



Why Do We Measure Hand Grip Strength?

As you know, we have quite the extensive assessment process. Thanks to our partners at VALD, we have been able to take our assessment process to the next level. While traditional practices rely on manual muscle testing, and perhaps outdated modalities, we pride ourselves on the objective data we collect through our health

technology. One of the simplest measures we conduct is hand grip strength. Many relate their hand grip strength to upper body strength, but not lower body strength. Here's the thing, it should be viewed as a measure that considers both lower and upper body strength. There are numerous reports indicating the relevance.

Hand Grip Strength

Hand grip strength can be a useful indicator of overall strength and health, especially in aged adults. While it may not provide a perfect measure of full body strength, there is a correlation between hand grip strength and various aspects of physical fitness and function in older adults.

Here are some ways in which hand grip strength correlates with full body strength and health in aged adults:

Muscle Mass and Function: Hand grip strength is often associated with muscle mass and function. As people age, they tend to lose muscle mass and strength (a condition known as sarcopenia). Reduced hand grip strength can be indicative of a general decline in muscle mass and function throughout the body.

Functional Independence: Hand grip strength is essential for performing various daily activities, such as lifting groceries, opening jars, or getting up from a chair. A strong hand grip can contribute to better functional independence, which is crucial for maintaining a high quality of life in older adults.

Mobility and Balance: Hand grip strength can influence mobility and balance. Stronger hand grip muscles can help older adults maintain better posture and balance, reducing the risk of falls and related injuries.

Chronic Conditions: Some chronic health conditions, such as osteoporosis, arthritis, and cardiovascular diseases, can impact both hand grip strength and full body strength. Monitoring hand grip strength can provide insights into the progression of these

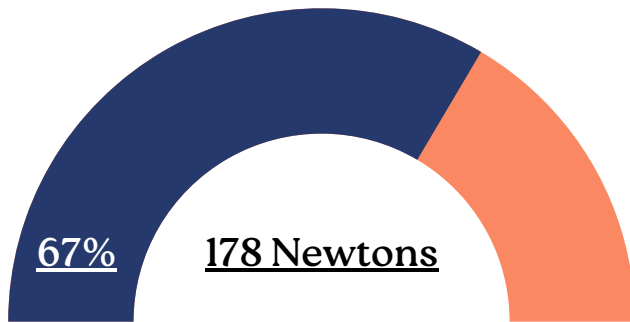
conditions and their impact on overall physical health.

Mortality Risk: Research has shown that lower hand grip strength is associated with an increased risk of mortality in older adults. This suggests that hand grip strength can be a useful predictor of overall health and longevity.

Hand Grip Strength Asymmetry.

More recently hand grip strength has again captured the attention of us exercise data nerds. 🧐

It was recently published that hand grip strength asymmetry may provide an additional layer of insight in one's overall health.

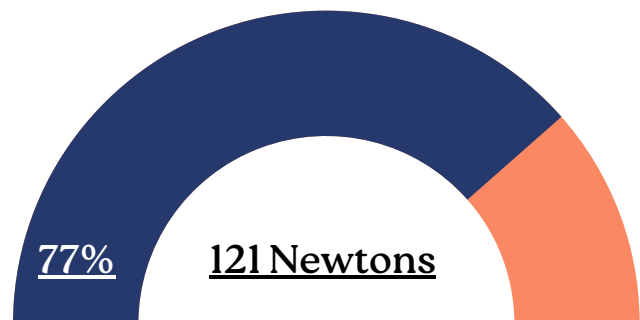


Male Hand Grip Strength

Goal: 265 Newtons
or 27 kg

Female Hand Grip Strength

Goal: 156 Newtons
or 16 kg



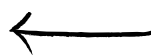
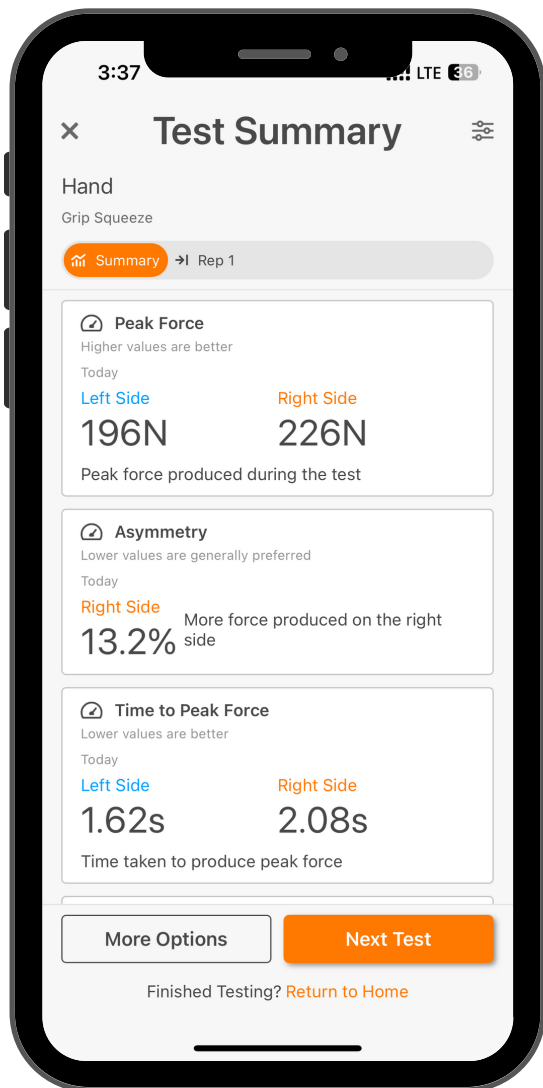
The study titled, *Handgrip Strength Asymmetry as a New Biomarker for Sarcopenia and Individual Sarcopenia Signatures* was published earlier this month. This research article explores the concept of handgrip strength asymmetry as a potential biomarker for sarcopenia, a condition characterized by the loss of muscle mass and function with age. Sarcopenia is a significant health concern among the elderly population, leading to decreased physical function and an increased risk of falls and fractures.

The study investigates the idea that differences in handgrip strength between the left and right hands can provide valuable insights into an individual's muscle health and the presence of sarcopenia. Handgrip strength is a well-established measure of overall muscle function.

Key Findings

- Handgrip strength asymmetry (greater than 10%) may serve as an **early** indicator of sarcopenia, potentially allowing for earlier intervention and treatment.
- The degree of handgrip strength asymmetry may vary among individuals and could be used to develop personalized "sarcopenia signatures" that reflect an individual's unique muscle health status.
- The study may suggest that addressing and correcting handgrip strength asymmetry through targeted interventions, such as strength training could be beneficial in managing and preventing sarcopenia.
- The study found those with hand drip strength asymmetry greater than 24% were more likely to be diagnosed with sarcopenia.

Overall, this research article presents the concept of handgrip strength asymmetry as a novel biomarker for sarcopenia and suggests its potential utility in developing individualized strategies for the assessment and management of sarcopenia.



All in All

Hand grip strength is used as **one** of our **fundamental measures**, but should not be viewed as the end all be all. Know that with each measure we collect, there is valuable reasoning and rationale behind it. We are excited as the exercise and health world combine to allow for greater insight, outcomes and healthier individuals.

Here's what we see on our end following assessment!

Scan the QR code to read the research study.

