

## Individualizing Nutrition Strategies in Team Sports: Dietary Supplements

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Dietary supplement use is widespread among athletes at all levels of sport, including team sport athletes. Use of dietary supplements may offer direct benefit to sports performance, support health, training or recovery, supply a convenient form of energy or macronutrients, or help prevent or treat micronutrient **deficiencies**. Supplements that claim to have direct or indirect performance benefits are typically the most heavily marketed to athletes, but only a few (including caffeine, creatine, nitrate and certain buffering agents) have good evidence of effectiveness. Although appropriate use of some supplements may offer benefit, others may place the athlete at risk for adverse **effects** from consumption of overt or hidden ingredients, contaminants or excessive micronutrient intake, or an antidoping rule violation, which could harm the athletes' health, performance and/or livelihood and reputation. This session will review the recommended approach to advise team sport athletes regarding dietary supplement use. This includes completion of a thorough assessment of the athletes' nutritional practices and dietary intake along with a cost-to-benefit analysis of product use and safety concerns (including potential toxic effects) and risk of ingestion of banned substances. Supplement use is best undertaken as an adjunct to a well-balanced sports diet and is hard to justify if the athlete is not obtaining adequate nutrition. Additionally, supplement use is not justified in the young team athlete who can make significant performance gains via growth/maturation, sports experience and development of healthy nutritional habits. Flow diagrams (available as part of the International Olympic Committee consensus on dietary supplement and the high-performance athlete) may be useful for guiding team sport athletes in making informed decisions regarding dietary supplement use.