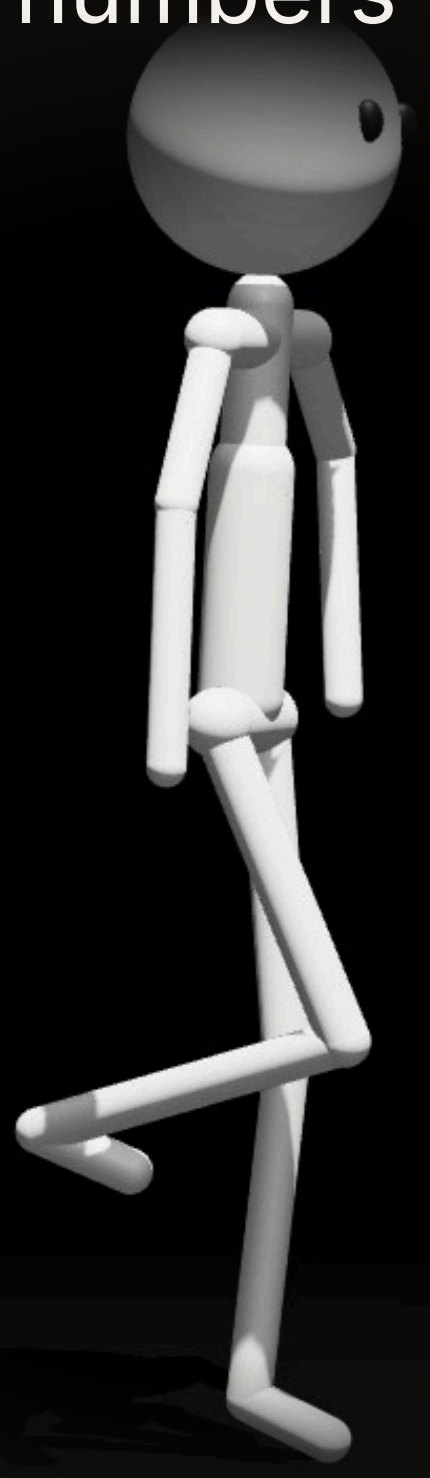
FREE GUIDE · LONGEVRA LABS

The Longevity *Home Kit*

Two quick tests that predicted who lived longer. Four routines that moved the numbers in real trials.



14 published sources. Every number names its source on the page.

START HERE

Ten minutes today. *Then three days a week.*

01 TODAY

Do both tests (pages 3 and 4). Write your scores on page 10.

02 THIS WEEK

Pick one blood-pressure hold: the **wall sit** or the **hand grip**. Do it 3 days a week.

03 EVERY MONTH

Re-test and log your scores. Add the strength, sleep and drink habits when you're ready.

> **Before you start.** Do the tests next to something sturdy you can grab. If you have high blood pressure or a heart condition, or take blood-pressure medication, ask your doctor before starting the holds. Breathe normally during a hold; never hold your breath.

TEST 1 · ABOUT A MINUTE

Sit on the floor. *Stand back up.*

Lower yourself to sit on the floor, then stand back up, using as little help as you can.

Score it: start at 10 (5 for sitting down, 5 for standing up). Take off 1 point for every hand or knee you use for support.

YOUR SCORE	RISK OF DEATH
8 – 10	Baseline
6 – 7.5	1.8×
3.5 – 5.5	3.4×
0 – 3	5.4×

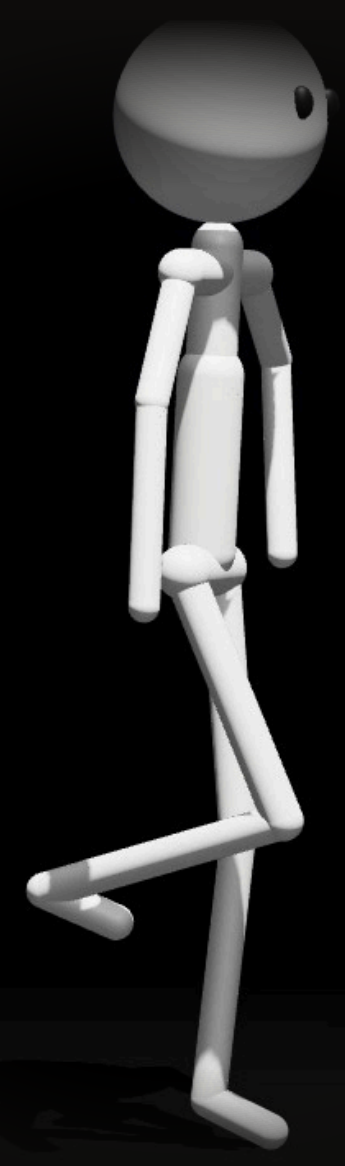
Compared with a score of 8–10, over a median of 6.3 years, after adjusting for other factors.

21% better survival for each extra point.

2,002 adults aged 51–80. Brito et al., European Journal of Preventive Cardiology, 2014. The score reflects muscle strength and flexibility, the authors note. It predicts; it doesn't diagnose.

TEST 2 · TEN SECONDS

Stand on one leg *for ten seconds.*



No holding on. Stand beside a counter in case you wobble.

Pass = you hold the full 10 seconds.

+84%

RISK OF DEATH OVER ~7 YEARS FOR PEOPLE WHO COULDN'T

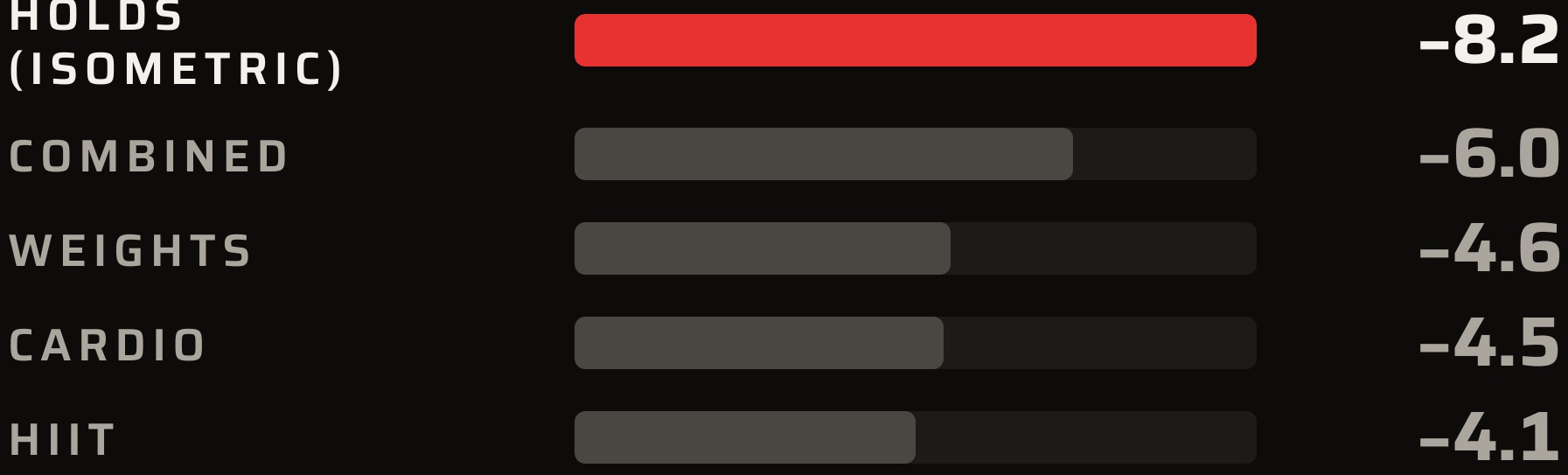
1 in 5 couldn't. Of them, 17.5% died during follow-up, vs 4.6% of those who could. The +84% is after accounting for age, sex, BMI and illness.

1,702 adults aged 51–75. Araújo et al., British Journal of Sports Medicine, 2022. It predicts; it doesn't diagnose.

ROUTINE 1 · BLOOD PRESSURE

The wall sit *beat cardio.*

270 trials, 15,827 people. Average drop in the top number (systolic, mmHg) by type of exercise:



OF THE HOLDS, THE WALL SIT RANKED FIRST. THEN A HOME TRIAL:

−9.5

mmHg vs no training after 4 weeks of home wall sits, 3 days a week (100 inactive adults). Stopping undid it within 4 weeks.



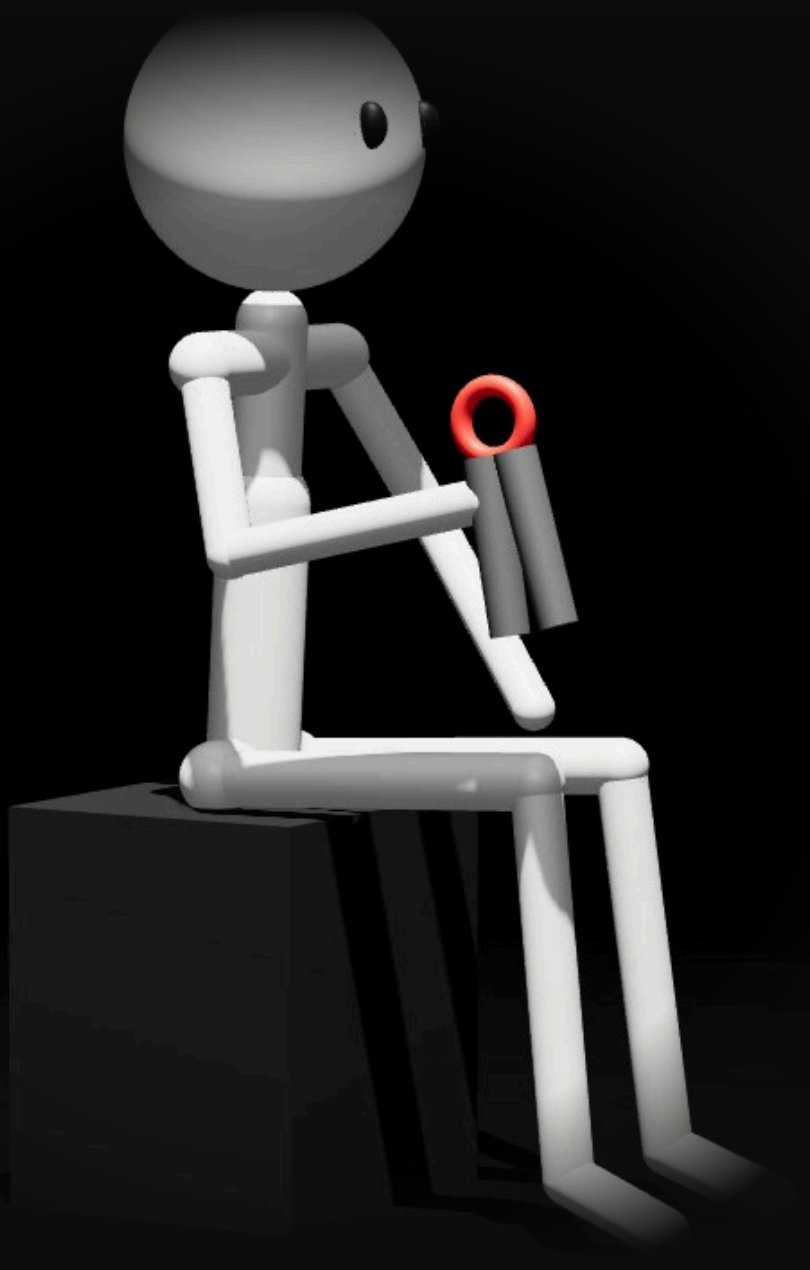
THE ROUTINE

2:00	**Hold**, back flat on the wall · then 2:00 seated rest
×4	**Rounds**, 3 days a week, 48 h apart

Sources: Edwards et al., Br J Sports Med, 2023 · Swift et al., BMJ Open Sport & Exercise Medicine, 2026.

ROUTINE 2 · NO WALL NEEDED

Squeeze a hand grip. *Not every day.*



-5.4

MMHG TOP NUMBER · -2.7 BOTTOM

31 trials, 905 people. **More wasn't better:** training more than 3 days a week was linked to a smaller drop, and squeezing lighter than about 30% of your max did less.

THE ROUTINE

2:00	**Squeeze** one hand at about a third of your hardest grip
1:00	**Rest** between rounds
×4	**Rounds**, 3 days a week at most, for 8+ weeks

Sources: Lin et al., J Clin Hypertens, 2026 · the 1-minute rest: ACC/AHA guideline (Whelton et al., 2017), as that review quotes it.

ROUTINE 3 · STRENGTH

Never too old *to get stronger.*

+174%

STRENGTH IN 8 WEEKS

Ten frail nursing-home residents, about 90, lifted heavy; walking speed rose 48%. A later trial (100 residents, aged 72–98): lifters +113%, non-lifters +3%.



THE ROUTINE · 2025 CONSENSUS

2–3×	a week, with **a rest day** between
8–12	reps; start with 1–2 sets, **build to 2–3**
Hard	heavy enough to feel hard; **all major muscle groups**

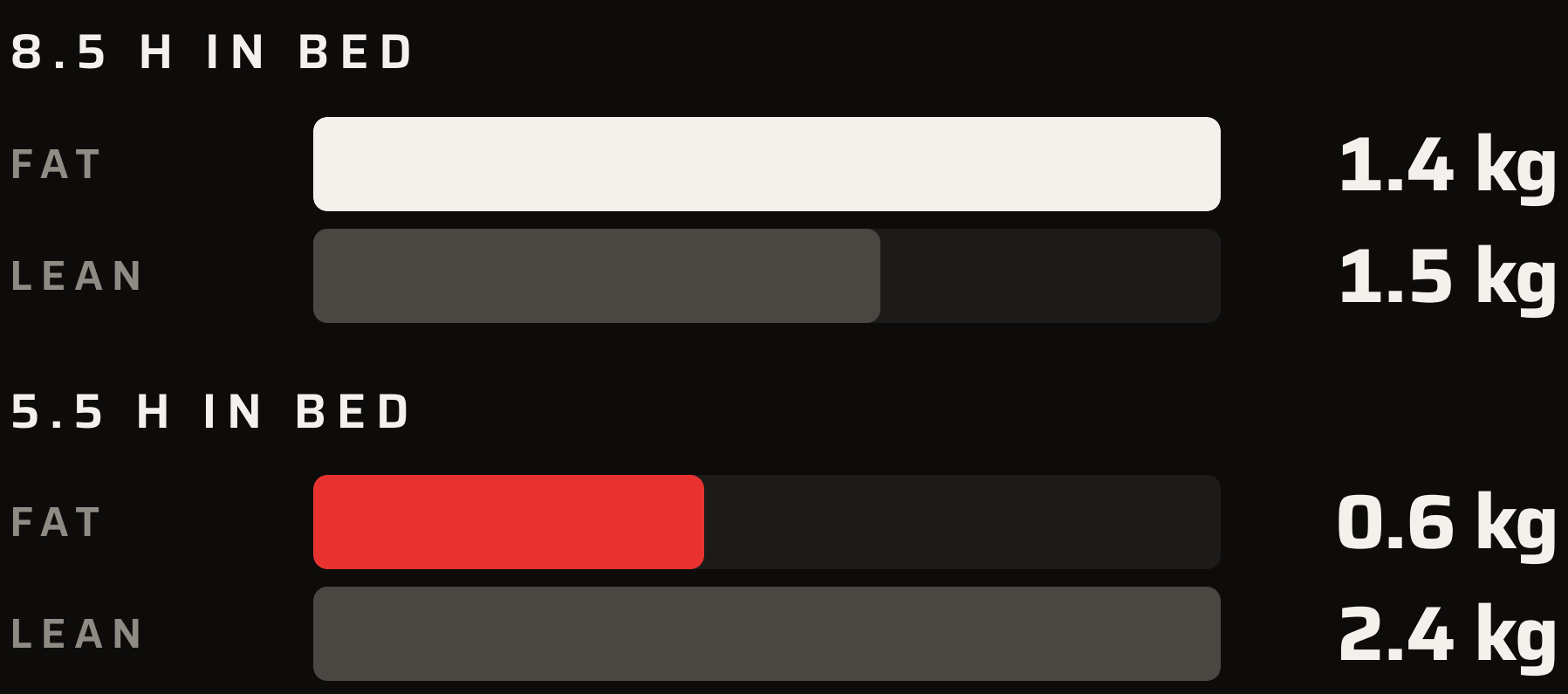
> **Light or heavy?** 20–25 reps or 8–12 built about the same muscle when every set went to failure (12 weeks, 49 trained men).

Sources: Fiatarone et al., JAMA, 1990 · Fiatarone et al., NEJM, 1994 · Izquierdo et al. (ICFSR), J Nutr Health Aging, 2025 · Morton et al., J Appl Physiol, 2016.

ROUTINE 4 · SLEEP

Dieting? *Protect your sleep.*

Ten dieters ate the same diet twice in a sleep lab, 14 days each: once with 8.5 hours in bed, once with 5.5.



-55% fat lost on short sleep, and more lean mass lost instead.

DO THIS

8.5 h If you're eating less to lose fat, **give yourself the time in bed** the rested group had.

Source: Nedeltcheva et al., Annals of Internal Medicine, 2010. Weight lost, by type (fat vs fat-free mass), in each 14-day stay.

MYTH CHECK

Diet soda beats water? *Look who paid for it.*



-6.2 vs -2.5

kg kept off, diet vs water: the viral 1-year study (303 adults), industry-funded, as it discloses.

-8.8 vs -7.6

kg lost, **water** vs diet drinks: an independent 24-week trial (89 dieting women).

DO THIS

01 Sugary soda → diet soda

02 Diet soda → water

03 Start with the after-lunch drink, 5 days a wk

Sources: Peters et al., Obesity, 2016 · Madjd et al., Am J Clin Nutr, 2015 (the after-lunch swap is its protocol) · McGlynn et al., JAMA Netw Open, 2022.

YOUR NUMBERS

Test today. *Re-test monthly.*

WHEN	SIT-RISE SCORE / 10	ONE LEG 10 S LEFT · RIGHT	BLOOD PRESSURE
START			
MONTH 1			
MONTH 2			
MONTH 3			

	DAY 1	DAY 2	DAY 3
WEEK 1			
WEEK 2			
WEEK 3			
WEEK 4			
WEEK 5			
WEEK 6			
WEEK 7			
WEEK 8			

Tick a box each day you do your hold. Screenshot this page or print it.

THE STUDIES

01 **Brito LB et al.** Ability to sit and rise from the floor as a predictor of all-cause mortality. Eur J Prev Cardiol 2014;21(7):892–898.

02 **Araújo CG et al.** Successful 10-second one-legged stance performance predicts survival in middle-aged and older individuals. Br J Sports Med 2022;56(17):975–980.

03 **Edwards JJ et al.** Exercise training and resting blood pressure: a network meta-analysis of randomised controlled trials. Br J Sports Med 2023;57(20):1317–1326.

04 **Swift HT et al.** Isometric exercise training and blood pressure control: a randomised controlled trial. BMJ Open Sport Exerc Med 2026;12:e003172.

05 **Lin CW et al.** The optimal dosage of isometric handgrip exercise for blood pressure reduction: systematic review and meta-analysis. J Clin Hypertens 2026.

06 **Whelton PK et al.** 2017 ACC/AHA guideline for the prevention, detection, evaluation and management of high blood pressure in adults.

07 **Fiatarone MA et al.** High-intensity strength training in nonagenarians. JAMA 1990;263(22):3029–3034.

08 **Fiatarone MA et al.** Exercise training and nutritional supplementation for physical frailty in very elderly people. N Engl J Med 1994;330(25):1769–1775.

09 **Izquierdo M et al.** Global consensus on optimal exercise recommendations for enhancing healthy longevity in older adults (ICFSR). J Nutr Health Aging 2025;29:100401.

10 **Morton RW et al.** Neither load nor systemic hormones determine resistance training-mediated hypertrophy or strength gains in resistance-trained young men. J Appl Physiol 2016;121(1):129–138.

11 **Nedeltcheva AV et al.** Insufficient sleep undermines dietary efforts to reduce adiposity. Ann Intern Med 2010;153(7):435–441.

12 **Peters JC et al.** Obesity 2016;24(2):297–304 · **Madjd A et al.** Am J Clin Nutr 2015;102(6):1305–1312 · **McGlynn ND et al.** JAMA Netw Open 2022;5(3):e222092.

> **Not medical advice.** This guide is for education. Study results are averages and won't predict any one person. If you have a health condition or take medication, ask your doctor before you start.

ONE STUDY AT A TIME

@longevralabs *on Instagram, YouTube & TikTok*