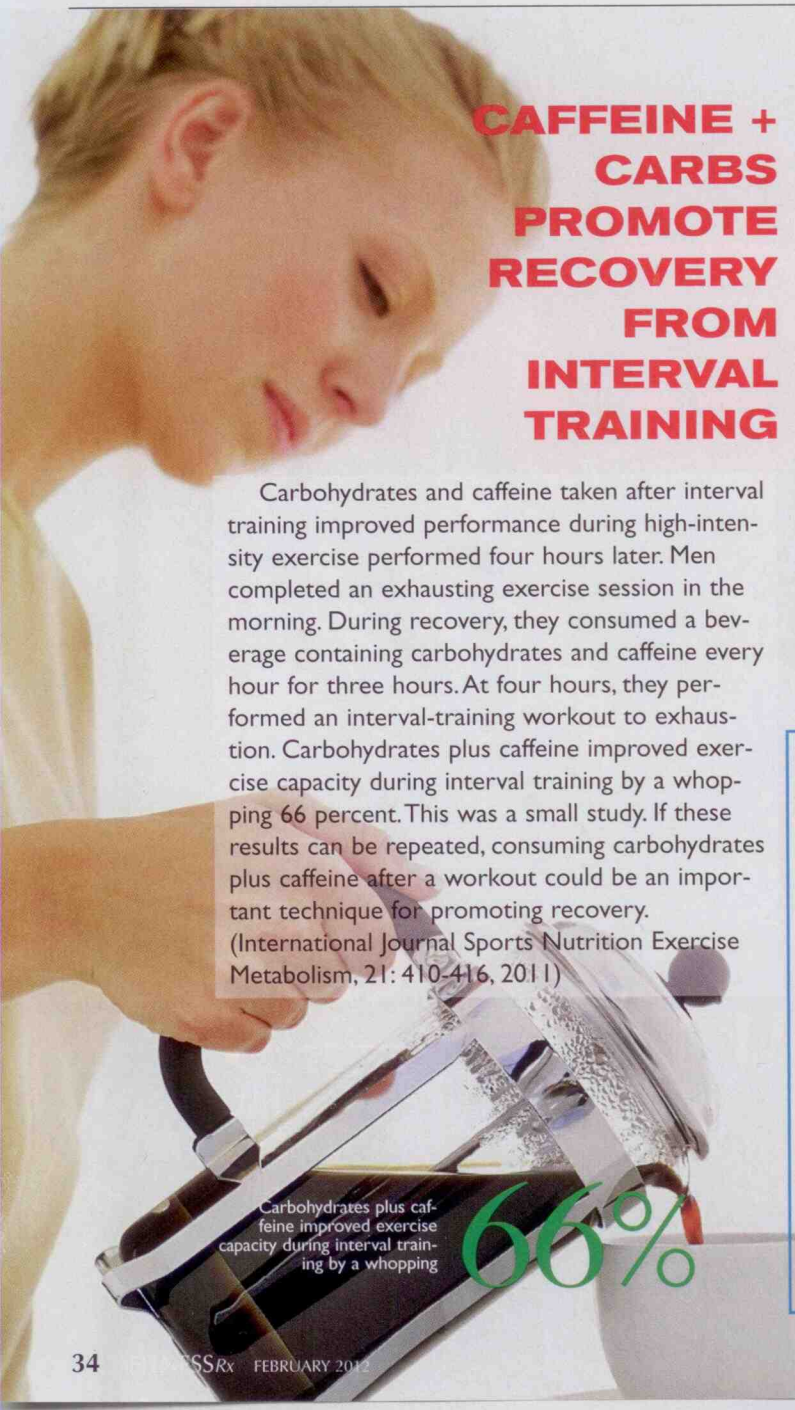
SUPPLEMENT Rx *Info-Bits*

WHEY PROTEIN: THE VERSATILE SUPPLEMENT

Whey protein reduces the risk of metabolic disorders and cardiovascular disease— according to a review of literature written by scientists from the University of Bonn in Germany. Whey contains lactoferrin, glutamine, lactalbumin and branched chain amino acids, which have positive effects on immunity, blood sugar control and protein synthesis. Whey protein lowers blood sugar and insulin, which helps protect against heart disease, diabetes and obesity. They concluded that while most studies show that whey protein benefits metabolism, the evidence is not strong enough to recommend the supplement to the general population.

Diabetes promotes cell destruction and decreases the capacity of the immune system to fight disease and promote tissue repair. Scientists from Saudi Arabia, in a study on diabetic rats, found that supplementing whey protein boosted immunity and prevented cell destruction. Whey protein enhances immunity, particularly in the B and T lymphocytes in diabetic rats. It is not known whether these results apply to humans. (Current Opinions Clinical Nutrition Metabolic Care 14: 569–580, 2011; Lipids in health and Disease 10:203, 2011; published online)



CAFFEINE + CARBS PROMOTE RECOVERY FROM INTERVAL TRAINING

Carbohydrates and caffeine taken after interval training improved performance during high-intensity exercise performed four hours later. Men completed an exhausting exercise session in the morning. During recovery, they consumed a beverage containing carbohydrates and caffeine every hour for three hours. At four hours, they performed an interval-training workout to exhaustion. Carbohydrates plus caffeine improved exercise capacity during interval training by a whopping 66 percent. This was a small study. If these results can be repeated, consuming carbohydrates plus caffeine after a workout could be an important technique for promoting recovery. (International Journal Sports Nutrition Exercise Metabolism, 21: 410-416, 2011)

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Quercetin Improves Endurance

Quercetin is a plant byproduct that prevents allergies, cancer and inflammation. It also increases cell energy centers called mitochondria. Animal studies found that quercetin supplements improved endurance by 40 percent during treadmill running. Human studies have not been so dramatic. Jochen Kressler from the Georgia Institute of Technology and colleagues, in a pooled analysis of 254 people, concluded that quercetin improved endurance by less than three percent. This might be significant in elite athletes, but probably doesn't mean much in the average person. (Medicine Science Sports Exercise 43: 2396-2404, 2011)

Tyrosine Boosts Exercise Performance in the Heat

Tyrosine is an amino acid that the brain uses to make a chemical called dopamine— the "get psyched" hormone. Dopamine gives you clear thoughts, motivation, sexual gratification, and promotes learning, memory and mental focus. It helps athletes push longer and harder, even when fatigued or injured. Tyrosine is an amino acid that helps the brain make dopamine. British researchers found that tyrosine supplements improved endurance capacity in the heat by 14 percent. It probably worked by helping athletes overcome the mental stress of training intensely in the heat. (European Journal of Applied Physiology 111: 2941-2950, 2011) ■

These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.