Journal of Occupational Medicine and Toxicology

Hypothesis

Open Access

Supplement use in sport: is there a potentially dangerous incongruence between rationale and practice?

Andrea Petróczi* and Declan P Naughton

Address: School of Life Sciences, Kingston University, Penrhyn Road, Kingston upon Thames, Surrey KT1 2EE, UK

Email: Andrea Petróczi* - A.Petroczi@kingston.ac.uk; Declan P Naughton - D.Naughton@kingston.ac.uk

* Corresponding author

Published: 29 May 2007

Journal of Occupational Medicine and Toxicology 2007, **2**:4 doi:10.1186/1745-6673-2-4

Received: 30 January 2007
Accepted: 29 May 2007

This article is available from: http://www.occup-med.com/content/2/1/4

Abstract

Background: Supplement use by athletes is complex and research supports the alarming notion of misinformed decisions regarding supplements.

Hypothesis: A frequent divergence between the type of supplements chosen by athletes and the rationale dictating the supplement use is hypothesized. Thus, a potentially dangerous incongruence may exist between rationale and practice.

Testing the hypothesis: In the continued absence of reliable data on supplement use, an alternative approach of studying the reasons underlying supplement use in athletes is proposed to determine whether there is an incongruence between rationale and practice. Existing data from large scale national surveys can be used to investigate this incongruence.

Implications of the hypothesis: In this report, analyses of distinctive patterns between the use and rationale for use of supplements among athletes are recommended to explore this potentially dangerous phenomenon.

Background

'Supplement' is an overarching name for vitamins, minerals, herbal remedies, traditional Asian remedies, amino acids and other substances to be taken orally. They may also be referred to as dietary, food or nutritional supplements or ergogenic aids (supplements purported to improve athletic performance) and are typically sold in the form of tablets, capsules, soft gels, liquids, powders, and bars. In the UK, most supplements are regulated as foods and subject to the general provisions of the Food Safety Act 1990, the Food Labelling Regulations 1996 and the Trade Descriptions Act 1968. Supplements are not required to exhibit efficacy before marketing, nor are they subject to prior approval unless they are genetically modified or claimed to be new. Medicinal claims on packaging or in an advertisement for a supplement, however, are prohibited.

Widespread debate has accompanied the introduction of new legislation on the use of dietary supplements within the EU. Comprehension of detailed studies, ranging from quantities and patterns of use to side-effects of supplement consumption, has been impeded by variations in terminology and practice amongst countries and user groups. Some thirty thousand supplements are commercially-available in the USA [1] with approximately half of the adult female population being regular users [2-4], with possible adverse effects of unregulated supplement use on health and disease outcomes being of particular interest [1].