



## PRE-EXERCISE MEAL

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### ■ ■ ■ Description

A • meal is the meal consumed before workouts or competition. It provides energy when an athlete exercises for an hour or longer. This meal is an extremely important part of the athlete's preparation for any athletic competition. Generally it is consumed 1 to 4 hours before exercise. In almost all cases it should consist of complex carbohydrates and adequate fluids, but athletes with medical problems such as hypoglycemia or runner's diarrhea may require significant modifications. A meal consumed 3 to 4 hours before competition should include more calories than a meal consumed 1 to 2 hours before competition. When competition lasts longer than 1 hour, athletes should consider a supplemental carbohydrate during competition and not depend on the pre-exercise meal to meet energy requirements for the entire competition.

### ■ ■ ■ Specific Concerns

**Nutritional Adequacy:** If athletes do not consume enough calories in the pre-exercise meal, hunger may impair performance.

**Fiber Content:** Consuming foods that are too high in fiber may slow the movement of food out of the stomach and into

the intestines, resulting in pain, nausea, and bloating. The greater the exercise intensity, the more likely this is to occur.

**Sodium Content:** Consuming foods with high sodium (salt) content may increase thirst during exercise. However, in athletic events lasting longer than 4 hours, some sodium should be consumed or salt losses may impair performance and health.

**Vegetables:** Gas-forming foods such as onions or cabbage should be avoided before competition, because these foods can also lead to bloating and abdominal discomfort.

**Protein Content:** High-protein meals slow emptying of the stomach and should be avoided, especially in athletes who have heartburn symptoms.

**Fluid Content:** Liquid foods can be taken before competition and are recommended for athletes who experience an urge to go to the bathroom while exercising. However, dehydration is not prevented by consuming large quantities of fluids at the pre-exercise meal but rather by planned consumption of fluids throughout training.

**Fat Content:** Fat consumption should be minimized before competition. It slows stomach emptying and can contribute to bloating.

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Notes:

(Up to 4400 characters only)

Notes and suggestions