



Steven N. Blair, P.E.D.

Steven N. Blair is Professor in the Departments of Exercise Science and Epidemiology and Biostatistics at the Arnold School of Public Health, University of South Carolina. Dr. Blair is a Fellow in the American College of Epidemiology, Society for Behavioral Medicine, American College of Sports Medicine, American Heart Association, and American Kinesiology Academy; and was elected to membership in the American Epidemiological Society.

Dr. Blair is a past-president of the American College of Sports Medicine (ACSM), National Coalition for Promoting Physical Activity, and the American Kinesiology Academy. Dr. Blair is the recipient of three honorary doctoral degrees--Doctor *Honoris Causa* degree from the Free University of

Brussels, Belgium; Doctor of Health Science degree from Lander University, U.S.; and Doctor of Science *Honoris Causa*, University of Bristol, UK. He has received awards from many professional associations, including a MERIT Award from the National Institutes of Health, ACSM Honor Award, Population Science Award from the American Heart Association, and is one of the few individuals outside the U.S. Public Health Service to be awarded the Surgeon General's Medallion. He has delivered lectures to medical, scientific, and lay groups in 48 states and 50 countries. His research focuses on the associations between lifestyle and health, with a specific emphasis on exercise, physical fitness, body composition, and chronic disease. He has published over 550 papers and chapters in the scientific literature, and is one of the most highly cited exercise scientists with over 31,000 citations to his body of work. He was the Senior Scientific Editor for the U.S. Surgeon General's Report on Physical Activity and Health.

Cardiorespiratory Fitness and Diabetes: A Review of the Epidemiology

Sedentary habits are highly prevalent around the world, and a WHO report indicates that physical inactivity is the fourth leading risk factor for deaths, following high blood pressure, tobacco use, and high blood glucose. Low cardiorespiratory fitness, which is caused by physical inactivity, is a major predictor of incident type 2 diabetes. This benefit occurs in normal weight, overweight, and obese individuals. Moderate to high cardiorespiratory fitness, which can be developed by 150 minutes of moderate intensity physical activity per week, is associated with lower mortality rates in persons with type 2 diabetes. This benefit is seen in all weight categories. Obese individuals with diabetes who are at least moderately fit have much lower death rates during follow-up than do normal weight individuals who are unfit. Regular physical activity is a key factor in preventing diabetes, and has major benefits for those who have diabetes.

Learning objectives:

1. Participants will be able to describe the extent of physical inactivity world-wide.
2. Participants will understand the role of physical inactivity and low cardiorespiratory fitness in the prevention of diabetes.
3. Participants will understand the value of maintaining cardiorespiratory fitness in individuals with diabetes.