



Personal trainers for obese patients

We welcome the progressive recommendations of the Obesity Canada Clinical Practice Guidelines Expert Panel in their 2006 clinical practice guidelines (particularly those of Robert Dent and colleagues in Chapter 9) regarding the role of exercise professionals in the management and treatment of obesity.¹ However, Dent and colleagues imply that it is appropriate for overweight and obese patients to work with personal trainers who have designations offered by organizations that do not require a college or university exercise science education. We are concerned with the implications of these statements for the safety and well-being of patients with obesity and other chronic diseases and of Canadians in general.²

As identified throughout the 2006 clinical practice guidelines, many overweight and obese people have an increased risk of developing comorbidities, including cardiovascular disease. It is therefore imperative that exercise professionals have a clear knowledge of the absolute and relative contraindications to exercise for patients with chronic diseases. Such knowledge can only be attained through a formal postsecondary exercise science program.

Exercise professionals (with the appropriate academic and practical training) have the knowledge to provide information to patients that is based on

sound physiologic principles, a clear awareness of the contraindications to exercise, and an extensive understanding of research and its practical application. In Canada, exercise professionals who have undertaken advanced academic and practical preparation are recognized through the comprehensive certifications provided by the Canadian Society for Exercise Physiology (CSEP), which include the CSEP-Certified Personal Trainer and the CSEP-Certified Exercise Physiologist certifications.² As physicians specializing in exercise science and other allied health professionals, we cannot endorse personal training designations that do not require postsecondary education in exercise science.

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Diabetes and osteoporotic fractures

In a recent study of bone mineral density and fracture burden in postmenopausal women, Ann Cranney and colleagues reported that most of the fractures in their study population occurred in women with normal or osteopenic bone mineral density.¹ The authors suggested that factors other than bone mineral density may influence bone strength or the risk of falls and thereby contribute to fracture risk. However, they did not mention type 2 diabetes mellitus as a potential factor contributing to fracture risk.

Mounting evidence suggests that patients with type 2 diabetes may be at increased risk of having certain types of osteoporotic fractures even if their bone mineral density is high.^{2,3} Of note, diabetes has been shown to be a risk factor for increased mortality in patients with a hip fracture.⁴ The fact that the number of patients with diabetes who are being treated with thiazolidinediones is increasing might help to explain the higher fracture risk.⁵ Thus, type 2 diabetes should be considered as an important clinical risk factor in the calculation of future fracture risk.

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