



USOC
SPORTS NUTRITION

RECOVERY FACTSHEET

THE UNITED STATES OLYMPIC COMMITTEE

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, there are several physiological consequences that occur which make you fitter, faster, stronger and/or improve your skill level. A sound recovery nutrition protocol will ensure you can optimize training adaptations and perform at 100% of your body's potential in the next training bout or in preparation for competition.

Are you practicing the 4 R's of recovery?

Re-plenish muscle glycogen (carbohydrate stored in muscle) after practice. Eat 0.5 g/lb BW.

Re-pair and regenerate muscle with high quality protein. Eat 15 – 25 g (higher end for larger athletes).

Re-inforce muscle cells and immune system with colorful and anti-oxidant rich foods (e.g. fruits, veggies, whole grains, fish, nuts, olive oil). Eat at least 2 cups of fruit and 3 cups of veggies daily.

Re-hydrate with fluid and electrolytes based on sweat loss in training (3 cups fluid/lb of sweat loss). Use urine color as a hydration guide pre-training.

Recovery nutrition depends on:

- ✓ Type of training session
- ✓ Training volume
- ✓ Training intensity
- ✓ Timing of your next training session
- ✓ Body weight
- ✓ Whether you are training or competing



Nutrition within 30 – 60 minutes after training or competition can enhance recovery due to:

- Increases in heart rate and blood pressure which enhances nutrient delivery to muscles
- Faster glycogen replenishment and initiation of tissue repair
- The body's hormonal switch from muscle breakdown to muscle building earlier in the recovery timeline



Key Considerations

Moderate to Hard Training Session

High volume or intensity, heavy lifting, competition, multi-day training bouts

- Timing and balance of nutrients is critical
- Refueling with the **4 R's** will facilitate training adaptations
- If 2 - 3 sessions/day, eat recovery snack post-training, then eat again in 2 hours

Light Training Session

Skills/drills, yoga, stretch, recovery day, weight loss phase

- The next meal or small post-training snack is sufficient

Recovery is an all-day process!

It takes 24 - 48 hours to fully replace your glycogen stores if they've been completely depleted, and your muscles are responsive to protein for 24 - 48 hours after a resistance training session.

Continue eating well-balanced meals and snacks throughout the rest of the day for optimal recovery.

Successful recovery will only occur with proper planning! Think about your training sessions ahead of time in order to plan and pack the appropriate fuels.

Recovery Snack Ideas

Choose a food from protein column + food from carb column based on training session!			
Protein: 15-20 g	Protein: 20-25 g	Carbohydrates: 15-30 g	Carbohydrates: 45-60 g
<ul style="list-style-type: none"> • 2 c milk (cow's, soy)* • $\frac{3}{4}$ - 1 c Greek yogurt* • $\frac{3}{4}$ c cottage cheese • 2 string cheeses • 1 c firm tofu • 2-3 cooked eggs • 2-3 oz deli meat • 1 $\frac{1}{2}$ c Kefir* • 1 $\frac{1}{2}$ oz jerky • 2-3 oz fish • $\frac{1}{2}$ c nuts or seeds* • $\frac{1}{2}$ - $\frac{3}{4}$ c edamame • 4 Tbsp nut butter* • 1 c beans* 	<ul style="list-style-type: none"> • 3 c milk (cow's, soy)* • 1 $\frac{1}{2}$ c Greek yogurt* • 1 $\frac{1}{2}$ c cottage cheese • 3 string cheeses • 1 $\frac{1}{4}$ c firm tofu • 3-4 cooked eggs • 3-4 oz deli meat • 2-2 $\frac{1}{4}$ c Kefir* • 2-2 $\frac{1}{2}$ oz jerky • $\frac{3}{4}$ - 1 c nuts or seeds * • 1 c edamame • 1-1$\frac{1}{2}$ c beans or lentils* • 1 scoop whey protein 	<ul style="list-style-type: none"> • 1 piece or cup fresh fruit • $\frac{1}{4}$ - $\frac{1}{2}$ c dried fruit • 1 c fruit juice • 1 c chocolate milk • $\frac{1}{2}$ c oatmeal • 1-2 slices sandwich bread • $\frac{1}{2}$ bagel • 1 english muffin • 1 granola or cereal bar • 2 x 6" tortillas or wraps • $\frac{1}{2}$ - $\frac{3}{4}$ c rice or farro • $\frac{1}{2}$ - 1 c quinoa, beans, lentils* • $\frac{3}{4}$ c cooked pasta • 4 Tbsp nut butter* 	<ul style="list-style-type: none"> • 2-3 piece or cups fresh fruit • $\frac{3}{4}$ - 1 c dried fruit • 2 c fruit juice • 2 c chocolate milk* • 1-1 $\frac{1}{2}$ c oatmeal • 3-4 slices sandwich bread • 1 bagel • 2 english muffins • 4 fig bar cookies • 2 x 8" tortilla or wrap • 1-1$\frac{1}{2}$ c rice or farro • 1$\frac{1}{2}$ - 2 c quinoa, beans, lentils* • 1 $\frac{1}{2}$ c pasta

Key: * Protein source contains at least 15 g of carbs, Carb source contains at least 10 g protein

Athlete Recommendations:

