

# Nutrition Tip Sheet for ELITE ATHLETES, WAR FIGHTERS, AND FIRST RESPONDERS

It is important to fuel and hydrate sufficiently pre, during, and post activity for optimal physical and mental performance, recovery, and injury prevention



## FIRST RESPONDERS

Carbohydrate: 3-5g/kg/day  
Protein: 1.2-2.4g/kg  
Fat: 20-35% of total daily calorie intake



## SERVICE MEMBERS

Carbohydrate: 4-8g/kg/day  
Protein: 1.2-2.4g/kg  
Fat: 20-35% of total daily calorie intake



## ELITE ATHLETES

Carbohydrate: 3-12g/kg/day  
Protein: 1.2-2.4g/kg  
Fat: 20-35% of total daily calorie intake

## PRE-TRAINING

- Pre-training carbohydrate tops off glycogen stores and provides readily available fuel for performance. Therefore, within 1-4 hours prior to activity the recommendation is 1-4g/kg. When eating 3-4 hours out, a mixed meal including carbohydrate, protein and fat can be consumed. If consuming fuel less than one hour before activity, 25-30g of carbohydrate should suffice.
- Elite athletes and service members should drink 5-7ml/kg plus sodium 4 hours prior to competition or missions to limit dehydration and another 3-5ml/kg about 2 hours beforehand if urine is dark or they cannot urinate.

## DURING TRAINING

- For sustained activity lasting over 60 minutes, a carbohydrate intake of 30-90g/h is recommended. Protein is not necessary; however, for the elite service member who may be on a prolonged mission, protein can play a crucial role helping meet one's total daily protein needs therefore helping attenuate muscle loss.
- While water is sufficient for most exercise lasting less than 60 minutes, a sports drink is recommended for prolonged physical activity. During activity it is important to drink enough fluid to prevent dehydration (body weight loss of >2%) without overdrinking.

## POST-TRAINING

- Following competition, training, or combat, it is wise to consume 20-40g of a high quality, complete protein such as soy to start the recovery process as soon as possible. If the elite athlete or service member is training, competing, or on a mission again within an 8-hour period, it is recommended they consume 1-1.2g/kg/h for the first 4 hours after activity.
- Additionally, to rehydrate afterwards it is wise to consume approximately 24oz. of fluid with sodium per pound loss due to sweat.

This [Korean-Style Braised Tofu](#) over rice is the perfect post-game or mission recovery meal. It is not only fast to make but also contains high-quality protein and antioxidants from tofu, as well as quick digesting carbohydrate from rice. [Click here for the recipe.](#)

