

Corvalen®

NPN 80068274

DESCRIPTION

Corvalen® D-ribose is a pentose sugar that is designed to provide athletic support by regulating fatigue, energy production and mitochondrial function. This slightly sweet d-ribose powder is rapidly dissolved and readily absorbed into the body.

FUNCTIONS

Corvalen® contains pure D-ribose, a safe and clinically researched ingredient that supports the natural way our bodies produce adenosine triphosphate (ATP), the energy currency of the cell. Ribose is the vital structural backbone of critical cellular compounds called purines and pyrimidines. Our bodies must have an adequate supply of purines and pyrimidines to form major cellular constituents such as our genetic material (DNA and RNA), numerous cofactors, certain vitamins, and, importantly, adenosine triphosphate (ATP). Ribose is the starting point for the synthesis of these fundamental cellular compounds, and the availability of ribose determines the rate at which they can be made by our cells and tissues. D-ribose is a structural component of DNA, RNA, ATP, GTP, flavins (FAD, riboflavin) and other important nucleotides found in all living cells. Ribose is formed naturally via the pentose phosphate pathway. This pathway is slow and rate-limited in cardiac and skeletal muscle due to an inherently low concentration (lack of expression) of the enzymes glucose-6-phosphate dehydrogenase and 6-phosphogluconate dehydrogenase. The product of this pathway is ribose-5-phosphate, which in turn is converted to 5-phosphoribosyl-1-pyrophosphate (PRPP), the primary driver in the synthesis and salvage of purine nucleotides. No other compound can be used by the body for this metabolic purpose. Purine nucleotides (ATP and its precursors) lost due to ischemia, hypoxia or genetic predisposition are replaced via the purine nucleotide pathway. This pathway is rate-limited by the availability of ribose in tissue. Administration of exogenous ribose bypasses the rate-limiting steps in the pentose phosphate pathway, resulting in a significant acceleration of PRPP.

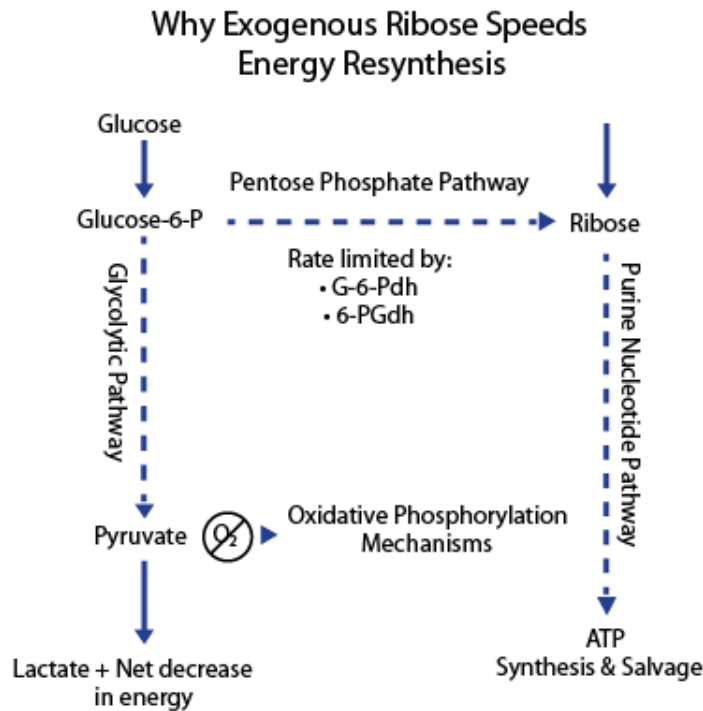
Renewed concentration of ATP is accompanied by an increased energy potential in the cell, also known as the "energy charge." Cardiac and skeletal muscle functions (e.g., contraction, cell wall maintenance, relaxation, polarization of the cell membrane) each require a different, quantifiable energy charge to drive or provide allosteric regulation for each function. Restoration of cellular energy charge restores function consistent with the degree of energy charge restored.

D-ribose is indicated for sports and fitness activities because it helps to promote endurance in extended, high-intensity exercise. It reduces the loss of energy during stress and accelerates energy and tissue/muscle recovery. Both endurance athletes and strength training athletes will benefit from the effects of supplemental D-ribose.

Unless our hearts have an adequate supply of ribose, they simply cannot satisfy their astonishing energy demand. Our bodies make ribose naturally, but in times of stress, the need is greater than our supply to satisfy the loss of energy from our cells. That is why supplementing with D-ribose can provide athletic support, such as helping to maintain healthy stroke volume during and after high-intensity exercise. One study found that supplementation with D-ribose in recreational bodybuilders resulted in significant increases in muscular strength and total work performed. Another study showed beneficial effects on energy levels in participants after only one week of supplemental D-ribose; energy levels continued to increase through the second and third weeks of supplementation.

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Although D-ribose is a five-carbon monosaccharide, it does not raise blood sugar, as outlined in the graph below.



Corvalen® D-ribose is highly soluble in both hot and cold solutions, tastes slightly sweet, and is non-GMO. D-ribose is rapidly and readily (~95%) absorbed with peak blood levels found within 30-45 minutes. Ribose not taken up by the cell is excreted unchanged in the urine.

INDICATIONS

- Athletic support
- Source of carbohydrates to support energy production
- Helps to promote endurance in extended, high-intensity exercise

FORMULA (#57451P-280HYC-C)

Each Scoop (5 g) Contains:

D-Ribose..... 5 g

Protected by U.S. patents 6,159,942; 6,534,480; 6,218,366; 6,339,716; 6,703,370 and other U.S. and foreign patents issued and pending ©2008 Bioenergy, Inc.

SUGGESTED USAGE

Adults: Take 1 scoop (2 teaspoons) twice daily with morning and evening meals. A third scoop may be added at midday as needed, or as directed by your healthcare practitioner. Mix well in 1-2 cups of liquid immediately before consumption. Continued use is required to maintain the benefits of Corvalen®.

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RISK INFORMATION

Consult your healthcare practitioner prior to use if you are pregnant or breastfeeding. Ensure to drink enough liquid before, during, and after exercise.

STORAGE

Store in a cool, dry place. Keep out of reach of children.

REFERENCES

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