

Moving Ahead With Physical Activity

Preface

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Exercise has long been identified as one of the cornerstones of diabetes management. More recently, we now have proof that exercise is also vital in postponing or preventing the onset of type 2 diabetes. In this From Research to Practice section, we focus on a broad range of topics relating to exercise and diabetes to provide an update on current exercise recommendations and to raise issues that are thought-provoking and timely. These articles are written by experts in the areas of exercise physiology, physical therapy, epidemiology, nutrition, and medicine.

In October 2004, a new technical review titled “Physical Activity/Exercise and Type 2 Diabetes” by Sigal et al.¹ was published in *Diabetes Care*. Because it provides a thorough review of this topic and includes important recommendations for practicing clinicians, we have chosen to begin our research section by reprinting an abridged version of it here (p. 87–101). This technical review includes information about evaluating patients before recommending an exercise program, as well as recommendations for aerobic, resistance, and flexibility exercises. It also contains valuable information about exercise in the presence of nonoptimal glycemic control and long-term complications of diabetes.

Although many clinicians do not work regularly with competitive athletes, most would benefit from greater knowledge in this area. Individuals with diabetes who are interested in pursuing competitive athletic endeavors should be able to get basic guidance and direction from their diabetes clinicians. Based on available research and their own significant experience in working with this special popula-

tion, Hornsby and Chetlin (p. 102–107) provide practical information for working with athletes who have type 1 diabetes. Topics addressed in their article include motivation for sports participation, methods athletes use to improve their performance and the impact of those methods on diabetes, and recommended strategies for working with competitive athletes.

Everyone has a part to play in improving rates of participation in physical activity. This includes health care and public health professionals, schools, businesses, community groups, and policy makers. In our next article, Mullooly and Kemmis (p. 108–113) provide a thought-provoking discussion of the role of diabetes educators in developing and implementing the exercise prescription as part of patients’ diabetes self-management training plans. They provide specific recommendations for the exercise prescription, describe the contributions that physical therapists and clinical exercise physiologists make to the diabetes team, and encourage all diabetes educators to become responsible for the exercise component of their patients’ care regimens.

Any discussion of exercise and diabetes would be incomplete without addressing primary prevention of type 2 diabetes. Here, Kriska et al. (p. 114–118) take this topic to a new level. They focus on ways to help address the critical problem of the high prevalence of sedentary lifestyle throughout the United States. The real test following large-scale research trials such as the Diabetes Prevention Program (DPP) is implementation of the findings in real-life communities and under the real-life circumstances people face every day. Through clever fishing analogies, true stories, and

research findings, these authors help translate the public health recommendations and the DPP findings regarding increasing moderate physical activity into practical solutions clinicians can use both with their patients and for themselves.

Exercise provides numerous benefits to anyone, especially those with or

at risk for diabetes. However, it continues to be something that far too few people have made a part of daily life. It is our hope that, going through this From Research to Practice section, readers will gain new information and be recharged to actively pursue exercise, both with their patients and in their own lives. We are all

responsible for working to improve and increase participation in active lifestyles.

Reference

¹Sigal RJ, Kenny GP, Wasserman DH, Castaneda-Sceppa C: Physical activity/exercise and type 2 diabetes (Technical Review). *Diabetes Care* 27:2518–2539, 2004