCIENCE INSTITUTE

NUMBERS VERSUS REALITY

Some of us are numbers people – we want to calculate exactly what our athletes should consume. Others of us want to know the science behind a recommendation, but don't want to crunch the numbers. This document gives the science-based sports nutrition recommendations for team sport athletes, the translation for how those numbers can be applied and the Gatorade products that can be used to help meet the recommendation.



THE TIMING	THE NUMBERS	THE PRACTICAL APPLICATION	GATORADE PRODUCTS
1-4 hours pre-exercise	1-4 g/kg carbohydrate 5-7 mL/kg fluid	Many team sport athletes are limited by set pre-game meal times or practice scheduling in relation to classes. Make sure this meal/snack is mostly carbohydrate and low in fiber, protein & fat (especially closer to the start of exercise). Advise athletes to drink fluids throughout the day so their urine color is light yellow before they start.	Gatorade Thirst Quencher or G2. Focus on carbohydrate-rich foods. 
Within 1 hour pre-exercise	Begin meeting “during” needs, ~25-30 g	This is a good practice if athletes are hungry or can't/won't eat carbohydrate during exercise. Look for a small amount of easily digested carbohydrate to help avoid stomach upset.	1 package Energy Chews or Sports Fuel Drink, or ~14-17 oz. Gatorade Thirst Quencher 
During exercise	30-60 g/h carbohydrate (for exercise > 1 h) Fluid with sodium based on sweat rate	The easiest way to address this need is to provide sports drinks and encourage the athlete to drink during breaks. Solid carbohydrates can be used if the athlete prefers to drink water. During games, halftime is a good opportunity to use solid forms.	Gatorade Thirst Quencher, G2 or Energy Chews/Sports Fuel Drink plus water 
Shortly following exercise	1.0-1.2 g/kg carbohydrate 0.25-0.30 g/kg protein 20-24 oz. fluid with sodium per pound body weight lost	Help athletes plan ahead or provide recovery nutrition in the locker room. Products like protein shakes and bars (not low-carbohydrate versions!), consumed with water, are a convenient way to get enough nutrients to start the recovery process in the locker room. Since some athletes aren't hungry right after exercise, shakes are often a “stomach friendly” way to meet this recommendation.	Protein Recover Shake Recover Whey Protein Bar 