

A Review: Role of Leucine as a Sports Supplement

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ABSTRACT Leucine is an essential amino acid that cannot be synthesised by the human body and so the body has to attain it from dietary sources. Besides its role in regulation of the blood-sugar level, wound healing and growth hormone production, it also helps in muscle protein synthesis and in decrease of muscle protein breakdown. L-Leucine, after exercise, stimulates recovery of muscle protein synthesis via translation regulation. Leucine supplementation during exercise is responsible for muscle growth, strength and enhanced performance. Studies recommend 4 grams per day of leucine supplementation for enhancing strength in male gymnasium goers. Leucine supplementation is currently in the scenario but more detailed studies are required on its effect on body composition, performance and health of a sports person. The paper includes comparison and review that will reveal the metabolic functions of leucine in human body, especially in sportspersons.