



Promoting exercise and preventing injury

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Exercise is a miracle drug. But it is hard to get our patients to take it, and generally we have been ill-trained to write the prescription.¹ Further, girls are disproportionately affected by the epidemic of sedentary living, with only 1 in 20 adolescent girls meeting daily exercise recommendations to maintain good health.²

In 2007 the American College of Sports Medicine launched an international initiative called Exercise is Medicine to provide leadership in promoting physical activity as a chronic disease prevention and management strategy.³ One of its key goals has been to increase the number of health care professionals assessing, prescribing, and counseling patients on physical activity.

In 2012 the Canadian Academy of Sport Medicine (CASM) added an *E* to its name, becoming the Canadian Academy of Sport and Exercise Medicine (CASEM), likewise recognizing that “exercise is medicine.” This has fostered some physicians who advocate adopting exercise as the newest vital sign.⁴ Exercise prescription can be selectively used by FPs to improve the health of all patients. In the past, sport medicine was seen by some as a “boutique” practice catering to elite amateur or professional athletes; with the adoption of the concepts of exercise as medicine, the exercise vital sign, and exercise prescription, sport and exercise medicine is now grounded in mainstream family practice.

There is more reason for optimism: girls are becoming more physically active, as reflected in the growth in girls’ participation in high-intensity sports such as soccer. In 2008 there were more than 850 000 registered youth soccer players in Canada, 42% of whom were girls, and the annual growth rate in soccer participation in Canada is about 2%.^{5,6} Among active Canadian children, soccer is the most popular sport, with almost twice as many of those younger than 14 playing soccer than hockey.⁷ If we consider the number of unregistered players who play casually or through school programs, the numbers are higher.

Although this rise in girls’ participation in sport is good news, there is also some cause for concern. Anterior cruciate ligament (ACL) injury has a 4- to 6-fold greater incidence in female athletes compared with males playing the same landing and cutting sports like soccer.⁸ Rupture of the ACL is costly in terms of surgery and rehabilitation, potential loss of long periods of sports participation, lowered academic performance, long-term disability, and greater risk of radiographically diagnosed osteoarthritis later in life.⁸ Combined, increased risk of ACL injury and the rise in participation of girls in sports such as soccer means a corresponding increase in ACL injuries, with the attendant costs.

Recognizing this, in the May issue of the *Clinical Journal of Sport Medicine*, CASEM is publishing an important position paper on injury prevention (in particular ACL injuries) in youth soccer players,⁹ which we would like to draw to the attention of a broader audience of FPs.

Preseason and in-season neuromuscular training programs based on the FIFA 11+ injury prevention program¹⁰ not only improve player performance, but also reduce ACL injuries in young soccer players, as evidence from meta-analyses and systematic reviews confirms. Although some early studies appeared to refute these findings, evidence-based reviews have allowed CASEM to recommend implementation of such prevention programs for all Canadian youth soccer teams.

Among the challenges of implementing a large-scale injury prevention program are educating national, provincial, and local governing bodies of youth soccer about the evidence and encouraging them to incorporate FIFA 11+ in coach, parent, and player education; and changing the attitudes of coaches, who traditionally have regarded training that does not obviously resemble playing soccer as a waste of time or a threat to the limited training time available. Adding training time and engaging and soliciting feedback from players and coaches could be critical to success.

As FPs, we have an important role in encouraging youth to be active and to participate in sport. We can also help reduce the risk of serious injuries by ensuring governing bodies of youth soccer understand the importance of widespread implementation of FIFA 11+, and by educating our patients—kids, parents, and coaches—about effective prevention using FIFA 11+, no matter the level of play. 🌟

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Competing interests
None declared

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