



FLUID FACTS

How much water do you need?

Your body needs about 1 ml of water for every calorie expended. If you burn 4,000 to 5,000 calories per day, that equates to about 4 to 5 liters of fluid. Monitoring body weight before and after training is the best way to keep up with fluid needs which increase with sweating.

16 fluid ounces = 1 pound

Recommended water/fluid intake for training:

- 8 to 12 ounces 15 minutes before exercise
- 4 to 6 ounces every 10 to 15 minutes during exercise
- 16 ounces for every pound lost after exercise (weigh before and after exercise to determine weight loss)

If you are working out longer than 60 minutes, a sports drink **may** be helpful in delaying fatigue by providing additional energy for working muscles

A 5% to 8% concentration of carbohydrate has been shown to be absorbed quickly. The small amount of electrolytes can also aide in the absorption of water from the intestine.

AN ATHLETE SHOULD NEVER BE THIRSTY

Body water and performance:

Although a 2% weight loss due to dehydration may not cause any visible symptoms --- **it does cause a decrease in physical performance.**

Water loss as % of body weight:

2% = difficulty in controlling normal body temperature

3% = reduced muscular endurance

4-6% = reduced strength power, endurance and heat cramps

> 6% = severe heat cramps, heat exhaustion and heat stroke

SWEATING KEEPS YOU COOL BUT IT ALSO DEHYDRATES YOU

During exercise some of the water naturally circulating through your body is used by your sweat glands, resulting in the following chain reaction:

Blood volume decreases (lower circulation)

Then

Heart rate increases

Then

Blood vessels leading to your skin constrict in order to maintain blood pressure

Then

Body temperature rises because heat produced by working muscles can't be transported to skin surface

DRINKING ADEQUATE WATER/FLUID CAN KEEP YOUR BODY COOL AND HALT THIS CHAIN REACTION