

Bond University  
Research Repository



**Pumping iron in residential aged adults**  
**Why isn't this more commonly available?**

Fien, Samantha; Henwood, Timothy; Climstein, Mike; Keogh, Justin William Leslie

*Published in:*  
Australasian Journal on Ageing

*DOI:*  
[10.1111/ajag.12259](https://doi.org/10.1111/ajag.12259)

*Licence:*  
Other

[Link to output in Bond University research repository.](#)

*Recommended citation(APA):*  
Fien, S., Henwood, T., Climstein, M., & Keogh, J. W. L. (2015). Pumping iron in residential aged adults: Why isn't this more commonly available? *Australasian Journal on Ageing*, 34(3), 202.  
<https://doi.org/10.1111/ajag.12259>

**General rights**

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

For more information, or if you believe that this document breaches copyright, please contact the Bond University research repository coordinator.

## **Pumping Iron in Residential Aged Adults: Why isn't this more commonly available?**

**Running Title:** Resistance training and residential aged adults.

Samantha Fien <sup>a</sup>, Timothy Henwood <sup>d,a</sup>, Mike Climstein <sup>e</sup>, Justin William Leslie Keogh <sup>a,b,c</sup>

<sup>a</sup> Faculty of Health Science and Medicine, Bond University, Robina, Australia

<sup>b</sup> Human Potential Centre, AUT University, Auckland, New Zealand

<sup>c</sup> Cluster for Health Improvement, Faculty of Science, Health, Education and Engineering, University of the Sunshine Coast, Sippy Downs, Australia

<sup>d</sup> University of Queensland/ Blue Care Research and Practice Development Centre, School of Nursing and Midwifery, The University of Queensland, Brisbane, Australia

<sup>e</sup> Exercise, Health and Performance Faculty Research Group, The University of Sydney, Australia

### **Corresponding Author**

Samantha Fien

Faculty of Health Science and Medicine,

Bond University,

Robina, Australia

4229

Ph. +617 5595 4487

Fax: +617 5595 3524

E. samantha.fien@student.bond.edu.au

Dear Editor,

The demand for residential aged care (RAC) placement will more than treble by 2050 (1). With population ageing, an Australian adult who is currently 65 years of age has a greater than 20 projected years of life expectancy. When coupled with the increased prevalence and number of complex health care conditions, it is reported the impending need for care nationally will dramatically increase (1). Consequently, the Australian health care system may need to adopt more innovative, evidence-based approaches to offset the high level of sedentary behaviour, disability and poor health in many of our older people, especially those residing in RAC (2).

For the healthy community dwelling older adults, research has long established that exercise, even when commenced later in life, has measurable benefits to wellbeing (3, 4). More recently, exercise is receiving significant attention as a means of prolonging and revitalising health in community dwelling older adults with care needs. However, it is resistance and weight bearing training that has been demonstrated to be the most potent stimulus to increase muscle mass, muscle strength and muscle function among older adults with care needs, with significant reductions in mobility disability and number of falls. In a recent systematic review on resistance and weight bearing exercise training in RAC, it was shown that participation significantly improves balance, flexibility, ability to rise from a chair, stair climbing power, gait performance, positive self-perception and self-sufficiency (5). In addition, participants had a greater satisfaction with life despite their age, level of chronic diseases, sedentary lifestyle and function disabilities (5). However, resistance and weight bearing exercise continues to be underutilized and understudied as a disability preventative in RAC.

We therefore strongly encourage health professionals working with older adults to more actively promote and/or deliver progressive resistance and balance training to as many older adults as possible. We also strongly encourage many more researchers to examine issues affecting the feasibility of progressive resistance and weight bearing exercise in RAC settings. Such interactions between health professionals and researchers have the potential to result in significant benefits to RAC residents, staff and the national healthcare expenditure.

#### References

1. Steering Committee for the Review of Government Service Provision Report on Government Services. Productivity Commission Canberra. 2012.
2. Reid N, Eakin E, Henwood T, Keogh JWL, Senior HE, Gardiner PA, et al. Objectively measured activity patterns among adults in residential aged care. *Int J Environ Res Publ Health*. 2013;10(12):6783-98.
3. Chodzko-Zajko WJ, Proctor DN, Fiatarone Singh MA, Minson CT, Nigg CR, Salem GJ, et al. Exercise and Physical Activity for Older Adults. *Med Sci Sports Exerc*. 2009;41(7):1510-30.

4. [Liu CJ, Latham N. Can progressive resistance strength training reduce physical disability in older adults? A meta-analysis study. Disabil Rehabil. 2011;33\(2\):87-97.](#)
5. [Valenzuela T. Efficacy of progressive resistance training interventions in older adults in nursing homes: a systematic review. J Am Med Dir Assoc. 2012;13\(5\):418-28.](#)