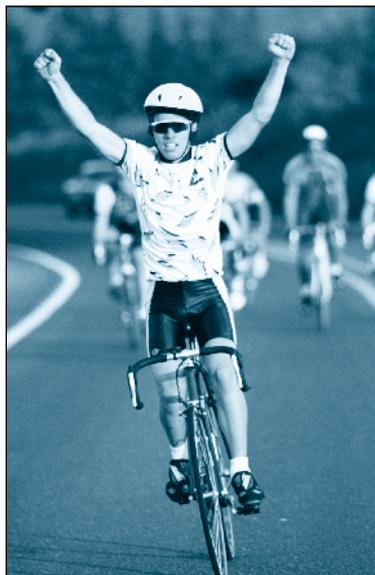


# D-RIBOSE

## Enhances Cellular Energy



Whether you are an athlete involved in high-intensity exercise, or a more sedentary person who simply wants to invigorate your body's cellular energy supply, Source Naturals D-RIBOSE is an important compound.

D-RIBOSE is a pentose sugar necessary for the synthesis of ATP (adenosine triphosphate), your body's primary energy-carrying molecule. During strenuous exercise, large amounts of ATP can be depleted from your heart and skeletal muscle cells.

Supplementation with D-RIBOSE may enhance the recovery of ATP to improve your health, lifestyle,

and level of fitness. In addition, promising new research is exploring the use of D-RIBOSE to address the muscle fatigue that can result from normal, daily activities.

D-RIBOSE addresses the two most basic of the dozen deep metabolic systems identified by Source Naturals as critical to your optimal health: Energy and Cells/DNA.



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These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.

## A Critical Compound for Cellular Energy

Ribose is a simple, 5-carbon monosaccharide, or pentose sugar. It is used by the body to synthesize important metabolic compounds, including ATP, the energy molecule. Ribose is a building block of the RNA used for genetic transcription, and is related to deoxyribose, which is a component of DNA.

Ribose plays a vital role in both heart and skeletal muscle metabolism, largely through its participation in the synthesis of ATP energy.

### Ribose Formation: A Slow Process

Ribose is formed when glucose from the food you eat travels through a pathway called the Pentose Phosphate Pathway (PPP) and undergoes a series of metabolic reactions. The PPP pathway in heart and skeletal muscle cells is regulated by the activity of two specific enzymes. As a result, forming ribose in these areas is a slow process.

Research indicates that taking supplemental ribose promotes quicker replenishment of ATP energy in depleted cardiac and skeletal muscle to compensate for the naturally slow production within the cells.

### Exciting New Research

In a preliminary clinical study, D-ribose was found to support energy, sleep, mental clarity and general comfort and well-being in 41 individuals with challenges to cellular energy metabolism.

The authors of the pilot study attributed these improvements to the role played by D-ribose in supporting cellular energy synthesis in heart and skeletal muscle. The dosage of D-ribose in this preliminary study was 5 grams taken three times per day.

Source Naturals D-RIBOSE is available as a potent powder (5 grams per serving) and a 1000 mg chewable wafer or tablet.

### Scientific Nutrition: Cornerstone of the Wellness Revolution

Source Naturals brings you the science of D-RIBOSE as part of our commitment to offer the latest emerging wellness strategies. Source Naturals is pleased to partner with your health food store and other outlets in bringing to market cutting-edge supplements to help you take personal charge of your health.

### References

- Butler T. L. Ribose and its Effect on Energy Recovery in Heart and Skeletal Muscle. Published by Bioenergy, Inc. June 1999.
- Gebhart B. and Jorgenson JA. Benefit of ribose in a patient with fibromyalgia. *Pharmacotherapy*. 2004 Nov;24(11):1646-8.
- Paul DF and Pepine CJ. D-ribose as a supplement for cardiac energy metabolism. *J Cardiovasc Pharmacol Ther*. 2000 Oct;5(4):249-58.
- Teitelbaum JE et al. The use of D-ribose in chronic fatigue syndrome and fibromyalgia; a pilot study. *J Altern Complement Med*. 2006 Nov;12(9):857-62.



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