

The Importance of Physical Functions in Fall Prevention and Safe Falling Techniques Among Older People

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Why? What? How?

WHY?

Falls among older people is a global problem with cost estimated at **\$50 billion annually** (WHO).

Traditionally, healthcare systems tend to focus on secondary fall prevention, addressing the problem only after a fall has occurred.

The judo society the judo community possesses **unique expertise in safe falling techniques**, which can be leveraged to tackle this issue proactively

WHAT?

Strength Training: To improve muscle function and physical performance.

Balance Exercises: To enhance stability and reduce the likelihood of losing balance. Evidence suggests that combining balance and strength exercises can reduce fall rates up to 23% (Sherrington C et al., *Cochrane Database of Systematic Reviews*, 2019)

Safe Falling Techniques (Fall Breaks): To reduce the risk of serious injuries, like fractures, during unavoidable falls.

HOW?

Group-based training lead by judo instructor offers several advantages, including higher participant compliance, improved results, and a lower risk of injuries during training sessions.



Why you need to include physical training for older people?

- ✓ Reducing Injuries and Fall Rates
- ✓ Higher Fitness Levels = Greater Independence in Daily Life = Better Quality of Life and Satisfaction
- ✓ The most important – BETTER breakfalls
 - Power
 - Joint mobility
 - Reaction time

By integrating these elements, we can empower older adults to improve their physical performance, reduce fall risk, and live safer, more confident lives.



Strength training – key points

- ✓ **Never too late**

Older individuals can develop muscle strength and increase muscle mass through strength exercises. *(Peterson MD, Rhea MR, Sen A, Gordon PM. Resistance exercise for muscular strength in older adults: a meta-analysis. Ageing Res Rev. 2010)*

- ✓ **Regular training**

- ✓ **Big muscle groups**

- ✓ **Progression is key!**

The Physical Activity Guidelines for Americans, 2nd edition. Being Active as We Get Older. The American College of Sports Medicine

- ✓ **Power**

Power is crucial for maintaining independence in daily life *(Jiménez-Lupi3n D, Chiroso-R3os L, Mart3nez-Garc3a D, Rodr3guez-P3rez M, Jerez-Mayorga D. Effects of Power Training on Functional Capacity Related to Fall Risk in Older Adults: A Systematic Review and Meta-analysis. Arch Phys Med Rehabil. 2023)*

- ✓ **For Beginners:** Focus on technique.

- ✓ **For Advanced Participants:** Focus on volume.



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Balance training – key points

- ✓ **Regularity**
- ✓ **Transition from easy to hard**
- ✓ **Shift from static to dynamic balance**

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- ✓ **Conventional balance training to reactive balance training**

Older adults and individuals with balance problems were less likely to fall in daily life after participating in RBT compared with traditional balance training. (*Devasahayam AJ, Farwell K, Lim B, Morton A, Fleming N, Jagroop D, Aryan R, Saumur TM, Mansfield A. The Effect of Reactive Balance Training on Falls in Daily Life: An Updated Systematic Review and Meta-Analysis. Phys Ther. 2022*)

- ✓ **From alone to couple or trio**



Thank you!

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