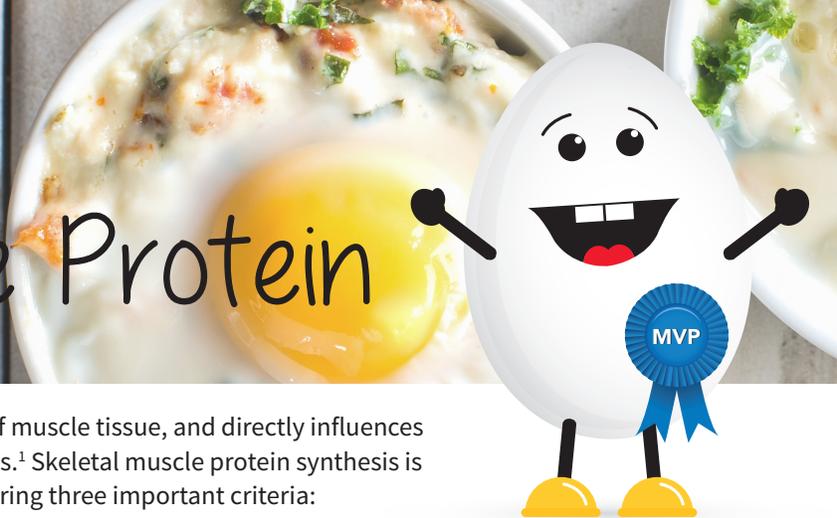


# EGG PROTEIN: A Most Valuable Protein



Protein contributes to the synthesis and maintenance of muscle tissue, and directly influences muscle mass, strength, and function in people of all ages.<sup>1</sup> Skeletal muscle protein synthesis is optimized by consuming dietary protein and by considering three important criteria:



## Protein Quality

Eggs are an MVP!

The quality of dietary protein is determined by its amino acid composition as well as how well the body absorbs and utilizes the protein. Egg proteins, like milk and beef proteins, are readily digestible and contain all of the essential amino acids.<sup>2</sup>

## Protein Quantity

1 large egg = 6g protein<sup>3</sup>

Post-workout protein is important for promoting recovery. Research indicates that eating 20-30 grams of protein sources rich in leucine, such as egg or whey, has been shown to promote muscle repair and glycogen resynthesis.<sup>4</sup>

## Timing of Protein Intake

Eggs can help muscles recover

Consuming high-quality protein in combination with rapidly digestible sources of carbohydrate post-workouts can help refuel muscles and optimize recovery.<sup>5</sup>



## Other Benefits of Egg Protein:



### Important for weight loss:

For individuals who are aiming to lose excess body weight or maintain a healthy weight, eating protein at breakfast can help satisfy the appetite and reduce calorie intake for the rest of the day.<sup>6</sup>



### Can help prevent muscle loss with aging:

Chronic age-related muscle loss causes frailty and increased risk for falling. Research suggests that exercise, along with optimal protein intake, can slow the effects.<sup>7</sup>



### Affordable and convenient:

At 15¢ a serving, eggs are the least expensive source of high-quality protein.<sup>8</sup>



1. Layman D and Rodriguez N. Egg protein as a source of power, strength and energy. *Nutr Today*.2009;44:43-48.

2. Campbell B et al. International society of sports nutrition position stand: protein and exercise. *J Int Soc Sport Nutr*. 2007;4:8.

3. US Department of Agriculture, Agriculture Research Service, Nutrient Data Laboratory. USDA National Nutrient Database for Standard Reference, Release 28. Basic Report: 01123

4. Mamerow MM et al. Dietary protein distribution positively influences 24-h muscle protein synthesis in healthy adults. *J Nutr*.2014;144:876-80.

5. Academy of Nutrition and Dietetics, Dietitians of Canada, and the American College of Sports Medicine Joint Position Statement. Nutrition and Athletic Performance. *Medicine & Science in Sports & Exercise* 2016;48:543-568.

6. Vander Wal JS. Egg breakfast enhances weight loss. *Int J Obes*.2008;32:1545-51.

7. Paddon-Jones D, et al. Role of dietary protein in the sarcopenia of aging. *Am J Clin Nutr*.2008;87:562S-65S.

8. United States Department of Agriculture. Economic Research Service. Retail data for beef, pork, poultry cuts, eggs, and dairy products.

# Fueling Fitness Recipe Collection on EggNutritionCenter.org

Whether your goal is to play on a Division 1 football team or to run your first 5K, proper nutrition plays an important role in fueling your body as you prepare and perform. Eggs are a high-quality protein and contain all of the essential amino acids that can help build, maintain and repair muscle.

While protein is an important nutrient to consider for physically active individuals, carbohydrate is important as well. In fact, consuming both protein and carbohydrate together in post-workout meals has been shown to help with recovery.<sup>5</sup> Adequate consumption of these two nutrients in pre-workout meals is also important for optimal performance.

This recipe collection includes fitness recipes (like the ones below!) that contain a mixture of carbohydrate and protein to help fuel and recover from exercise. Explore the recipes on the ENC website for fitness to optimize your active lifestyle.

## Scrambled Egg, Tomato, Basil & Mozzarella Panini

### Ingredients:

- 2 Eggs
- 2 Tbsp Water
- Pepper
- 2 Slices mozzarella cheese (1-1/2 oz.)
- 4 Slices tomato
- 6 Fresh basil leaves
- 4 Slices whole wheat bread

### Directions:

1. HEAT panini press according to manufacturer's directions. BEAT eggs and water in microwave-safe bowl until blended. MICROWAVE on HIGH 45 seconds; stir. MICROWAVE until eggs are almost set, 30 to 45 seconds longer. SEASON with pepper.
2. LAYER cheese, tomato, basil and scrambled eggs evenly on two bread slices. COVER with remaining bread.
3. GRILL sandwiches in panini press, on medium-high heat, until bread is toasted and cheese is melted, about 2 minutes.

*Nutrition Info per Sandwich: 282 calories; 11g total fat; 4g sat fat; 477mg sodium; 26g carbohydrate; 4g dietary fiber; 19g protein.*



## Egg Pita Snackers

### Ingredients:

- 6 Hard-cooked eggs, peeled
- 1/4 cup Refrigerated ranch dip
- 2 Tbsp Minced green onion
- 1/4 tsp Pepper
- 1/4 cup Finely chopped red, yellow & green peppers
- Mini whole wheat pitas
- Small tomato wedges

### Directions:

1. PLACE eggs, ranch dip, green onion, and pepper in food processor. Pulse until finely chopped. SPOON into serving bowl. TOP with bell peppers.

*Nutrition info per tablespoon of egg salad: 20 calories; 1g total fat; 1g sat fat; 31mg sodium; 0g carbohydrate; 0g dietary fiber; 1g protein. Nutrition info per 2 whole wheat mini pitas: 60 calories; 0.5g total fat; 0g sat fat; 130mg sodium; 12g carbohydrate; 2g dietary fiber; 3g protein*

