## Fluid Guidelines for Athletes*

## Effects of Dehydration

Dehydration can affect an athlete's performance in less than an hour of exercise-sooner if the athlete begins the session dehydrated.

Dehydration of just 1-2\% of body weight (only $1.5-3 \mathrm{lbs}$ for a $150-\mathrm{lb}$ athlete) can negatively influence performance.

Dehydration of greater than $3 \%$ of body weight increases an athlete's risk of heat illness (heat cramps, heat exhaustion, heat stroke).

## Warning Signs of Dehydration

Recognize the basic signs of dehydration:
■ thirst

- muscle cramps
- irritability
- fatique
- loss of performance
■ vomiting


## What to DRINK <br> During Exercise

If exercise lasts more than 45 minutes or is intense, a sports drink should be consumed during exercise.

A 6-8\% carbohydrate (CHO) solution maintains optimal carbohydrate metabolism.
$\sqrt{D}$
During events when fluid loss is of primary concern a beverage with less than $7 \% \mathrm{CHO}$ is recommended.

Fluids with salt (sodium chloride) are beneficial for increasing thirst and voluntary fluid intake as well as offsetting losses.

## What NOT to Drink During Exercise

$\checkmark$ Fruit juices, carbohydrate gels, sodas and any sports drink with a CHO level greater than $8 \%$ are not recommended during exercise as the sole beverage.
$\sqrt{\mathrm{CHO}}$ concentrations of $8 \%(19 \mathrm{~g} / 8 \mathrm{oz})$ or more slow fluid absorption and are not recommended during exercise.

Beverages containing caffeine, alcohol or carbonation are discouraged because they are not as effective as sports drinks in rehydrating the body.

