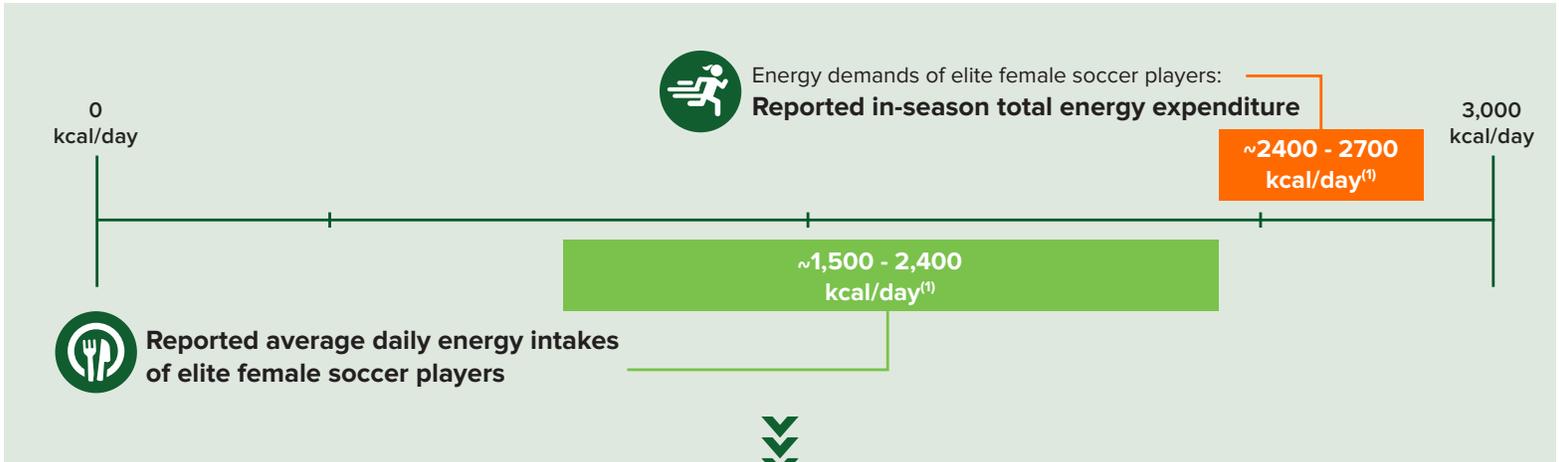


SPORTS NUTRITION RECOMMENDATIONS FOR ELITE FEMALE SOCCER PLAYERS

FOR MORE INFORMATION, SEE THE PAPER ON WHICH THIS INFOGRAPHIC IS BASED, FOUND IN THE FOLLOWING REFERENCE: [Link to Full text](#)



Chronic energy deficiency can lead to low **energy availability (EA)** which can negatively impact athlete health and performance. ^[5]



Effect on Athlete Health



Effect on Athlete Performance

Growth & Development	Psychological	Haematological	Cardiovascular	Gastrointestinal	Lower Endurance	Decreased Concentration	Depression	Irritability	Decreased Muscle Strength
Immunological	Menstrual Function	Bone Health	Endocrine	Metabolic	Lower Glycogen Stores	Increased Injury Risk	Lower Training Response	Impaired Judgement	Decreased Co-ordination



Between 23% and 89% of elite female soccer players classify as having low EA ^[1,2,3]



Sports Nutrition Recommendations

Carbohydrates

DAILY CARBOHYDRATES



6 – 8 g/kg/d

Range of daily carbohydrate intake with congested fixture periods (i.e., matches every 3 – 4 days)



3 – 8 g/kg/d

Range of daily carbohydrate intake during a single match week or pre-season training – depending on the intensity of training/match



< 4 g/kg/d

Off-season training

PRE TRAINING/ MATCHES



3 – 4 h before consume a carbohydrate-rich meal 1 – 3 g/kg

Choose a high glycaemic index (GI) carbohydrates, to help promote glycogen synthesis. And avoid low fibre foods ^(7,8)

DURING TRAINING/ MATCHES



~30 – 60 g/h

may aid soccer performance.

Warm-up, breaks for half-time, extra time, and stoppages in play (e.g., injuries) are all opportunities to “top up” carbohydrate stores which may be needed in the later stages of a match

POST TRAINING/ MATCHES



Replace carbohydrates immediately after exercise with ~1 g/kg/h

to help replenish muscle glycogen stores

Protein

DAILY PROTEIN



1.6 g/kg/d

with ideal distribution of at least ~0.4 g/kg per meal

Consume protein intake every 3 – 4 h to maximize total daily muscle protein synthesis, which is important for adaptation and recovery

POST TRAINING/ MATCHES



0.25-0.3 g/kg or ~20g

of protein as soon as possible post-match to support recovery

NOTE: post-exercise protein intake will not ameliorate muscle soreness or improve recovery of muscle function in the short-term (i.e., between matches and training), but is important for longterm adaptation

Fat

CONSISTENT DIETARY INTAKE OF FAT EQUATING TO APPROXIMATELY 20-30% OF TOTAL CALORIC INTAKE IS RECOMMENDED FOR REPLENISHING:



intramuscular triacylglycerol stores



delivering essential fatty acids



absorbing fat-soluble vitamins



providing an energy source for athletes

Unless recommended for medical reasons, there is a lack of evidence to suggest female players should adhere to a low-fat (< 15 – 20%) or high-fat diet (> 35%).

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