

Nutrient Intake Recommendations for Endurance Athletes

The physiological demands of ultra endurance events are greater than those of regular sporting activities, therefore the nutrition and hydration needs of endurance athletes are subsequently greater than those of regular athletes (and much greater than those of the general population). The optimal nutrition recommendations (daily consumption, and pre-, during-, and post-exercise) for ultra endurance athletes are summarised in this chart.

It's important to note that, due to the diversity of participant demographics and event characteristics (distance, course terrain, environmental conditions, external support etc), fuelling and hydration strategies should be developed on an individual basis and practiced regularly in training.

Furthermore, guidelines for ultra endurance nutrition are continuously changing based on growing interest and research in the area. The recommendations outlined in this chart are based on current research in ultra endurance events and should be viewed as a starting guide only.

Nutrient	Daily Requirement	Pre-Exercise	During Exercise	Post-Exercise
Carbohydrate	6-10g/kg (male) 5-7g/kg (female) 8-12g/kg (heavy training)	1-4g/kg	30-60g/hr (1-2 hours) 60-90g/hr (>2 hours)	8-10g/kg + protein (within 60 min post-exercise)
Fat	20-30% total energy intake	Limit	Add as tolerated	N/A
Protein	1.2-1.4g/kg	0.3g/kg	0.25g/kg/hr	0.3g/kg (within 60 min post-exercise)
Water	Individual athlete needs (follow thirst mechanism)			Replace fluid losses
Sodium	300-600mg/h in hot/humid conditions			1,380mg/L aids water repletion in the body
Caffeine	3-6mg/kg taken 60-90 min prior to exercise		3-6mg/kg every 1-2 hours	N/A