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## Nutritional Supplements Pose Risks to the Heart



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A recent statement by the European Society of Cardiology (ESC) warns that nutritional supplements taken to boost athletic performance can pose risks to the heart.

"Nutritional supplements are commonly viewed as risk-free substances that may improve performance. Some nutritional supplements, including various plant and 'natural' extracts, may pose a serious health risk and athletes may even risk contravening anti-doping rules," says the ESC statement.

The document also highlights that athletes who use supplements often have no knowledge about the possible effects on sports performance and overall health. There is thus a need for more wide reaching educational interventions. Experts point out that a natural supplement may not necessarily be a safe supplement. Hence, athletes should use supplements from established manufacturers with good quality standards. Athletes need to understand that they are personally responsible for the supplements they consume and ignorance is not an acceptable excuse if they end up with a positive doping test.

The use of legal supplements by athletes varies between 40% and 100% depending on the sport and level of competition. Legal supplements include caffeine, creatine, energy drinks/gels/bars, beetroot juice, and proteins.

"Caffeine is a prime example of a natural substance that is considered safe," said first author Dr. Paolo Emilio Adami of World Athletics, the global governing body for track and field. "While caffeine improves performance, particularly aerobic capacity in endurance athletes, its abuse may lead to fast heart rate (tachycardia), heart rhythm disorders (arrhythmias), high blood pressure, and in some cases sudden cardiac death."

Many athletes consume a combination of supplements daily. They also often ignore dosing recommendations and use multiple drugs simultaneously. This could expose them to the risk of ingesting prohibited substances since they are regulated as food ingredients and not subject to the rigorous safety standards of pharmaceutical products. Also, the use of experimental drugs that have not been proven safe in humans is potentially even riskier than using steroids or other prohibited drugs.

Athletes often use a mix or cocktail of substances to improve their performance. But the interaction between the different substances can be dangerous. All doping substances are risky and their use as medications should only be allowed when prescribed by a physician to treat a medical condition, when no therapeutic alternatives are available, and following the Therapeutic Use Exemption (TUE) requirements.

Therefore, the statement from the ESC warns athletes that they should be aware that all supplements and substances may not necessarily be safe. It is important to only use what has been recommended by professional nutritionists.

Source: ESC

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