Improving pharmaceutical care for athletes: A proposed assessment tool and useful resources

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PHARMACISTS OFTEN OVERLOOK ATHLETES AS patients who might benefit from trusted pharmaceutical advice. Many athletes are strongly motivated to seek techniques or substances to optimize performance. Any strategy to increase performance, from anabolic steroids to visualization techniques, can be referred to as an ergogenic aid.^{1,2} Most pertinent to pharmacists are the regulated pharmaceutical ergogenic aids, such as natural health products (NHPs) or supplements.¹ A recent survey of college athletes indicated that 42% had used supplements within the previous year.² With high use, pharmaceutical support is required.

Ample misinformation surrounds NHPs and supplements. Product marketing overemphasizes the benefits and minimizes the shortcomings. However, athletes continue to financially fuel the industry, hoping that marketing claims are factual. When selecting supplements, athletes often place high value on testimonial evidence. As pharmacists—grounded in evidence—an opportunity exists to improve care. As Peter J. Ambrose, Doping Control Officer of the Sydney and Beijing Olympics, states, “Pharmacists are primed to recommend products supported by efficacy and safety data while considering an athlete’s specific needs.”³

Accompanying this opportunity is notable demand from athletes. In the United States, one study showed that over 1000 drug or NHP inquiries were made to the National Collegiate Athletic Association each month between July 2009 and June 2010.² Pharmacists are urged by various sources, including the International Pharmaceutical Federation, to

expand their knowledge about pharmaceutical care for athletes, but there is little evidence of pharmacists providing support.^{4,5} Undoubtedly, pharmacists have a wealth of useful knowledge to assist athletes.

Barriers exist in providing pharmaceutical care to athletes. A lack of adequate resources and reliable evidence inhibits pharmacists from providing efficient, evidence-based recommendations.⁶ To help alleviate this obstacle, reliable resources to support pharmacists can be found, although some may be considered unconventional (Table 1).

Even with accessible and reliable information, answering athletic supplement questions may feel foreign. The “WEIGHTS” acronym (Table 2) presents a simplified method to address athletes’ questions. The 7-point approach assists in collecting key information prior to making a supplement recommendation. “WEIGHTS” aims to balance an athlete’s personal desire to purchase a product with available evidence on efficacy and safety. As NHPs and supplements are available over the counter, product selection is ultimately up to the patient. Therefore, as pharmacists, we must develop patient relationships to assist with appropriate selection.

Ubiquitous supplement use and misinformation have created an opportunity for pharmacists to greatly improve the pharmaceutical care provided to athletes. Barriers to providing care are undoubtedly present but are surmountable. Using the streamlined “WEIGHTS” acronym and reliable resources, pharmacists can provide the efficient, evidence-based advice athletes require. ■

TABLE 1 Resources for pharmacists addressing questions on athletic supplements

Description	Athlete-specific information	References provided	Access
Databases			
Natural Standards Database www.naturalstandard.com			
User-friendly, comprehensive database, including a variety of products	Section specific to sport medicine Search by indication (e.g., athletic performance)	Yes	Fee for subscription
Examine.com http://examine.com/			
Athlete-focused database providing evidence-based information on common athletic supplements	Athlete-focused information	Yes	Limited free access Full access requires payment
Natural and Non-prescription Health Products Directorate www.hc-sc.gc.ca/dhp-mps/prodnatur/applications/licen-prod/lnhpd-bdpsnh-eng.php			
Database of products found to be safe, effective and of high quality by Health Canada	Not specific to athletes	Yes Product monograph provided	Free access
Informational websites			
World Anti-Doping Agency (WADA) http://list.wada-ama.org/prohibited-in-competition/prohibited-substances/			
International organization devoted to antidoping in sport	Athlete-focused information Includes frequently updated list of banned substances	Not applicable	Free access

TABLE 2 “WEIGHT\$” acronym for pharmacists addressing questions on athletic supplements

	Discussion point	Explanation	Rationale
W	What’s the goal?	Determine what the athlete wishes to achieve by taking the product.	Knowing the athlete’s goal may allow you to consider alternative supplements.
E	Exercise type?	What is the athlete’s main type of exercise (e.g., endurance, strength)?	Product efficacy may differ depending on exercise type.
I	Indicate who recommended supplement	Who recommended the supplement? (e.g., health care provider, teammate, trainer)	Allows for collaboration among health care providers.
G	Gather personal history and investment	Gather the athlete’s medical and medication history. Determine how invested the athlete is in taking this particular supplement (or supplements in general).	Balance athlete’s personal desire to take a product with the efficacy and safety data.
H	How effective is the supplement?	Will this product assist the athlete in achieving his or her desired goal?	Efficacy and safety data should ideally guide the recommendation.
T	The risk of the supplement?	Is the product safe for this individual? (e.g., side effects, drug interactions, contraindications, allergies, potential prohibited substance, etc.)	Primary concern is to ensure patient safety.
\$	Cost-effective?	Is the potential efficacy worth the cost of the supplement?	Allow athlete to balance cost with potential benefit.

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