

Desert Vista High School
Girl's / Boy's Cross-Country
Post-exercise Macronutrient Replacement

IMMEDIATE POST-EXERCISE PERIOD:

Attempt to ingest 300 – 600 calories immediately post-exercise.

Fluids might/should include:

1) Water
2) Gatorade
3) Orange Juice
4) Ice Popsicle
5) Smoothie
Foods might include:
6) Fruit (Bananas/Apples/Watermelon/Strawberry)
7) Bagel
In the <u>immediate</u> post-exercise period, fluid consumption in the absence of food consumption is appropriate and sufficient as long as the fluid consumption meets the aforementioned caloric intake (300 – 600 calories) and is <u>primarily</u> oriented toward carbohydrate consumption.
<u>POST-EXERCISE MEAL:</u>
Peer-reviewed research suggests that the first post-exercise meal (in the case of DVHS athletes ... breakfast) should emphasize a combination of carbohydrate and protein in the approximate ratio of three (3) grams of carbohydrate for every one (1) gram of protein. Carbohydrate intake serves to replenish not only liver but also muscle glycogen content. Protein intake provides a source of amino acids necessary to re-synthesize (rebuild) numerous proteins such as the muscle proteins that are continuously utilized (stressed) during long duration exercise/training.
Accordingly, representative breakfasts might include:

1)	Cereal and non-fat milk
2)	Bagels and orange juice
3)	Nutrient-fortified energy bars containing 8 – 10 grams of protein and low-fat milk
4)	Low-fat yogurt, a bagel, and orange juice or low-fat milk
5)	A fruit smoothie with fruit and frozen yogurt

Again, the preceding suggestions provide a representative framework for appropriate post-exercise meals. Certainly, various combinations of the aforementioned meals would also serve as appropriate post-exercise meals.

The fundamental goal is to consume an appropriate combination of carbohydrate and protein. Ideally, an athlete might seek to consume as much as 300 - 400 calories of both protein and carbohydrate in the initial post-exercise meal. It should be noted, however, that atypically long workouts ("long runs") obviously place a greater energetic demand upon the human body and, thus, should be followed by as much as 600 grams of carbohydrate consumption in the 24-hour period following such a workout.