



## Keeping Healthy with OPTM Sports Therapy

# Are You Balanced?

Balanced as an important component of rehabilitation protocols focussing on the trunk and lower extremities. Balance deficits can have a major impact on health and well being, particularly in the elderly. 40% of women over 50 will incur a fracture as a result of a fall. Roughly a third of people over 65 living at home will fall at least once, and half of the people over the age of 65 hospitalized as the result of a fall will die secondary to complications within the following year. The American population is growing older, with an increase in fall-related mobility and mortality rates.

Balance depends on multiple sensory inputs: *vision, vestibular, and proprioception*. Integration of all these senses must also be combined with an intact musculo-skeletal system capable of responding to challenges to balance.

*Vision* tends to be the dominant orientation

### OPTM Welcomes Nicole Goodwin, MPT



OPTM is proud to introduce our new therapist, Nicole Goodwin, MPT. Nicole received her Master's degree in physical therapy at the University of Southern California in 1996 and her Bachelor of Science degree in physiology from the University of California at Davis in 1994. Nicole completed a postgraduate residency program in manual therapy at the Institute of Orthopedic Manual Therapy.

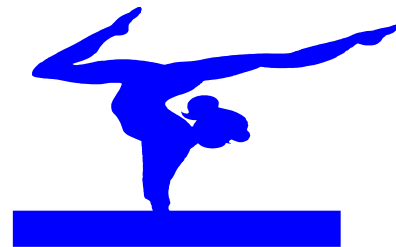
sense as people age. However, this increasing reliance on vision is not an effective compensation as vision degenerates with age. Loss of acuity, vertical and horizontal perception, and ability to distinguish color decrease with aging.

*Vestibular* sense is provided by (the semi-circular canals in) our inner ears, which function similarly to gyroscopes. This vestibular apparatus feeds information regarding the position of our head with respect to gravity to the brain. Vestibular sense also declines with age, due to arthritic changes affecting the neck and related nerve function.

*Proprioception* refers to movement sense. Proprioceptors are specialized nerve endings located in the tissues around joints. Those of most importance to balance are around the ankle and foot. Injuries or other disease processes can damage these nerve endings, impairing movement sense.

Strength is also a critical factor for balance. Even in absence of sensory dysfunction, legs that are too weak to support and move the body cannot cope with even minor unexpected challenges to stability.

At OPTM, we have a comprehensive approach to rehabilitation based on research, and all these factors are taken into account when designing individual programs. We know for some patients, it could mean their life.



### Visit our Website

Log onto [www.optmtherapy.com](http://www.optmtherapy.com) to meet all of our therapist and staff, view and print past newsletters as well as exercise programs for the knee, back and cervical areas. You can also get general information regarding insurance billing, office hours, and directions. Your comments and suggestions are appreciated.