



# NO GUARANTEES: MANAGING SUPPLEMENT RISK IN SPORT

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Before taking a supplement, competitive athletes need to assess the need, risk and consequence of their use. This is because there are no guarantees that any supplement product is free from substances that are prohibited in sport.

In this article, Prof. Susan H. Backhouse from the Carnegie School of Sport at Leeds Beckett University outlines some important considerations and steps to help athletes make an informed supplement use decision, that minimises their risk of an anti-doping rule violation, or harmful health effects.

## WHAT IS A SUPPLEMENT?

- There is no clear definition, but supplements are purposefully ingested, in addition to diet, to achieve a specific health and/or performance benefit.<sup>1</sup>
- They can be found in pill, capsule, powder or liquid form and contain dietary ingredients (e.g., vitamins, minerals, amino acids, botanicals) that can affect the body.

## WIDESPREAD USE OF SUPPLEMENTS

- For a variety of reasons, between 40 and 100% of athletes use supplements<sup>2</sup>, depending on the sport and level of competition.
- Widespread use of supplements in sport is problematic when combined with the risk of contamination and/or adulteration of supplements with prohibited substances; putting athletes in a vulnerable position of breaking anti-doping rules, and experiencing negative health effects.

## STRICT LIABILITY MATTERS

- An important principle of the World Anti-Doping Code (WADA) is strict liability, which states that every athlete is responsible for a substance found in their bodily specimen, whether or not they used the substance intentionally. Ignorance is not accepted as an excuse in relation to a positive doping test.

## ASSESS THE NEED - SEEK QUALIFIED ADVICE

When considering using a supplement, you should consult a qualified nutritionist or dietitian to identify two key things:

- Are there ways you can adapt your diet to get the full benefits from a food first approach; and
- If there is anything specific missing in your diet that you cannot get from food.

- A “food first” approach, which promotes a focus on conventional food and drinks, is a goal of an evidence-based sports nutrition plan.<sup>3</sup> However, some supplements and sports foods can play a small but valuable role in such a plan.<sup>3,4</sup>
- The Australian Institute for Sport ABCD classification system<sup>3</sup>, provides a tool to rank supplement ingredients according to the scientific evidence that they can safely and practically contribute to an athlete’s goals.
- Whilst a zero-tolerance approach to supplement use has been promoted by anti-doping organisations, there’s growing recognition that ‘food first, but not always food only’<sup>4</sup> is the most appropriate evidence-based strategy, when supported by qualified professionals.

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### ASSESS THE RISK - ONLY USE BATCH TESTED PRODUCTS AND RETAIN RECORDS OF SEARCHES

Be alert! The risk of prohibited substances in supplements has persisted for more than two decades.<sup>5</sup>

- This risk arises because a substance is
  - 1) not declared on the product label,
  - 2) declared, but with another name that does not appear on the WADA Prohibited List, or
  - 3) declared, but the athlete is unaware that the substance is prohibited.
- High risk products include multi-ingredient 'pre-workouts', 'muscle building' and 'fat-burning' products.<sup>6</sup> Athletes are advised to avoid products making exaggerated claims of product effects (e.g., "extreme," "quick results," "all natural").
- If a qualified nutritionist/dietitian has recommended you use a supplement, only use products that have been screened for prohibited substances by an independent company (i.e., only use batch-tested products) to minimise your risks of contamination/adulteration with prohibited substances. Make sure you check the actual batch numbers prior to use. Please note, there are still no guarantees, as risk cannot be completely eliminated.
- The supplement market is poorly regulated. That is why it's important to assess the risk by carrying out detailed research into a supplement you take and retain records of your searches.

### ASSESS THE CONSEQUENCE - PRESENCE OF A PROHIBITED SUBSTANCE IN YOUR BODY COULD RESULT IN A BAN FROM ALL SPORT

- Some supplements not only pose serious risks to athletes' careers—for example, when contaminated products cause them to fail drug tests and lead to a ban from sport—but also their health and wellbeing.
- The sanction for intentional cheating is 4 years for the first offence. To get a reduction in a sanction, the athlete must provide substantial proof they did their research and were not intending to break the anti-doping rules.

#### REFERENCES

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