

# Muscle strength and quality in old and oldest-old people

Citation for published version (APA):

Wearing, J. (2021). *Muscle strength and quality in old and oldest-old people*. [Doctoral Thesis, Maastricht University]. Maastricht University. <https://doi.org/10.26481/dis.20210119jw>

## Document status and date:

Published: 01/01/2021

## DOI:

[10.26481/dis.20210119jw](https://doi.org/10.26481/dis.20210119jw)

## Document Version:

Publisher's PDF, also known as Version of record

## Please check the document version of this publication:

- A submitted manuscript is the version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher's website.
- The final author version and the galley proof are versions of the publication after peer review.
- The final published version features the final layout of the paper including the volume, issue and page numbers.

[Link to publication](#)

## 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.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal.

If the publication is distributed under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license above, please follow below link for the End User Agreement:

[www.umlib.nl/taverne-license](http://www.umlib.nl/taverne-license)

## Take down policy

If you believe that this document breaches copyright please contact us at:

[repository@maastrichtuniversity.nl](mailto:repository@maastrichtuniversity.nl)

providing details and we will investigate your claim.

## Propositions

1. Strength monitoring in old age groups is important to evaluate current health status and to predict future health outcomes.  
*This thesis*
2. Handgrip strength testing is recommended in nursing-home residents to screen for physical condition.  
*This thesis*
3. Isometric quadriceps strength is highly predictive of independence in daily activities of nursing-home residents.  
*This thesis*
4. Sonographically measured muscle quality is an appropriate method to detect age-related changes in muscle.  
*This thesis*
5. The underlying philosophy of a neurophysiological treatment concept is that all human beings, including those with disabilities, have untapped existing potential.  
*Herman Kabat*
6. Management of sarcopenia requires an inter-professional healthcare team approach to develop an individualized treatment plan.  
*Dent et al.*
7. Resistance exercise counters many age-related processes such as of sarcopenia when specific evidence-based practice recommendations for older adults are used, and when specific individual needs and capabilities are considered.  
*adapted from Fragala et al.*
8. Prevalence of significant muscle weakness is a meaningful information about the risk for sarcopenia and the importance of frequent handgrip strength assessments for elderly people and general practitioners, the Swiss Federal Statistical Office and Swiss insurance companies.  
*This thesis*
9. “Everyone of us today should be interested in the possession of a powerful grip.”  
*Edward Ashton, Britain’s strongest man 1911-1934*
10. “Though I look old, yet I’m strong and lusty.”  
*William Shakespeare*
11. “Age is not a barrier. It’s a limitation you put on your mind.”  
*Jackie Joyner Kersee*

Julia Wearing  
October 6<sup>th</sup> 2020