

PYRUVATE



■ ■ ■ Description

Pyruvate is a small molecule that has been shown to increase endurance exercise capacity in humans and animals. Although the exact mechanism is unclear, most experts believe it is used for energy production by the body and spares the body's supply of sugars used for exercise. It is a natural substance that is one of the normal byproducts of energy production of the body. As a secondary effect, pyruvate has also been found to inhibit accumulation of fat in the liver and in general throughout the body. It has also been found to stop weight gain in some studies.

■ ■ ■ Why Athletes Use It

Athletes use pyruvate to improve endurance and decrease body fat.

■ ■ ■ Adverse Effects

- Diarrhea (loose stools)
- Borborygmus (excessively loud bowel sounds)
- Flatus (increased gas)
- Dizziness
- No change in performance

■ ■ ■ Pharmacology

Pyruvate appears to work by substituting itself into the body's energy cycles instead of the body's own energy sources. These energy sources are spared initially, and the amount of exercise the body can perform increases. Pyruvate does not appear to have a significant effect on protein metabolism. When blood has been drawn on subjects to examine pyruvate's effects on the body, no significant changes have been found. The initial recommended dose of pyruvate was 15 g/day. However, side effects were very common and occasionally severe. A dose of 5 g/day is now recommended and is considered equally effective. The cost of pyruvate is about \$20 per week but may be more with some preparations.

■ ■ ■ Preventive Measures

Pyruvate is a relatively new substance, and only a few scientific articles have been written about it. At present it appears safe in recommended doses, but higher doses may be associated with significant side effects.

Notes:

(Up to 4400 characters only)

Notes and suggestions