

# **FallProof!**

**Second Edition**

**A Comprehensive Balance and  
Mobility Training Program**

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**Human Kinetics**

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With thanks and gratitude to all the older adults who have touched my life and inspired me to create this program.



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# Preface

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Maintaining balance and mobility is essential to aging successfully. In addition to making it possible to perform basic activities of daily living, such as rising from a chair or climbing a flight of stairs, good balance forms the foundation on which a healthy and active lifestyle is built. Impairments in any of the multiple systems that contribute to postural stability not only limit the extent and type of physical activities we pursue as we grow older but also may result in falls, leading to further restrictions in activity and profound psychological consequences. The strong association between impaired balance and mobility and greater risk of falling suggests the need for activity-based programs that specifically *and* systematically focus on improving the multiple dimensions of the balance system, particularly among older adults.

The second edition of *FallProof! A Comprehensive Balance and Mobility Training Program* not only builds on the knowledge presented in the first edition but also provides a structured approach to the design and implementation of a balance and mobility program that reduces many of the risk factors that contribute to falling. This program remains the first published balance and mobility program to provide the reader with the fundamental theoretical concepts and practical skills needed to assess and design effective activity programs for older adults with balance and mobility disorders as well as a comprehensive set of progressive balance activities that address the important dimensions of balance and mobility. The program in this guide is based on sound, theoretical research, and a group-based version of the program has been field-tested extensively by many physical activity instructors and rehabilitation specialists working with older adults across a broad continuum of functional abilities. The innovative balance and mobility program described in this book was developed at the Center for Successful Aging at California State University at Fullerton and is currently being implemented in numerous community-based and residential care settings with considerable success. Physical activity professionals who embrace this unique multidimensional programming approach to treating balance and mobility disorders can expect to achieve the same success.

The second edition of *FallProof! A Comprehensive Balance and Mobility Training Program* is divided into three parts. Part I, *The Theory Behind the Program*, provides the reader with in-depth knowledge about the various body systems that contribute to balance and mobility and the common age-related changes that occur in each of these systems. The external and internal risk factors known to be strongly associated with falls among the older adult population are also discussed, as are the common medical conditions and medications known to adversely affect balance and mobility.

Part II begins by describing a concise set of balance and mobility assessments used to evaluate every client entering the FallProof™ program both before and at regular intervals throughout the program. These assessments measure the multiple dimensions of balance and mobility and provide the instructor with the information needed to determine where each participant should start in each of the six major components of the FallProof program. These components, described in the remainder of part II, include (1) center-of-gravity control training, (2) multisensory training, (3) postural strategy training, (4) gait pattern enhancement and variation training, (5) strength and endurance training, and (6) flexibility training. In addition to describing a set of progressive exercises for each component of the FallProof program, each chapter provides ideas for increasing

the challenge associated with each balance activity. Advanced progressions are based on manipulating the task demands and the environmental constraints to progressively challenge the individual capabilities of the participants. At-a-glance summary tables are also provided in chapters 5, 6, 8, and 9 to further guide the instructor.

Part III of the book describes how to implement a balance and mobility program. The first chapter in this part describes contemporary principles of motor learning that will enable instructors to foster optimal learning, develop effective lesson plans, organize the classroom environment to maximize safety and efficiency, and provide meaningful feedback to program participants. The second and final chapter describes the leadership and class management skills needed to be a successful balance and mobility instructor. It covers the important activities that must be completed (a) following the initial assessment of program participants and before the start of the program, (b) before the start of each class session, (c) during each class session, (d) between class sessions, and (e) after each follow-up assessment. It also describes how to communicate effectively with program participants.

This instructor guide will be an invaluable resource for experienced health care professionals and physical activity instructors who want to acquire the specialized knowledge and practical skills needed to develop and implement programs that improve the balance and mobility of older adults. The wide range of exercise progressions described and the ideas for manipulating the challenge associated with each exercise make *FallProof! A Comprehensive Balance and Mobility Training Program* a versatile guide in programming for older adults who come from a broad range of functional levels. Although physical activity instructors who have not yet completed the academic and practical skills training needed to work with at-risk older adults can also use this instructor guide to learn how to incorporate more balance and mobility exercises into their senior fitness programs, they should not develop a specialty balance and mobility program for at-risk older adults until they have completed additional training in the area.

*FallProof! A Comprehensive Balance and Mobility Training Program* is the first systematic effort to develop a structured and progressive program of activities specifically designed to address the multiple dimensions that contribute to balance and mobility.

This instructor guide serves as the core text for the balance and mobility instructor specialist certification program, which began operating at California State University at Fullerton in 2001. Readers interested in developing their knowledge and practical skills in balance and mobility training so they can become certified to implement the FallProof program should consider enrolling in this certification program. The program is staffed by an outstanding group of experienced kinesiologists and physical therapists with expertise in geriatric assessment and rehabilitation. Information about the certification program and an online application can be obtained by logging onto the Center for Successful Aging Web site at <http://hhd.fullerton.edu/csa>.

New to the second edition is a supplementary DVD that includes video clips and the forms you will need to assess your clients and monitor their progress throughout the program. Icons (such as the two on this page) appear throughout the text, alerting you to the contents of the DVD. You will find the instructional videos for the Fullerton Advanced Balance (FAB) scale and the 30-foot walk test particularly helpful in preparing you to administer these tests. You can also test your readiness to administer and score the FAB scale



by watching the case study video and scoring each test item of the FAB scale after it is administered. Finally, the DVD contains short video clips highlighting different exercise progressions related to each core component of the program and a 30-minute FallProof class with Harriet and Ben, two of my wonderful clients from the Center for Successful Aging.

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