

The prevalence of diabetes mellitus has been increasing steadily; according to the American Diabetes Association (2007) 7.8 percent of the US population is diabetic and 23.1 percent of people over age 60 have the disease. This short course is designed to provide an update on the current understanding and management of diabetes, considering pathophysiology, systemic review of clinical implications, pharmacologic approaches and implications for physical therapy clinical decisions including exercise prescription.

Learning Objectives:

Following the presentation, the participant will be able to:

- 1) describe pathophysiology of Type 1 and Type 2 Diabetes Mellitus
- 2) evaluate implications of the multi-system involvement of diabetes on physical therapy examination and interventions
- 3) discuss impact of pharmacologic management of hyperglycemia on physical therapy clinical decisions
- 4) develop a safe and effective exercise prescription for a patient with Diabetes
- 5) discuss current management of diabetic foot

Key References:

Cade, Diabetes-related Microvascular and Macrovascular diseases in the physical therapy setting. *Physical Therapy* 2008 88: 1322-1335.

Deshpande, Harris-Hayes, and Schoutman. Epidemiology of Diabetes and Diabetes-Related Complications

PHYS THER 2008 88: 1254-1264

Gulve. Exercise and Glycemic Control in Diabetes: Benefits, Challenges, and Adjustments to Pharmacotherapy

PHYS THER 2008 88: 1297-1321

Marcus, Smith, Morrell et al. Comparison of Combined Aerobic and High-Force Eccentric Resistance Exercise With Aerobic Exercise Only for People With Type 2 Diabetes Mellitus *PHYS THER* 2008 88: 1345-1354

Sigal et al. Effects of Aerobic Training, Resistance Training or Both on Glycemic Control in Type 2 Diabetes: a Randomized Trial. *Annals of Internal Medicine*, 2007, 147:357-359.

Speaker Credentials/ Bio:

Dr. Beverly D. Fein received her BS in Physical Therapy from the University of Pennsylvania, MS from Temple University and her EdD in Educational Leadership from the University of Bridgeport. She serves as Associate Professor of Physical Therapy and Director of Clinical Education in the Program in Physical Therapy at Sacred Heart University in Fairfield, CT. Areas of presentation and publication include: the impact of communication apprehension on clinical education and on physical therapy practice, developing clinical teachers, the incidence of health disparities in the Latino community, and preparing culturally competent students and practitioners. She is a credentialed trainer of for both the Basic and Advanced APTA Clinical Instructor Training Workshops. She teaches content dealing with management of medical complexity including cardiovascular, pulmonary and integumentary issues and diabetes. Recent research is focused on physical therapist roles in emergency preparedness/all hazards situations.