

Empty-basket philosophy



While chatting to Shelly Meltzer, head of the dietary practice at the Sports Science Institute of South Africa, I learnt about a new concept: the empty-basket or full-basket approach to managing athletes. Shelly used this term in describing the approach she is using when she consults with athletes about nutritional supplements. It is well known from a variety of studies around the world that about 60% of elite athletes ingest supplements¹ and most of these

athletes work on the assumption that all supplements are effective and adopt a 'more-the-merrier' approach to what supplements they choose to ingest. The full-basket approach is in accordance with this way of thinking. It follows that if you train hard your body needs extra nutrition, which can only be obtained by ingesting supplements. By flooding the body with nutrients, those nutrients that are required are absorbed, and those that are deemed unnecessary, or in excess, are excreted – the net result, according to this approach, is that all the nutritional demands are met. This approach provides comforting insurance, satisfying a 'just in case ...' way of thinking.

The athletes who adopt this approach have mindsets which are wired to ensure that they have an abundance of nutrients, in the event that their bodies need something that is not covered in their habitual nutrition. This is analogous to a caterer preparing for a meal, not knowing the likes and dislikes of the people who will be eating the meal. As a safeguard the caterer provides an excessive variety of food, incurring large amounts of waste and expense. Athletes who subscribe to the full-basket approach also do so at excessive monetary cost, while producing nutritious urine which is flushed down the toilet. These athletes also increase their risk of ingesting a contaminated supplement resulting in the failure of a drug test.² Such athletes are difficult to counsel because this way of thinking is resistant to change. A pragmatic strategy for a dietitian dealing with this type of athlete is to offer advice on what they can remove from their full basket, rather than advising on what they should put in. In other words, their full basket needs to be systematically emptied.

In contrast, the empty-basket approach describes a bottom-up approach in which the first step is to examine what an athlete is currently eating. The next step is to make recommendations that accommodate the specific demands of the athlete (i.e. age, gender, training load, level of performance, type of sport, phase of season). Once the athlete's eating habits have been optimised the dietitian carefully considers whether nutritional supplements should be prescribed. Recommendations are then made about the dose and brand of supplement and the timing of the ingestion. This is done in accordance with the risk associated with contaminated products. With this approach athletes are monitored and adjustments are made, if necessary, to the supplements. Younger, less experienced athletes are more likely to be amenable to this approach.

There is no doubt that the empty-basket approach is logical and appealing to anyone who believes in an evidence-based approach to managing athletes. It requires an understanding of the principles of nutrition and the demands of exercise and then matching the two. The reality, however, is that the full-basket approach is more common, particularly among experienced high-performance athletes. The full-basket approach follows the path of least resistance, a quick-fix mentality inculcated by peers, and promoted by manufacturers, eager to get a slice of the multibillion dollar international industry. The manufacturers of supplements take advantage of this mentality and flood the market with new products with wonderful claims about their efficacy, cunningly supported by pseudoscience. It is an enormous challenge for health care providers working with athletes, but the only way to change the current prevailing pattern is to consistently promote the empty-basket approach so that this becomes the norm around which recommendations are made.

Mike Lambert

Editor-in-Chief

1. Maughan R. Contamination of dietary supplements and positive drug tests in sport. *J Sports Sci* 2005;23(9):883-889.
2. Van der Merwe PJ, Grobbelaar E. Unintentional doping through the use of contaminated nutritional supplements. *S Afr Med J* 2005;95(7):510-511.