

A look at D-ribose supplementation in vivo

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Routledge is proud to offer a research study with the potential to broaden our understanding of the popular dietary supplement d-Ribose. It is an important supplement for humans and the equine because of its crucial role in cellular bioenergetics. D-Ribose Supplementation in the Equine: Lack of Effect on Glycated Plasma Proteins Suggesting Safety in Humans is now available for free access from the *Journal of the American College of Nutrition*, official publication of the American College of Nutrition.

D-Ribose is a naturally occurring sugar, commonly used as a [dietary supplement](#) to improve [muscle recovery](#) in endurance athletes and racehorses. Research backing its benefits, however, is inconsistent, with some studies warning of potential negative effects. Several in vitro (outside normal biological context) studies have raised concerns over ribose supplementation's potential to generate advanced glycation end products (AGEs), compounds in the blood that can cause cognitive impairment and exacerbate numerous degenerative diseases. By testing the supplement's effects on live racehorses, this study is the first to examine d-ribose interaction with mammalian glycation in vivo (within normal biological context).

Two groups of five healthy racehorses at the Berkley Farm in Darlington, Maryland, received a d-ribose supplement daily for 17 weeks. The horses were run through a series of low and high intensity workouts, and were subject to a series of blood tests that measured glycated [plasma proteins](#), the advanced glycation end product of interest. Results showed that d-ribose supplementation didn't promote the formation of glycated

plasma proteins or any other adverse effects, and actually protected the horses from cramping while enhancing muscle recovery. This demonstration of d-Ribose's safety in thoroughbred racehorses suggests similar implications in humans as well.

More information: "d-Ribose Supplementation in the Equine: Lack of Effect on Glycated Plasma Proteins Suggesting Safety in Humans." [DOI: 10.1080/07315724.2015.1022459](https://doi.org/10.1080/07315724.2015.1022459)

Provided by Taylor & Francis

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