

How to Dead Hang to Increase Grip Strength

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STORY AT-A-GLANCE

- › When you dead hang you use gravity to free muscles around your shoulder – like the lats and chest – that can become stiff from sitting at a computer
- › This movement can reshape the bone surrounding your shoulder to make more space in the ball and socket joint so your shoulder can move more freely
- › The dead hang exercise also increases your grip strength, which is one of the biggest predictors of mortality
- › A good target hang time is 90 seconds for men and 60 seconds for most women. Though longer durations are possible, it's more beneficial to aim for shorter, more frequent sessions
- › A digital hand dynamometer is the easiest and most reliable way of measuring your hand strength, and owning one can help you keep track of your grip strength over time

When you dead hang you use gravity to create space in your shoulders that are typically more compressed from modern-day lifestyle. This opens up muscles around your shoulder – like the lats and chest – that can commonly become stiff from sitting at a computer. This movement can literally reshape the bone surrounding your shoulder to make more space in the ball and socket joint so your shoulder can move more freely.

This movement also increases your grip strength, which is one of the biggest predictors of mortality. If done correctly, it can actually make your shoulders and core stronger and more resilient, giving you more strength and athleticism throughout your entire body.

If you're new to this exercise, you may initially hang for only a few seconds. With regular practice, you will aim to gradually increase the time spent on your regular practice of this exercise. I like to do it first thing in the morning after waking up and before I go to bed. I also integrate it into my resistance training.

General Recommendations on Duration

A good target hang time is 90 seconds for men and 60 seconds for most women. Though longer durations are possible, it's more beneficial to aim for shorter, more frequent sessions. A total daily hang time of 3 minutes is an excellent goal.

While there's substantial benefit in accumulating 3 minutes of dead hanging time per day, aiming for a continuous hang of 1 minute for women and 90 seconds for men, repeated twice daily for men and three times daily for women for a total of 3 minutes is a far better goal. I typically dead hang for two minutes twice a day. Seeking to work my way up to 3 minutes as a personal challenge.

The longer dead hanging time significantly enhances muscular strength in your grip and hands compared to shorter, more frequent sessions. Initially, breaking it up into smaller durations may be necessary for most people starting out. However, as you progress, you'll find it increasingly feasible to comfortably maintain the hang for the full duration — either 1 minute for women or 90 seconds for men.

This duration should suffice for general fitness goals. Nevertheless, for those who are particularly competitive or ambitious, consider challenging yourself further by extending the time. Aim for longer holds like 2 or even 3 minutes, depending on your strength and endurance levels. That said, hanging longer than 3 minutes is unnecessary and may be counterproductive.

Recommended Setup

The dead hang is a simple exercise that requires little equipment. Here are some general tips and suggestions for getting started.

Setting up – Use an overhead bar, like a pull-up bar, which can be easily purchased online.

Bar height – The bar should not be so high that you need to jump to reach it, as this could shock your shoulders. Ideally, you should be able to reach the bar on your tiptoes.

Using a stool or chair – If needed, use a stool or chair to help you reach the bar comfortably.

Exercise caution – The key precaution is to avoid straining your shoulders.

Performing the dead hang – Simply grab the bar and hang, keeping your body still. Hold on to the bar until your grip starts to fatigue. What you will notice is that the bar will gradually slip away from your hand grip until you can't hold on any longer. This is a sign that you have reached your limit. For many this will be 10 to 15 seconds when starting out.

Progressions – To accelerate your progress, consider placing your feet down for assistance to make it to the full minute. Some may need to start with their feet down the whole time and that's completely fine. As you build up your strength for the full 60 second hang, you can intermittently lift your toes off the support and then place them back down gradually decreasing the assistance time until you are able to dead hang for a full minute without any assistance.

Gradually increase your hang time – Ideally work up to a total daily hanging time of 3 minutes done over as many times as you need to get there.

Advanced Add-Ons

Aside from increasing your time, you could also consider adding one of these following movements while you're dead hanging.

1. Add neck rotations – To optimize efficiency, you can rotate your head to the side as far as possible and once you reach the end, isometrically contract it in that direction for 1 to 2 seconds. Switch directions and keep repeating until you are done hanging.

This is just another opportunity to increase mobility in your cervical spine. This exercise, especially with the neck circles, is ideally done immediately after your morning and evening near-infrared light therapy, especially if you're using a near-infrared sauna.

2. Add spinal rotations – Rotate your upper body to one side and contract the muscles required to maintain this position for 2 seconds. Relax for 2 seconds and then repeat on other side. Continue for five sets.

3. Contract your shoulder muscles – Tighten all the muscles in your shoulders for 2 seconds. Relax for 2 seconds. Repeat 10 times.

Grip Strength Is a Reliable Biomarker of Biological Age

One of the main benefits of participating in the dead hanging exercise is that you will increase your grip strength. This is great because increasing your grip strength is significantly correlated with longevity, as it's a reliable biomarker of your biological age.

“Grip strength naturally begins to decline around age 50 ... People who maintain their grip strength age more slowly. They stay healthier longer and are stronger throughout their bodies.” ~ Dr. Ardeshir Hashmi, Cleveland Clinic

As noted in a November 2022 study¹ published in the Journal of Cachexia, Sarcopenia and Muscle:

“There is a large body of evidence linking muscular weakness, as determined by low grip strength, to a host of negative ageing-related health outcomes. Given these links, grip strength has been labelled a ‘biomarker of aging’... The objective of this study was to determine whether [normalized] grip strength [NGS] was associated with measures of DNA methylation (DNAm) age acceleration ...

There was a robust and independent cross-sectional association between NGS and DNAm age acceleration ... There was also an independent longitudinal association between baseline NGS and DNAm age acceleration ... Our findings provide some initial evidence of age acceleration among men and women with lower NGS and loss of strength over time.”

Relationship Between Grip Strength and Health

Other researchers have also identified similar relationships between grip strength, overall health and specific health conditions. According to geriatric medicine specialist Ardeshir Hashmi from the Cleveland Clinic:²

“Grip strength naturally begins to decline around age 50, and maybe even earlier. People who maintain their grip strength age more slowly. They stay healthier longer and are stronger throughout their bodies.”

The consensus is that the stronger your grip strength, the better your health and the lower your grip strength the poorer your health. However, there is no consensus on the exact low and high measurements, and they differ based on your chronological age, weight and other factors.³

Generally speaking, grip strength is an indication of general muscle strength, which is crucial for endurance, balance and mobility. But strength can also influence other health parameters, including immune function.

The association between hand grip strength and the strength of your immune system was the focus of a 2022 study,⁴ which concluded that measuring hand strength allows

for “preliminary predictions on the current level of immunity and inflammation in the body.” Data have also shown that greater hand grip strength is correlated with:

- Improved heart health, and can help predict cardiovascular problems alongside family history, blood pressure and other indicators.⁵
- Reduced risk of osteoporosis in postmenopausal women.⁶
- Increased functional independence, as it can affect your stability and reduce the risk of falls.⁷
- Neurocognitive brain health and a reduced risk of cognitive loss, psychiatric conditions and dementia⁸ – One large study^{9,10} published in 2022 associated poor hand grip strength in midlife with cognitive decline roughly 10 years later.

The researchers believe this adds to a growing body of research indicating that increasing muscle strength in middle-aged adults may help maintain neurocognitive brain health as you age. Another 2022 study¹¹ published in BMC Medicine analyzed cross-sectional and longitudinal data from over 40,000 participants.

The researchers looked at the association between grip strength, behavioral outcomes and brain structure, finding an association between grip strength and increased gray matter volume in regional areas of the brain, as well as several measures of cognition and mental health.

How to Measure Hand Grip Strength

Grip strength measures muscle strength exerted in your hand and forearm muscles. A digital hand dynamometer is the easiest and most reliable way of measuring your hand strength, and owning one can help you keep track of your grip strength over time. To use a dynamometer be sure to follow the instructions that come with the device. General instructions include:¹²

1. The grip handle should be positioned to fit your hand

2. Bend your elbow at a 90-degree angle
3. Apply maximum effort to squeeze the dynamometer
4. Repeat a total of three times and average the three results

A 2018 study¹³ used data from 1,232 participants aged 18 to 85 years to extract normative reference values for hand grip strength in that age range. The researchers established ranges based on gender and dominant or non-dominant hands.

The cohort was broken into 5-year age ranges and an overall range was established for each group as well as identifying those in the 10th, 25th, 50th, 75th and 90th percentiles. Examples of the measurement ranges in the dominant hand include:

| Years | Pounds |
|--------------|----------------|
| Men | |
| 18-24 | 103.6 +/- 17.9 |
| 35-39 | 103.8 +/- 26.2 |
| 50-54 | 97.0 +/- 22.7 |
| 60-64 | 84.7 +/- 22.7 |
| 70-74 | 76.5 +/- 19.8 |
| Women | |
| 18-24 | 61.9 +/- 15.7 |
| 35-39 | 64.4 +/- 13.7 |
| 50-54 | 62.2 +/- 13.9 |
| 60-64 | 52.0 +/- 14.3 |

Years

Pounds

70-74

47.4 +/- 11.2

Dead Hang Warmup

Before you engage in the dead hang, you'll want to warm up first by following these steps:

- **Warm-up with light therapy:**
 - **Step 1** — Use a near-infrared bulb, which has beneficial effects on muscle performance and recovery.
 - **Step 2** — Before starting your grip strength exercises, prepare your forearm muscles. Shine the near-infrared light close to the palmar surface of your forearm, targeting the area where the wrist flexors are located. Ensure the light is close enough to warm the skin but not so close as to cause discomfort or heat.
- **Stretch your wrist flexors:**
 - **Step 1** — Bend your wrist back to a 90° angle, so your fingers point towards you.
 - **Step 2** — Use your other hand to gently press down on the fingers of the extended hand. This creates a stretch in the wrist flexors on the underside of your forearm.
 - **Step 4** — While pressing down with your fingers, gently push upwards with the hand being pressed down to increase the stretch. Hold this position for 2 to 3 seconds.
 - **Step 5** — Perform the stretch five to 10 times on each arm, depending on your comfort level.

- **Step 6** – Repeat on your other wrist.