



Ribose

What Is It?

Ribose is a pentose sugar found in all living cells. It is important for maintaining healthy total adenine nucleotide pools and ultimately for the production of adenosine triphosphate (ATP), promoting skeletal and cardiac muscle energy metabolism.*

Uses For Ribose

Rapid Energy Repletion For Intense Exercise: Research indicates that nucleotides decrease after repeated, intense exercise and that they may not be recovered for up to several days, leaving muscle without the ability to refuel energy stores. Numerous studies demonstrate the ability of ribose to increase levels of the nucleotides AMP, ADP and ATP, which are depleted during strenuous physical activity or by lack of oxygen to working muscle. Skeletal and cardiac muscle rely on these metabolites for energy, and two metabolic mechanisms preserve these pools.

The first mechanism involves salvaging end products of AMP breakdown, or preventing them from leaving the cell. If they are salvaged, they may be recycled back to AMP and ultimately to ATP. The second mechanism for preserving nucleotide pools is de novo synthesis, or formation of new nucleotides from ribose.

Both of these crucial activities can only begin when ribose is converted to 5-phosphoribosyl-1-pyrophosphate (PRPP). If ribose concentrations are not sufficient, PRPP is in low supply and muscle cells cannot adequately recharge. Although the body has the ability to manufacture ribose from glucose, it is a slow process which requires glucose-6-phosphate dehydrogenase (G-6-PDH), an enzyme typically in short supply. Supplemental ribose allows the body to bypass this step, rapidly supplying the compounds needed to boost salvage activity and enhance de novo synthesis.

Ribose also offers powerful, complementary support to creatine by enhancing TAN pools, providing the necessary substrates which creatine can then convert to ATP.

What Is The Source?

Ribose is derived from corn or glucose fermentation.

Recommendations

Pure Encapsulations recommends 1-2 scoops per day (2.2-4.4 grams), 30 minutes before or following an exercise session, or in divided doses before and after exercise. On days with no exercise scheduled, take in the evening before bedtime.

Are There Any Potential Side Effects Or Precautions?

If pregnant or lactating, consult your physician before taking this product. In a small number of instances, diarrhea, gastrointestinal discomfort, nausea, and headache have been reported with ribose supplementation. Ribose may have a hypoglycemic effect, which appears to be transient and clinically non-significant. It is advised that diabetics be supervised closely by their healthcare practitioner.

Are There Any Potential Drug Interactions?

At this time, there are no known adverse reactions when taken in conjunction with medications.

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one scoop contains

d-ribose..... 2.2 grams

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