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It's Weird, but Tendon Training Could Give You Jaw-Dropping Strength

Analysis by Dr. Joseph Mercola | November 8, 2026

STORY AT-A-GLANCE

- Your tendons transfer force from your muscles to your bones, helping you lift, grip and move with strength and control, even without large muscles
- Tendons adapt more slowly than muscles, so increasing exercise intensity too quickly puts extra strain on tissues that aren't yet prepared for heavier loads
- Five training methods — isometric holds, slow resistance exercises, end-range holds, controlled lowering movements and quick hops — challenge your tendons in different ways, which may help improve strength and physical performance
- Simple isometric exercises, such as supported squats, lunges and push-up holds, may help older adults and beginners develop strength without heavy weights and with less of the muscle soreness associated with more demanding workouts
- Training your tendons three times weekly, with rest days between sessions and gradual increases in difficulty, is one practical schedule for steady progress over several months

Picture two people carrying the same heavy piece of furniture. One has noticeably larger muscles, yet the other handles the weight with greater ease and control. Muscle size alone doesn't explain the difference. Your ability to lift, grip and move with strength also depends on how well your nervous system coordinates your muscles and how efficiently your connective tissues transfer force to your bones.

Those tissues are your tendons, and they deserve more attention than they typically receive in conventional strength training. Your muscles and tendons don't strengthen on the same schedule, and that mismatch may matter more as you age. I believe tendon strength is one of the most overlooked foundations of a strong, resilient body. Training it directly requires surprisingly little equipment, and the potential payoff is better control in the movements you rely on every day.

Five Tendon Training Methods Build Functional Strength

An October 2026 YouTube video from fitness content creator Mr. White, featured above, describes five exercise methods designed to improve tendon strength, joint control and the ability to produce force.[1] The video emphasizes that effective tendon training requires different types of mechanical stress, from sustained holds to rapid, spring-like movements. It also provides a three-day weekly routine and simple ways to measure progress.

The recommendations are based on exercise physiology principles rather than results from a controlled clinical trial. Each method challenges your tendons differently, which may help you to develop strength across a range of movements instead of focusing exclusively on heavier weights.

- **Heavy isometric holds create sustained tension without movement —** One example uses a thick towel placed beneath both feet. Grip the ends, bend your knees and hips as though preparing for a deadlift, then pull upward without moving.

  The video recommends approximately 70% to 80% of your maximum effort for 30 to 45 seconds, followed by two minutes of rest, for four to five sets. In practice, that means pulling hard enough that the hold feels challenging but sustainable, with your form staying steady through the final seconds. As the narrator explains, "Here, consistent force beats peak force." Changing your knee and hip positions also changes which tissues bear the load.

- **Slow resistance exercises challenge tendons throughout each repetition —** The video recommends taking three seconds to lower a weight and another three seconds to lift it, completing six to eight repetitions for three to four sets. Slow push-ups, rows and split squats are examples.

  This controlled pace reduces reliance on momentum and keeps the muscles and tendons under tension throughout the movement. Once you complete eight repetitions per set with proper form, increase the resistance slightly and return to six repetitions.

- **End-range holds, which load a joint near the limit of its range of motion, help develop grip endurance and upper-body control —** Hanging from a pull-up bar challenges your hands, forearms and shoulders while your body remains suspended. The video recommends accumulating two minutes of hanging time, beginning with four 30-second holds if necessary.

  As your strength improves, progress toward three 60-second holds. An active hang, in which you pull your shoulder blades downward without bending your elbows, adds shoulder control. More advanced variations include towel hangs and assisted one-arm hangs.

- **Controlled lowering exercises load tendons heavily as muscles lengthen —** Eccentric contractions occur when a muscle lengthens while resisting force, such as when you lower yourself from a pull-up. For calf raises, the video recommends rising onto both feet, shifting your weight onto one leg and lowering your heel over four seconds.

  The suggested routine is three sets of 12 to 15 repetitions per leg. Because these exercises can cause considerable muscle soreness when they're unfamiliar, the narrator recommends reducing the number of sets during the first few weeks.

- **Short, quick hops train tendons to release stored energy —** During a hop, your Achilles tendon stretches as your foot contacts the ground, then releases some of that stored energy to help propel you upward. This is called the stretch-shortening

cycle. It works much like a pogo stick: The spring compresses on landing, then releases that stored energy to send you back up.

The video recommends beginning with two sets of 20 light, two-legged hops after at least four weeks of preparatory training. As your control improves, progress to forward-and-backward hops, sideways hops and eventually single-leg hops. Treat four weeks as a minimum rather than a deadline, since readiness varies from person to person.

- **A three-day routine makes progress easier to measure —** The video recommends three weekly sessions lasting approximately 20 to 30 minutes each, with at least one rest day between sessions. Day one combines towel holds with slow leg and pulling exercises.

  Day two focuses on hanging, dip support holds (supporting your body weight on straight arms using stable parallel bars or a securely anchored dip station) and controlled pull-up descents. Day three combines isometric holds, eccentric calf raises and, once you're prepared, short hops.

  Every four weeks, record your maximum hanging time, controlled single-leg calf raises and how your joints feel during the heavy exercise that bothers them most. The narrator's advice is simple: "Think in months, not weeks."

Simple Isometric Exercises Build Strength Without Heavy Weights

If towel deadlifts and bar hangs sound like a big leap from where you are now, a researcher who studies tendons for a living offers a gentler entry point. In a video from the University of California, Davis (UC Davis) Health, Keith Baar, Ph.D., professor of molecular exercise physiology at UC Davis, demonstrates three exercises designed to strengthen muscles and tendons without expensive equipment.[2] His approach focuses on people who are older, have metabolic conditions or are beginning an exercise program.

Baar recommends exercises that prepare the body for greater physical challenges. One advantage is reduced muscle soreness. Baar explains that older adults and people with metabolic conditions often experience more muscle damage from demanding exercise than younger adults. Static exercises offer a gentler starting point while still challenging the tissues responsible for strength.

As Baar explains, "We get almost a similar strength gain from when we just do light weights, but we hold them for longer periods of time."

- **Holding a position makes your muscles work progressively harder —** Baar explains that when you maintain a fixed position, your tendons gradually relax under tension. Your muscles must continue contracting to maintain that position, which helps explain why a simple hold becomes harder after several seconds.

  In his words, "That's why our muscles start to burn and we get this feeling that we're working really hard, even though all we're doing is staying in the same position." This gives you a way to challenge your strength without completing repeated movements.

- **An assisted lunge targets the tendons around your knees —** Begin with one foot forward and the other behind you, then lower your body until your front knee bends to approximately 90 degrees. Hold a sturdy chair for support.

  Baar recommends maintaining this position for at least 10 seconds initially, then progressing toward 30 seconds. The exercise places tension on the patellar tendon, located below your kneecap, and the quadriceps tendon, located above it. Moving your front knee farther forward increases the demand on your Achilles tendon near your heel.

  As your strength improves, reduce your reliance on the chair. Progress from two hands to one hand, then eventually hold the position without assistance. This gives you a clear way to measure improvement without adding weights.

- **A supported squat challenges your legs while allowing you to control the difficulty —** Stand with your feet approximately shoulder-width apart and your toes turned slightly outward. Hold a chair, bend your knees and lower your hips as though preparing to sit. Allow your knees to move slightly beyond your toes while maintaining a comfortable position. Baar recommends beginning with a 10-second hold and gradually extending the duration as your strength improves.

  You can adjust the difficulty by changing how deeply you squat and how much support you use. Once you're ready, rely on one hand for balance, then gradually work toward an unsupported hold. Rise slowly when you finish.

- **An elevated push-up hold challenges your upper body without repeated push-ups —** Place your hands against a sturdy chair, table or another secure surface. Lower your chest toward the surface and hold the position with your elbows bent. This challenges the muscles and tendons around your chest, shoulders and elbows. A higher surface makes the exercise easier, while a lower surface increases the demand.

  Baar explains that even someone capable of performing numerous regular push-ups can benefit from a 10-second static hold. As your strength improves, gradually lower the surface until you're ready to perform the exercise closer to the floor.

- **Short holds with lighter loads were linked to strength gains in climbers, according to Baar —** Baar describes research involving rock climbers who performed 10-second hanging exercises using approximately 40% of their body weight. He reports that their strength improvements were comparable to those achieved with heavier loads. "The weight didn't actually change how much strength improved," he explains.

  This matters if heavy lifting isn't practical for you. It suggests that sustained tension deserves attention alongside the amount of weight you lift. However, Baar doesn't provide the study's participant numbers or detailed methods in the video, so the finding can't establish that lighter loads work equally well for every exercise or person.

- **A 30-second hold may temporarily ease joint discomfort —** Baar describes an analgesic effect, meaning a reduction in pain, from sustained isometric contractions. He states that holding an exercise position for 30 seconds can reduce discomfort around the affected joint for approximately two to three hours.

  This offers another reason to consider carefully selected static exercises when joint discomfort limits activity. However, Baar's statement doesn't establish that everyone will experience the same relief, and reduced pain doesn't mean an injured tendon has healed. If you're recovering from an injury, a physical therapist can help determine which positions and loads are appropriate.

How to Build Stronger Tendons and Improve Your Strength

A sound approach to strengthening your tendons is to give them the right amount of tension, increase that tension gradually and allow enough time for recovery. Your muscles often become stronger faster than your tendons, so I recommend focusing on controlled, consistent exercise rather than rushing to lift heavier weights. Whether you're new to exercise, returning after a long break or already strength training, these five steps can help you build a stronger foundation.

Where you begin depends on your current fitness. If you're new to exercise or rebuilding after time off, spend your first several weeks on the static holds in Steps 1 and 3 before adding the moving exercises in Step 2. If you already strength train, you can move through Steps 1 to 3 quickly and put more of your effort into Step 4. Step 5 applies to everyone.

1. **Start with supported isometric exercises to build your foundation —** If you're a beginner or an older adult, start with exercises that challenge your muscles and tendons without requiring repeated joint movements. These allow you to build strength while controlling how much weight your body supports.

Begin with an assisted squat. Stand with your feet shoulder-width apart, hold a sturdy chair and lower your hips into a comfortable squat. Hold for 10 seconds, then slowly stand. You can also try a supported lunge, with one foot forward and your back knee lowered toward the floor. As your strength improves, extend your holds toward 30 seconds and gradually reduce your reliance on the chair. Your first goal is simple: Complete each hold with good control before increasing the difficulty.

2. **Use slow resistance exercises to strengthen your tendons throughout each movement —** Once you're comfortable with static holds, add controlled resistance exercises that challenge your muscles and tendons as your joints move. Begin with body-weight exercises, such as push-ups against a sturdy counter, split squats or rows.

   Take three seconds to lower yourself and another three seconds to return to the starting position. Aim for six to eight repetitions per set, with two to three minutes of rest between sets.

   Start with a manageable number of sets and work toward three or four. Pay attention to your final repetition. If you lose control of the movement or start rushing, reduce the difficulty. When you complete eight repetitions with consistent form across every set, increase the resistance slightly. Small, steady increases give your tendons time to catch up with your muscles.

3. **Strengthen your grip and upper body with controlled holds —** Your hands, wrists, elbows and shoulders all play a role in lifting, carrying and supporting your body weight. Try adding a simple upper-body hold that matches your current strength. If hanging from a pull-up bar is too demanding, begin with an elevated push-up hold.

   Place your hands against a sturdy counter, lower your chest slightly and hold for approximately 10 seconds. As you become stronger, progress toward a lower surface.

If you already have adequate grip and shoulder strength, try a **dead hang** from a secure pull-up bar. Begin with short holds and gradually work toward two minutes of total hanging time across several sets. Keep a record of how long you hold each position. Even a few extra seconds provide a useful measure of progress.

4. **Introduce controlled lowering exercises before faster movements —** Your tendons need to tolerate force as your muscles lengthen, especially during activities such as descending stairs or lowering a heavy object. Slow lowering exercises may help develop this ability.

   A simple place to start is with calf raises. Stand on a stable surface, rise onto your toes using both feet, then shift your weight onto one leg and slowly lower your heel over four seconds. Use a chair or railing for balance. Begin with fewer repetitions and gradually work toward three sets of 12 to 15 per leg.

   Once you've developed a foundation of strength and control, consider light, two-legged hops to challenge your tendons' spring-like action. Your readiness depends on your strength, balance and comfort. Start with two sets of 20 light contacts, emphasizing quiet landings and brief contact with the ground.

5. **Give your tendons time to recover and track your progress —** Organize your tendon exercises into three weekly sessions, with at least one rest day between them. Build each session up to about 20 to 30 minutes rather than fitting every exercise into one workout.

   Recovery is part of the process. Your tendons need time between demanding sessions to respond to the stress of exercise. Support that process with adequate sleep, sufficient whole foods and consistent training rather than repeated **maximum-effort workouts**.

   Every four weeks, choose two or three simple measurements, such as how long you hold a supported squat, how many controlled calf raises you complete or how long you hang from a bar. Write down your results and compare them with your previous scores.

Focus on steady improvements over several months. If you experience persistent tendon pain, swelling or discomfort at rest, reduce the load and arrange an assessment with a qualified healthcare provider or physical therapist before returning to demanding exercises.

FAQs About Tendon Training

Q: Why is tendon strength important for physical performance?

A: Tendons transfer the force produced by your muscles to your bones. Strong, well-conditioned tendons support efficient movement, joint stability and the ability to handle physical demands. Muscle size alone doesn't determine how much usable strength you have.

Q: What are the best exercises for strengthening tendons?

A: Isometric holds, slow resistance exercises, controlled lowering movements and supported body-weight exercises all challenge tendons. Once you've developed adequate strength and control, light hopping exercises help train their ability to store and release energy during quick movements.

Q: Is tendon training safe for older adults and beginners?

A: Supported isometric exercises offer an accessible starting point because they place tension on muscles and tendons without repeated joint movement. Chair-assisted squats, lunges and elevated push-up holds let you adjust the difficulty according to your current strength and mobility. If you have a joint condition, a past tendon injury or persistent pain, check with a qualified healthcare provider before starting a new exercise program.

Q: How long does it take to strengthen my tendons?

A: Tendons generally adapt more slowly than muscles, so meaningful changes require consistent training over several months. Gradually increase exercise difficulty, allow recovery between demanding sessions and assess your progress every four weeks rather than expecting rapid results.

Q: Do I need heavy weights to build stronger tendons?

A: Sustained holds and controlled body-weight exercises provide a useful training stimulus without heavy equipment. Baar describes research in which climbers achieved comparable strength improvements with lighter and heavier loads during specific hanging exercises. The amount of tension, duration of each hold and gradual progression all influence your results.

This article is for informational purposes only and does not constitute medical advice. Consult a qualified healthcare provider before making changes to your health regimen.

Sources and References

- [1] YouTube, Mr. White, It's Weird, but Tendon Training Will Give You Jaw-Dropping Strength October 11, 2026
- [2] YouTube, UC Davis Health, 3 Isometric Exercises for Strengthening Tendons and Ligaments with Dr. Keith Baar February 5, 2025