Young Athletes and the Psychology of Supplementation

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AS THE POPULARITY of sport supplements continues to grow among young athletes, athletic trainers need to be aware of their use and have knowledge of the effectiveness of different supplements. Furthermore, athletic trainers need to understand the motivations driving use of supplements and best practices for guiding athletes to make good choices.

Sources of Information

Dieticians and nutritionists are the most credible sources of nutritional information, but television, magazines, and the Internet are often relied upon for such information as well. Information is often derived from conversations between individuals that contributes to a “ripple effect” of supplement use among young athletes. For young female athletes, family members have been reported as the primary source of information about supplements. For male athletes, retail store employees, friends, teammates, coaches, and athletic trainers serve as primary sources of information. The volume of questionable information that is available on supplements presents a challenge to the communication of accurate information.

For example, a Google search of “nutritional supplements” yields close to three million sources, few of which provide any sound basis for the accuracy of the information provided. Further complicating the situation is that the majority of sport supplement marketing claims lack research evidence. Young athletes often make a personal decision about the reliability of a given source of supplement information, which becomes the basis for subsequent actions. Lack of nutrition knowledge undoubtedly plays a central role in the decision to use supplements that are associated with health risk, negative influence on performance, or unnecessary cost.

Motivations for Use of Supplements

Motivations for supplement use include perceived health benefits, performance advantages, sport-specific incentives, competitiveness, pressure for success, and body image considerations. Socio-cultural factors also influence supplement use, such as messages from the media, parents, peers, and perceived social pressure. Within a social learning framework, motivations driving use can be explained on the basis of a young athlete’s interpersonal contacts. These social interactions influence (a) the athlete’s positive or negative attitude toward supplement use, (b) the extent to which the athlete feels a need to comply with significant others’ expectations to feel accepted (subjective norms), (c) the
athlete’s intent to use supplements (behavioral intentions), (d) the athlete’s perception of ease associated with supplement use (perceived behavioral control), and (e) the athlete’s perception of the impact of social resources on the decision-making process (perceived power). 10

A very powerful motive driving supplement use is the establishment and confirmation of athletes’ identity as “real athletes.” 11 Young athletes construct their identities through observation of the sport culture in which they train and compete. In this context, athletes may adopt a course of action that is likely to further support their identities and confirm a commitment to the sport. Being recognized as “real athletes” by others is interactive, progressive, and voluntary. 11 Young athletes demonstrate their qualities to others in an effort to prove value or usefulness (e.g., being a “regular” at early morning workouts). To continue moving up within the competitive hierarchy, athletes will progressively and voluntarily increase levels of sacrifice and commitment (e.g., choosing to load excessive amounts of Creatine prior to the early morning workouts).

Although sacrifice and commitment are perceived as voluntary means to achieve individual and team goals, athletes are often expected to behave in ways that may go beyond that which is considered healthy or normal for the general population. 12 Manifestations of conformity to excessive expectations in competitive sports may include a tremendous amount of physical training, substantial time away from family and friends, constant calorie counting, or a large amount of supplement intake. Similar to physical overtraining, the “more is better” approach to supplement use is often based on honorable intent. In a competitive environment that imposes pressure for success on young athletes, supplement use is often perceived as an expectation. 7,8,13 The more exclusively an individual’s self-identity is tied to sport (personally and socially), the more likely he or she will unconditionally conform to expected behavior. 8 Because athletes will do just about anything to improve performance, they are willing to go beyond that which is considered normal in order to achieve success. 8,12

**Practical Application**

Despite the potential for negative consequences associated with the use of certain supplements on the market, 1 young athletes will continue to purchase and use supplements in response to competitive pressures placed upon them. The responsibility for educating young athletes about the safe and effective use of supplements should be accepted by professionals who work closely with them (Table 1). Athletic trainers and therapists should serve as sources of clear and compelling information for young athletes. 13 Effectiveness in this role may be enhanced through the following:

- **Be aware of your influence.** Athletic trainers clearly influence young athletes’ intentions to use supplements. 13 What influence do you have? Examine your own beliefs about use of supplements and the competitive sport culture. Reflect on the role you play in influencing your athletes’ decision-making processes. 4

- **Be educated.** Inform yourself and coaches about scientific research findings pertaining to supplement use, including both its positive and negative aspects. 4 Are the supplements needed to ensure proper nutrition? What types of supplements are appropriate for the young athletes? How much and how often? Awareness of reliable information about the effectiveness of available supplements will give you credibility.

- **Be real.** Encourage honest discussions about supplement use. When questions arise, provide answers that are based on research findings, including both benefits and adverse effects. 7 Concealing or understating experimentally confirmed benefits will discredit you.

- **Know your audience.** Focus discussion on topics that are specific to the athlete or group of athletes with whom you work. Consider the needs and interests of the individual athlete, or group of athletes, in terms of sport, skill level, gender, age, and/or grade level. 4

- **Focus on beliefs and consider motives.** Understanding athletes’ attitudes and beliefs about supplement use, and the influence that others may have on their decisions to use supplements, may be more important than any facts that you can provide. 4 Discussion of motives influencing supplement use may provide opportunities to clarify misconceptions, while presenting facts about more appropriate alternatives. 7

- **Emphasize healthy alternatives.** Athletic trainers can emphasize healthy alternatives to supplement use by making science-based nutritional information available to athletes, along with information on biomechanical, physiological, and psychological aspects of training. 2,7 As part of psychological training, skills related to resisting social pressures should be encouraged. 7

- **Refer to trained professionals.** If you are aware of a potential problem relating to an athlete’s supplement use, or are unsure of whether or not a problem exists,