RESEARCH ON DAIRY’S IMPACT ON SPORTS PERFORMANCE AND RECOVERY

SPORT PERFORMANCE AND RECOVERY: THE ROLE OF DAIRY
1. Carbohydrates + protein fuel performance, then repair and replenish muscles after activity.
2. Replaces fluids, electrolytes and other nutrients lost during activity.
3. Vitamin D, calcium, phosphorus and potassium help maintain strong bones, proper muscle functioning and fluid balance.

EATING DAIRY HAS BEEN LINKED WITH REDUCED CHRONIC INFLAMMATION ACROSS THE LIFESPAN

STUDY
Panagiotakos DB, et al., (2010)1

FINDINGS
In a cross-sectional survey that enrolled over 3,000 apparently health adults, an inverse association was found between dairy products consumption and levels of various markers of chronic inflammation.

Labonté ME, et al., (2014)2

In a multicenter randomized crossover study of 112 adult men and women with high-sensitivity C-reactive protein (hs-CRP), short-term consumption of both low- and high-fat dairy products as part of a healthy diet had no adverse effects on markers of chronic inflammation.

PROACTIVE INJURY PREVENTION: THE BENEFITS OF DAIRY
1. A calcium, vitamin D and protein-rich diet that includes dairy can strengthen muscle and bone.
2. The unique nutrient package that dairy can provide for recovery may be difficult to replace by other foods and beverages.
3. Going dairy-free could unintentionally be counter-effective for proactive injury prevention.

SPECIALIZED NUTRIENTS FROM DAIRY

Calcium From Dairy3

Risk of Stress Fracture

Bone Mineral Density

STUDIES SHOW...

Drinking all types of milk (i.e., chocolate, whole, low-fat, etc.) achieves the 3 R’s of recovery: Refuel, Repair, Rehydrate3

Drinking fat-free chocolate milk is shown to have unique benefits on enhancing recovery, including greater muscle protein synthesis and increasing time to exhaustion.

Reinforce with your athletes that a nutrient-dense, balanced diet – that includes dairy products – is prudent to help combat chronic inflammation.

Provide a combination of foods that are high in carbohydrate (CHO) and moderate in protein. Aim to consume 1–4 g CHO/kg of body weight 1–4 hr. before exercise.

3–4 Hours Before Exercise
TRY: Looking for recipes or foods that are low in fat and fiber, but provide adequate CHO to ensure that fuel targets are met, and to meet goals for gut comfort.
Try hydrating with at least 16–20 oz. of fluid.

0–60 Minutes Before Exercise
TRY: Fruit (like apple sauce, or fruit snacks), a small granola bar, pretzels or graham crackers to top off stored CHO levels.

PRE-EXERCISE

REFUEL muscles with CHO (generally 30 to 60 g CHO/hr. exercise; prolonged events 2.5 hr. = up to 90 g CHO/hr. exercise).
REPAIR and rebuild muscle with up to 20–30 g of high-quality protein.
REHYDRATE with fluids and electrolytes lost during exercise (more fluid than was lost [e.g., 1.25 to 1.5 L of fluid for every 1 kg of body weight lost]).

POST-EXERCISE

TRY: Looking for recipes made with high-quality protein sources (e.g., milk-based proteins [whole or low-fat milk, yogurt, etc.]; lean meats, protein isolate supplements [e.g., whey, casein, soy, and egg]) to support muscle protein synthesis, retention of fat-free mass and recovery of force and dynamic power production.

Help give your athletes a properly fluided multigrain edge with whole grains, healthy fats, lean protein, fruits, veggies and fluid. Visit realcalifornia milk.com for recipes and more to help inform the care of your athletes.