

EATING TO COMPETE WITH DAIRY

An Athlete's Guide



EATING TO COMPETE WITH DAIRY

As an athlete, staying properly fueled throughout the day is critical for keeping your energy levels steady so you can perform at your best. Use this guide to identify what, when, and how to eat to compete with real California dairy.*

WHAT SHOULD I EAT TO COMPETE?

PROTEIN

WHAT DOES IT DO?

Athletes require more protein than the average person.^{1,2} Protein is a vital part of an athlete's diet, playing a role in:



- Muscle repair, growth, maintenance, and reducing muscle soreness after exercise
- Supporting strong muscles, bones, ligaments, and tendons
- Healthy weight
- Immune function
- Healing

HOW MUCH DO I NEED?

Your personal protein needs depend upon intensity, duration, and frequency of your exercise.

Experts recommend **0.5-0.9 grams (g) per pound** of body weight.^{1,2}

Try to consume roughly 20-30 grams of protein each meal to maximize muscle building and recovery.³

WHAT FOODS HAVE IT?



2 STRING CHEESE
(14 g)



1 TUB (170 g)
YOGURT (7 g)



1 CUP COTTAGE
CHEESE (25 g)



1 POUCH TUNA
(17 g)



3 OZ. DELI ROAST
TURKEY (24 g)



2 HARD BOILED
EGGS (12 g)

Timing is Everything



- Spread protein throughout the day
- Protein pack your breakfast
- Include protein at all meals and snacks
- Protein before bed helps keep your muscles in positive balance to support muscle growth and recovery

CARBOHYDRATE

WHAT DOES IT DO?

Carbohydrates provide quick fuel for your muscles—they are stored in your muscle to be used during exercise.



They help us use the protein and fat we eat for growth, repair, and energy.

Eating too little carbohydrates may negatively affect your athletic performance.^{1,4}

HOW MUCH DO I NEED?

The more active you are, the more energy you need, so therefore the more carbohydrates your body requires. All athletes, no matter what sport, typically require at least **half of their calorie needs** to come from carbohydrates.

WHAT FOODS HAVE IT?



1 CUP CHOCOLATE
MILK (26 g)



1 OZ. PRETZELS
(23 g)



1 PEACH CUP
(23 g)



1 MEDIUM BAKED
POTATO (26 g)



½ CUP CHICKPEAS
(25 g)



¾ CUP WHOLE
GRAIN PASTA (23 g)

1/2 PLATE CARBOHYDRATES:

whole grains, beans,
starchy vegetables



MORE ACTIVE DAYS = MORE CARBS NEEDED

Most athletes need at least half their calories from carbohydrate foods. Multi-sport athletes need even more.

CALCIUM

WHAT DOES IT DO?

A mineral that helps build strong bones and keeps your nerves and muscles in top shape.



HOW MUCH DO I NEED?

The Daily Value for calcium, or the recommended amount of calcium to consume each day, is **1,300 milligrams (mg)**.

WHAT FOODS HAVE IT?



1 CUP
MILK
(300 mg)



1 TUB (170 g)
YOGURT
(311 mg)



1 OZ.
CHEDDAR
CHEESE
(260 mg)



1 CUP
KALE
(101 mg)

VITAMIN D

WHAT DOES IT DO?

A vitamin that teams up with calcium (Ca) to keep bones strong.



HOW MUCH DO I NEED?

The Daily Value for vitamin D, or the recommended amount of vitamin D to eat each day, is **20 micrograms (mcg)**.

WHAT FOODS HAVE IT?



1 CUP
MILK
(4 mcg)



1 OZ. CHEDDAR
CHEESE
(0.3 mcg)



1 EGG
COOKED
(1.1 mcg)



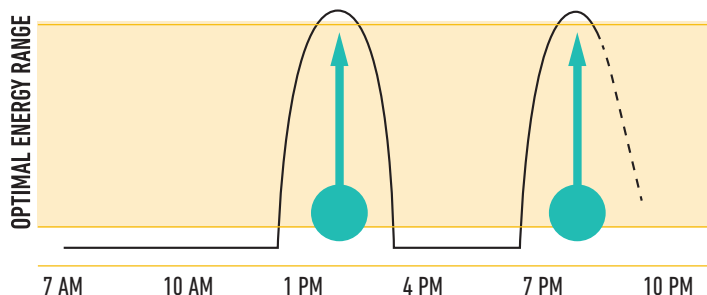
3 OZ.
SALMON
(14.2 mcg)

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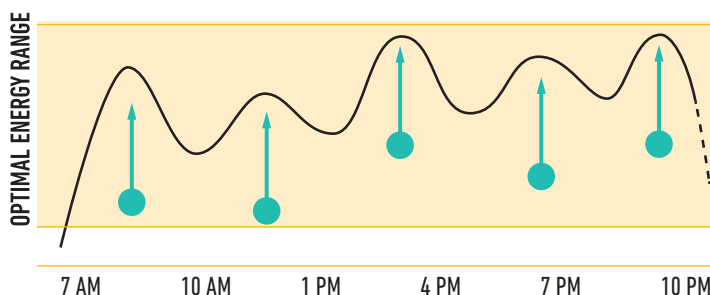
WHEN SHOULD I EAT TO COMPETE?

To stay competitive, **it is critical to eat every 2–3 hours**. This is so our bodies have the right mix of nutrients and energy to power us through exercise, and kickstart the recovery process once we are done. It is also important to choose certain foods timed around activity, so they provide the right nutrients to keep you in the game.*

INCONSISTENTLY-FUELED ATHLETE: BIG MEALS



CONSISTENTLY-FUELED ATHLETE: MINI-MEALS



EAT TO COMPETE **PRE-EXERCISE PLAN**

WHEN	WHAT	DETAILS	MEAL OPTIONS
3–4 hours before	Moderate Sized Meal & Liquids	Balance of carbs, protein, and fat	2 soft chicken tacos on corn tortilla, 2 tbsp guacamole and salsa, ¼ cup shredded Monterey Jack cheese Water
2–3 hours before	Small Meal & Liquids	Low in fat & low in fiber	PERFORMANCE AND RECOVERY SNACK PACK Cup of chocolate milk
1 hour before	Snack & Liquids	Low in fat & low in fiber Easy to digest	Sports drinks, graham crackers, saltines, banana, mini bagel, English muffin, sports gummy or gels
Early Morning Game Breakfast	Light or Liquid Meal	Low in fat, moderate protein	Oatmeal with banana, blueberries, yogurt cup

PERFORMANCE AND RECOVERY SNACK PACK

Developed by Jordan Mazur, MS, RD

“Fueling your day doesn’t mean only fueling up for your workouts. It means that you are fueling your body all day long for whatever demands the day brings: practice, meetings, workouts, schoolwork, etc. **This snack pack provides balanced levels of carbs, fats, protein, and functional ingredients so you can fuel all day long to perform your best.**”

This snack pack is also perfect if you suspect an intolerance or sensitivity to dairy. It allows you to be flexible with your food and beverage choices to manage symptoms. Low- to no-lactose real dairy products like hard cheeses made with California milk, are easy alternatives that allow you to get the benefits of the nutrients in dairy for performance and recovery.”



JORDAN MAZUR, MS, RD
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FOR THE RECIPE, HEAD TO:
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RECOVERY STRATEGIES: THE 4 R'S

Taking in nutrition within 30 - 60 minutes after exercise is ideal timing.

REFUEL muscles with carbohydrates, especially if another game or practice is happening within 8 hours.

- Refuel with carbs by dividing your body weight by 2.
- Example: If you weigh 150 pounds, you need 75 grams of carbs.

REHYDRATE with fluids and electrolytes lost during exercise.

- Weigh yourself before & after exercise a few times per year to learn how much fluid you lose during exercise.
- Drink 3 cups (24 fl. oz.) fluids for every pound of weight lost during exercise.

REPAIR and rebuild muscles with around 20–30 grams of high-quality protein.

- If you have a low appetite after exercise, a liquid option may be best.

REST and get more sleep.

- Aim for 8–10 hours each night.
- Athletes who sleep less than 8 hours have 1.7 times greater risk of injury.⁵

Drinking **all types of real milk** (i.e., chocolate, whole, low-fat, etc.) provides **13 essential nutrients** for athletes and is an excellent way to **replace fluid lost during exercise, repair, and refuel.**⁶⁻⁸



EATING TO COMPETE WITH DAIRY

HOW SHOULD I EAT TO COMPETE?

Piecing all this information together into a sports nutrition game plan that will work for you is easier than you think. Here is a sample eating schedule that you can follow to stay optimally fueled all day.*


MORNING TO NOON


BREAKFAST
7:00 AM

1 cup **Oatmeal** + 1 cup **Blueberries** + 1 tbsp. **Honey**
2 **Eggs** w/ 2 tsp. **Olive Oil** (for cooking)
1 cup **Low-fat Milk**



Total Protein = 28 grams
Total Carbs = 80 grams


SNACK
9:30 AM

1 Medium **Banana**
1 **Cheddar Cheese Stick**

Total Protein = 7 grams
Total Carbs = 30 grams



LUNCH
12:00 PM

Turkey Sandwich: 3 slices **Turkey** + 1 slice **Cheddar Cheese** +
½ **Avocado** + 2 slices **Whole Wheat Bread**
1 **Orange**, 1 Serving **Baby Carrots**, 1 Bottle of **Water**




Total Protein = 35 grams
Total Carbs = 63 grams

AFTERNOON WORKOUT OR GAME


PRE-WORKOUT
3:30 PM

6 oz. Container Flavored **Yogurt**
1 Bottle (16 fl. oz.) **Water**

Total Protein = 12 grams
Total Carbs = 25 grams


DURING WORKOUT*
4:30–6:00 PM

1 Bottle (16 fl. oz.) **Water** or **Sports Drink** (20 fl. oz.)
1 Packet **Fruit Snacks, Gummies** or **Gel**

Total Protein = 0 grams
Total Carbs = 65 grams


POST-WORKOUT
6:15 PM

8 fl. oz. **Chocolate Milk**
18 **Pretzels**




Total Protein = 25 grams
Total Carbs = 15 grams

EVENING TO BEDTIME


DINNER
7:00 PM

3 oz. **Salmon**, 1 cup **Brown Rice**
1 **Salad** + 2 tbsp. **Salad Dressing**
6 **Strawberries**

Total Protein = 25 grams
Total Carbs = 15 grams


BEDTIME SNACK
9:00 PM

1 cup 2% **Cottage Cheese** + ½ cup **Canned Peaches**



Total Protein = 24 grams
Total Carbs = 20 grams

* If workout or game lasts longer than 60 mins.

FROM THE PRO ATHLETIC TRAINER'S CORNER

"Eating to compete with dairy is essential for both health and performance. **Growing up on a farm myself, I appreciate the importance of dairy products to a well-balanced nutritional diet.** A proper nutritional plan is essential to recover and perform at a high level on and off the field."



DUSTIN LITTLE, ATC, PT, DPT, CSCS
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References:

1. Thomas DT, Erdman KA, Burke LM. Position of the Academy of Nutrition and Dietetics, Dietitians of Canada, and the American College of Sports Medicine: Nutrition and athletic performance. *J Acad Nutr Diet.* 2016;116(3):501-528.
2. Jäger R, Kerkick CM, Campbell BI, et al. International Society of Sports Nutrition position stand: Protein and exercise. *J Int Soc Sports Nutr.* 2017;14(20):1-7.
3. Schoenfeld BJ, Aragon AA. How much protein can the body use in a single meal for muscle-building? Implications for daily protein distribution. *J Int Soc Sports Nutr.* 2018;15(10):1-6.
4. Burke LM, Hawley JA, Wong SH, Jeukendrup AE. Carbohydrates for training and competition. *J Sports Sci.* 2011; 29(Suppl 1):S17-27.
5. Copenhaver EA, Diamond AB. The value of sleep on athletic performance, injury, and recovery in the young athlete. *Pediatr Ann.* 2017;46(3):e106-e111.
6. Seery S, Jakeman P. A metered intake of milk following exercise and thermal dehydration restores whole-body net fluid balance better than a carbohydrate-electrolyte solution or water in healthy young men. *British Journal of Nutrition.* 2016;116(6):1013-1021.
7. Lunn WR, Pasiakos SM, Collette MR, et al. Chocolate milk and endurance exercise recovery: Protein balance, glycogen, and performance. *Medicine & Science in Sports & Exercise.* 2012;44(4):682-691.
8. Volterman KA, Obeid J, Wilk B, Timmons BW. Effect of milk consumption on rehydration in youth following exercise in the heat. *Appl Physiol Nutr Metab.* 2014;39(11):1257-64.

Sponsored by the California Milk Advisory Board, an instrumentality of the California Department of Food and Agriculture.

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*The guidance provided, including the featured meal plans in this handout, should not be generalized to other populations, skill levels, sport types or training amounts. An individual's nutrient needs vary depending on many factors, and the individual's nutrition and health goals should always be considered.





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