SPORTS NUTRITION

RECOVERY

Why is Recovery Important?

As a high performance athlete, you've chosen a career where taking care of your body is your job. When you are training and competing full time, there are several physiological consequences that occur as a result of hard exercise. A sound recovery nutrition protocol will ensure you can optimize training adaptations and perform at 100% of your body's potential for the next training bout or in preparation for competition.

Physical Consequences of Hard Training	The 4 R's of Recovery Nutrition
Dehydration	**R**e-hydrate with fluids and electrolytes
Depletion of glycogen (carbohydrate stored in muscle and liver)	**R**eplenish muscle glycogen stores with carbohydrates
Breakdown of muscle	**R**epair and regenerate muscle tissue with high quality protein
Cell damage and inflammation	**R**einforce your immune system with nutritious, fresh foods (e.g., fruits, vegetables, whole grains, fish, nuts, olive oil)

Key Considerations for Recovery Nutrition

- How quickly you should refuel and how much you need depends on your training intensity, volume, timing of your next training bout and your body weight. This means your daily approach to recovery fueling may change throughout the week or season.

- For hard training research shows that timing is critical and refueling with the following nutrients will optimize recovery:
    - **1g of carbohydrate per kg of body weight (0.5g of carb per 1lb)**
    - **15-20g of protein (high biological value from whey, found mainly in animal sources)**
    - **24oz (3 cups) fluid per pound of sweat lost from session**
    - **Electrolytes from a sport drink or some salty food**

- For moderate training, timing and balance of nutrients is also important, but less stringent. In easy training recovery can occur through your next meal or a small post-training snack.

- Successful recovery will only occur with proper planning! Think about your training sessions ahead of time, so you can plan and pack the appropriate fuels with you.

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Recovery Nutrition Guidelines

Training Type	Nutrition Guidelines	Examples of Recovery Nutrition
Hard training ***Characteristics:*** • Higher volume and/or intensity phases • Physical adaptation training (ie. heavy lifting, altitude training) • Competition or simulated competition days • Multi-day training bouts	• Refuel immediately after training • Ensure a minimum of 1 g/kg carbs, 15-20g protein, and fluids/electrolytes lost are replaced. • Eat next meal within 1 hour of initial recovery fuel. • Add a snack 1 hour later. • Regular fueling and hydration throughout the day. • Planning is essential!	**45 - 60kg (110-132 lbs)** ❑ 16oz chocolate milk + water ❑ 6oz non-fat Greek yogurt + fresh fruit + water ❑ Natural ingredient sport bar (fruit/nut) + glass of skim milk + water ❑ Recovery mix (carbohydrate + protein mixed) **70-80kg (154-176lbs)** ❑ 24 oz chocolate milk + water ❑ Sport bar (45-50g carb/15-20g pro) +16oz sport drink ❑ 2 x 6oz non-fat Greek fruit yogurt + 1 cup fruit juice + water ❑ Recovery mix + Banana **90-100+kg (198-220+kg)** ❑ 24 oz chocolate milk + 1 banana ❑ Sport bar (50g carb/15-20g pro) + 24oz sport drink ❑ Recovery mix (aim for 90 g of carbs and 25 g of protein) + banana
Moderate training ***Characteristics:*** • Single session with training the next day • Maintenance of fitness/strength	• Refuel within 30-60 minutes after training session. • Balanced snack with carbs, protein and fluids • Eat next meal within 2 hours • Regular fueling and hydration in the day.	❑ 8-16oz chocolate milk ❑ 6oz non-fat Greek yogurt + fruit + water ❑ Natural ingredient sport bar (35-40g carbs and 15-20g pro) + water ❑ PB & J + glass of milk ❑ Recovery mix + water ❑ 8oz of fruit and yogurt smoothie + water
Easy training ***Characteristics:*** • One session in day, followed by a rest day • Recovery day • Athlete in a weight loss phase	• Timing is less critical, but be sure to refuel within 1-2 hours following exercise. • Top up glycogen storage with a small high carb snack or having your next core meal	❑ Water followed by core meal ❑ 8oz PowerAde ❑ Fresh Fruit + Water ❑ Fruit Leather Snack + Water ❑ 4oz Fruit Juice + Water ❑ 4-8oz Chocolate Milk or Soy + Water ❑ Plain Greek yogurt + Water

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