GUIDE

For an older beginner, the scaled squat is a different prescription, not a smaller one.

A light chair squat, lowered slowly and driven up fast, trains muscle power, the part of fitness that fades first with age. A heavy squat that a beginner cannot move fast does not train it as well.

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Getting up from a low couch, climbing out of a car, stepping up a curb before the crosswalk light changes: none of it looks like exercise, and all of it asks for force delivered quickly. That quality is muscle power. Strength is how much force you can produce. Power is how fast you can produce it. Liam Pearson-Noseworthy, a Distinguished Teaching Fellow at Northumbria University, wrote in The Conversation on November 6, 2026 that power "fades earlier and faster than strength does as we age."

When squats are on the whiteboard in a CrossFit class, an older beginner is often offered a scaled version: squat to a chair, use less weight. Most people hear that as the small version of the real workout. Done light, lowered slowly and driven up fast, the chair squat is a different prescription, aimed at the quality that goes first.

Muscle power declines first because fast-twitch fibers weaken with age

Muscle power is how quickly a muscle can produce force, and Liam Pearson-Noseworthy of Northumbria University, writing in The Conversation, traces its early decline to the muscle fibers. Slow-twitch fibers, built for endurance, tend to hold up fairly well with age. Fast-twitch fibers, built to produce force quickly, tend to shrink and weaken. A quick stand from a low seat leans on the fibers that age weakens most.

Twenty trials found fast lifting built more power and the same strength

The most direct evidence on fast lifting in older adults is a 2022 systematic review and meta-analysis by Anoop Balachandran and colleagues in JAMA Network Open. It pooled 20 randomized clinical trials enrolling 566 community-living older adults. Power training in those trials meant lifting weights fast and lowering under control, and the comparison groups mainly did the same exercises at a slower speed.

Against slower lifting, power training showed a moderate advantage for muscle power and a modest improvement in physical function, with no difference in strength or muscle mass. When two versions of a movement build the same strength and one of them also builds more power, the power version is not the lesser one. On the quality that declines first, the fast version came out ahead.

Pearson-Noseworthy's own trial points the same way at a smaller scale. Thirty-one untrained adults aged 60 to 79 did one leg press session a week for six weeks. Whether they pushed fast or slow, their strength, everyday function and quality of life all improved. The slow groups tended to gain a little more strength, and the fast groups tended to improve more on everyday tasks.

A heavy squat cannot move fast, which is why the power chair squat is light

The light chair squat was never the exercise under test. The 20-trial review compared speed, not load, with both groups doing the same exercises, and Pearson-Noseworthy's trial used a leg press. The chair squat follows from the trials; it was not tested in them.

A skeptic can push further. Pearson-Noseworthy writes that the weight itself does not have to move fast, and that what matters is trying to move it as quickly as you safely can. If intent is what counts, why not do the full, heavier squat and try to drive it up fast?

Pearson-Noseworthy's own recipe is the evidence that load limits speed. He tells readers to pick a light-to-moderate weight, something they could lift perhaps 15 times with good form, and to stop at around eight reps, "so every rep still moves quickly." That stopping rule only makes sense if reps slow down as a set goes on, even at a weight chosen to be light. The next step is an inference, not a tested result: if a 15-rep weight stops moving quickly after about eight, a squat near a beginner's limit leaves no room for speed at all, and the rep crawls however hard they try. The chair sets a depth the beginner can stand up from quickly, and the light load leaves room for intent to become speed. That makes the light chair squat a prescription for power, not a smaller squat.

The strongest objection: slower lifting builds more strength and muscle

The best case against the fast chair squat comes from a 2026 systematic review and meta-analysis by Meiling Tao and colleagues in Sports Medicine and Health Science. It pooled 16 studies with 801 older participants and concluded that lifting at deliberately submaximal speed was better for muscle mass and muscle strength than lifting at maximal intended speed. A careful coach could argue from this: build strength first with slower, heavier work, and add speed later, because strength is what power is built on.

Grant Tao the strength point in full. The two reviews disagree on strength, and the thesis does not need to win that argument, because it is a claim about power.

Tao's review also found that moderate-intensity training with maximal intended speed came out ahead for functional performance, the measure closest to daily life, and the 20-trial review found the fast groups gained more power. On the quality this essay is about, both reviews point the same way. A beginner whose goal is more muscle has a

good case for slower, heavier work as they progress. A beginner whose goal is getting out of low chairs and cars has a good case for the light, fast version now. Many people will want both over time, and the order can follow the goal.

At O-SEA CrossFit, the power chair squat runs the same way every time

When squats are on the board and an older beginner takes the chair line, the O-SEA CrossFit coach sets it up in a fixed order. First, the load: body weight, or a light weight if body weight is easy, at a level you could manage perhaps 15 times. Second, the lowering: sit down slowly and under control, without dropping into the seat. Third, the stand: drive up as fast as you safely can, with your hands on the armrests if you need them. The set ends around eight reps, or sooner if the stand slows noticeably, because a slow rep has stopped training power. The cue the coach will give is four words: sit slow, stand fast.

We would rather hear a beginner ask for that than watch them grind through a heavier squat they cannot move fast. The number on the board for everyone else is a starting point, and the chair line beside it is a separate prescription with its own purpose. An older beginner standing up from a chair with full effort is doing the exercise correctly, even if the person next to them moves a barbell twice as fast. The beginner's job is their own eight reps, done to their own prescription.

The fast chair squat does not suit every goal or every body

The fast chair squat has clear limits, and they decide who should start somewhere else. Balance is the biggest. The 20-trial review found that fast lifting made no clear difference to balance, and Pearson-Noseworthy notes that for preventing falls the strongest evidence is for balance and functional exercise such as stepping and turning. Somebody whose main concern is falling needs that work, and a fast chair squat does not replace it.

Somebody recovering from surgery, or managing a joint or heart condition, should have their own clinician shape their exercise before a group class does. Somebody who cannot yet control the slow lowering should learn that half first, because a fast stand after an uncontrolled drop is not the exercise described here.

> A scaled squat is not the real workout with parts removed. Done light and fast, it aims at the quality age takes first.

The first class will probably include a squat written on the board that an older beginner cannot do yet as written. When squats go up, four words are worth saying to the coach before the clock starts: "Sit slow, stand fast." Those words ask for the version built for the job.

Further reading

1. Liam T. Pearson-Noseworthy, Northumbria University, in The Conversation: a review of the trials on lifting speed in older adults, with the chair squat recipe theconversation.com/this-weightlifting-technique-can-help-older-adults-stay-fit-and-independent-as-they-age-294751
2. Tao et al., Sports Medicine and Health Science: systematic review and meta-analysis of maximal versus submaximal intended velocity resistance training in older adults, the source of the strongest objection pmc.ncbi.nlm.nih.gov/articles/PMC13250209
3. Balachandran, Steele, Angielczyk, Belio, Schoenfeld, Quiles, Askin and Abou-Setta, JAMA Network Open (2022): the 20-trial, 566-participant systematic review and meta-analysis comparing power training with traditional strength training in older adults, named directly so a reader can check it without going through a summary pmc.ncbi.nlm.nih.gov/articles/PMC9096601

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