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D-RIBOSE

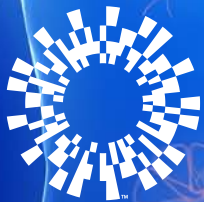
THE HEART-HEALTHY NUTRIENT YOU PROBABLY DON'T KNOW ABOUT

One of the most important nutrients for your heart is a sugar molecule that your doctor probably never told you about. It's called D-Ribose and it's found in every cell in your body, including all of the cells in your heart.

Because of two very important health benefits that D-Ribose provides, many world-class athletes include it as part of their daily nutritional supplement program, and a growing number of cardiologists and other physicians are now recommending it to their patients.

How D-Ribose works

One of the most important ways that D-Ribose works in your body is by maintaining the proper functioning of DNA and RNA, both of which are made up in part by D-Ribose molecules. Together, DNA and RNA serve as the building blocks for your body and all of its cells, tissues, and organs while simultaneously providing the blueprint that each of your body's trillions of cells require to function properly. Without an



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Another reason that D-Ribose is so important for good health is because it is essential for producing adenosine triphosphate, or ATP, is the primary source of energy for all of the literally thousands of tasks your cells perform each day. Without enough D-Ribose, your body cannot manufacture enough ATP to meet its many energy needs.

Because of the essential role D-Ribose plays in the production of ATP, it is a particularly useful supplement during times of stress and illness, since both of these events lead to a loss of

energy in the body caused by diminished ATP production. Supplementing with D-Ribose can avoid this problem, enabling your body to produce the ATP it needs to recover from stress or illness more quickly.


Why D-Ribose is good for your heart

For years, D-Ribose has been shown to be helpful for boosting energy levels in people who were chronically tired, as well as for patients suffering from chronic fatigue syndrome (CFS), fibromyalgia, and other health conditions. More recently, because of how D-Ribose boosts ATP production, many nutritionally oriented cardiologists have begun recommending D-Ribose as a safe and natural means for preventing and

recovering from heart disease. That's because D-Ribose not only increases the production of ATP in cells, it also boosts ATP levels in the body's muscles, including the heart muscle. This has been confirmed by scientific studies showing that D-Ribose, when taken as a supplement, can increase energy production of the heart and other muscles by as much as 430 percent.

And that's not the only cardiovascular benefit D-Ribose provides. Additional research shows that D-Ribose is extremely effective in preventing and reversing a condition known as ischemia, which is characterized by diminished blood flow to and from the heart. When blood flow is reduced, it results in a decreased supply of oxygen to the body's cells, tissues, and organs. Without enough oxygen, cells cannot properly make use of ATP and other energy-producing fuels. As this process continues, increased pressure is put on the heart muscle, further reducing the amount of energy available to the rest of your body. This explains why ischemia patients are so often tired after performing even the simplest of physical activities.

Research shows that ischemia can reduce ATP levels by as much as 50 percent or more. Even when ischemia is stabilized, ATP levels typically do not return to normal until another week to 10 days. In fact, lack of energy is a major symptom for most



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patients suffering from any type of heart disease. D-Ribose can help to prevent and reverse such problems.

Scientists have found that D-Ribose supplements can enable weakened hearts to recover up to 85 percent of their normal ATP levels in as little as 24 hours. Other studies have shown that D-Ribose can restore ATP levels and normal heart function within 48 hours after a heart attack, whereas it takes an average of four weeks for heart function and ATP levels to return to normal without D-Ribose.

The ability of D-Ribose to protect against ischemia is particularly noteworthy for people who are middle-aged or older. That's because the heart muscle typically becomes enlarged and "stiff" as we age, making it more difficult for blood to be pumped to other areas of the body. This, in turn, increases the risk ischemia and explains why ischemia is a more common occurrence in older people.

Research with animals shows that D-Ribose supplementation can protect against ischemia caused by aging, enlarged hearts by improving heart function. In one study, researchers fed D-Ribose to animals with healthy hearts and then induced ischemia. They found that the heart muscles of animals that received D-Ribose were able to stave off irreversible injury when ischemia was induced 25 percent longer than animals in the control group.

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In addition, the animals that received D-Ribose also had significantly higher stores of glycogen, a primary fuel source for the body. This indicates that D-Ribose supplementation can improve survival rates in humans with ischemia.

In the same study, the researchers also showed that D-Ribose supplementation also improved heart function in animals with enlarged hearts by 25 percent, enabling the animal hearts to pump blood more effectively and efficiently.

Based on these and other studies, it's not surprising that D-Ribose is now recommended by many physicians to boost energy and protect against heart disease. If you think that D-Ribose could benefit you too, discuss it with your doctor. You can find D-Ribose supplements at your local health food store. For healthy people, 5,000 mg per day is the suggested dose, which can be increased to 10 to 15,000 mg for people who engage in intense exercise or who suffer from heart disease.

References

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