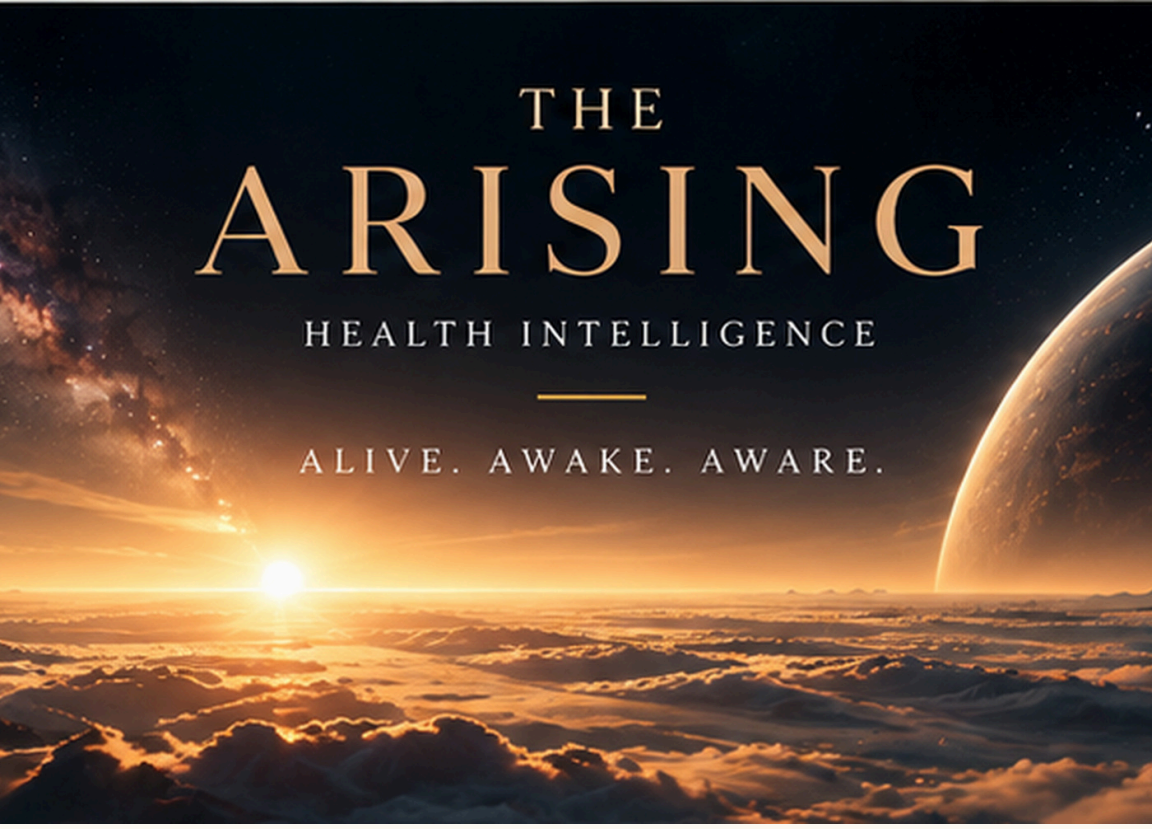


16 / EVERYDAY HEALTH

Strength Is Something We Keep Making

Protein, training, recovery, and the physical reserve that keeps ordinary life open.

JOHN GRIFFIN, MD

REVIEW EDITION · OCTOBER 2026

Capacity has a daily meaning

Strength is the ability to carry, rise, steady, lift, and continue. The value of preserving it is easier to see in an ordinary day than in a photograph. A more useful healthspan conversation asks what a person wants to remain able to do and what makes that activity possible.

The readings here examine nutritional evidence and a preclinical mechanism of muscle maintenance. They answer different questions. The nutrition synthesis draws across human studies; the DEAF1 work investigates biology in experimental systems. [1,2]

Measure function alongside mass

Muscle size, strength, power, endurance, and recovery do not describe the same capacity. A weight-loss intervention that reports only the scale leaves important questions unanswered. So does a nutrition study that measures lean mass without checking how people move.

The LIFE randomized trial provides an example of a functional endpoint: loss of the ability to walk 400 metres. Among 1,635 sedentary adults aged 70-89 with physical limitations, structured activity reduced major mobility disability compared with health education over about 2.6 years. That is a result about participation in life, not a promise that every limitation will reverse. [3]

Build a practice that can change

A useful plan needs room for recovery, illness, changing responsibilities, and the body's response. More effort is not always the missing ingredient. For some people the next step is access to rehabilitation, help obtaining adequate food, or an assessment of an unexplained decline.

Bone, balance, joints, and muscle also belong in the same conversation about movement, although evidence for one should not be borrowed automatically for another. The aim is a coordinated practice that preserves options and can adapt as a person's circumstances change.

FROM THE ARISING / 2026-10-24

Muscle preservation begins with the foundations

A large nutrition review puts protein and resistance training ahead of speculative fixes

Maintaining muscle is part of maintaining independence. A systematic review in The Journal of Nutrition brings together evidence on nutritional approaches to sarcopenia, the age-related loss of muscle mass, strength and physical performance. Its strongest support goes to familiar foundations: protein-centered nutrition paired with resistance training, and correcting vitamin D deficiency when present.

Dharmansyah and colleagues included 248 studies concerning adults aged 60 and older. The collection comprised 236 primary studies and 12 systematic reviews or meta-analyses. Among the primary studies were 100 randomized trials, along with observational and other designs.

A synthesis, not one giant experiment

The authors did not pool all the studies into a single treatment effect. They used a synthesis without meta-analysis, examining the direction of findings and grading certainty. That distinction matters when a large study count appears in a headline.

For example, the review reported a favorable direction of effect in 84% of single-nutrient randomized trials. This is not an 84% chance of success for an individual, and it does not tell us the average size of benefit. Studies can differ in population, outcome and magnitude while pointing in the same direction.

Where the support was strongest

The authors rated protein-anchored strategies, including adequate intake and resistance training, as moderate-to-high-certainty approaches. Their discussion includes protein intakes around at least 1.0–1.2 grams per kilogram per day and leucine-enriched approaches. Those are research and guideline-context figures, not a personal prescription; needs and restrictions differ with clinical circumstances.

Vitamin D repletion in deficient older adults was also strongly supported within the review's framework. That is different from assuming that more vitamin D is better for everyone.

Mediterranean-style dietary patterns came next, with moderate certainty and evidence that was largely observational. Such associations support further study but do not establish that the diet alone prevented muscle loss.

The gut-muscle connection remains developmental

Approaches aimed at the gut microbiome were interesting but much less certain. Results tended to be favorable yet varied substantially, and the authors rated the evidence as low to very low certainty. They described microbiome targeting as a research priority rather than current prescriptive practice.

The review also found inconsistent diagnostic criteria and outcome reporting. That makes confident comparisons harder and limits firm clinical recommendations. A large literature can still leave important questions unresolved.

A useful order of attention

The editorial implication is to give established foundations sustained attention while newer mechanisms are tested. The goal is not only a scan showing more lean tissue, but strength and function that carry into daily life.

Future trials should use clearer, more consistent definitions and measure outcomes people recognize: mobility, capability and independence. The research is most useful when the measurements remain connected to those purposes.

Read the research: Primary study / PubMedStudy publication: October 21, 2026. Source edition: October 24, 2026. Open research →

FROM THE ARISING / 2026-10-19

Strength is something we keep making

A preclinical exercise study explores muscle maintenance without establishing an age when it is too late to begin.

Muscle is a place of continuous activity even when a person is resting. Proteins are made, damaged components are cleared, and signaling pathways balance growth with maintenance. A preclinical study follows one part of that balance through DEAF1, FOXO and mTORC1.

The paper is a 2025 study revisited in the October archive. It should not be presented as a newly completed human exercise trial.

The pathway under study

The researchers identified DEAF1 as an upstream driver of mTORC1 activity in aging muscle models. Greater DEAF1 activity increased mTOR transcription and was linked to disrupted protein maintenance and features of muscle senescence.

Exercise suppressed Deaf1 through FOXO activation in the studied models. Blocking FOXO or increasing Deaf1 interfered with the exercise-related benefit. The experiments help connect a familiar activity with a specific cellular process.

The work involved flies, mice and cultured cells. It did not determine how much exercise an individual should do, which human training program is optimal or whether a particular person would respond to manipulating the pathway.

What not to conclude

The phrase “reverse muscle aging” in a scientific title can travel much farther than the experiment. Changes in model-organism function do not establish whole-body rejuvenation in people.

Nor does the study establish a birthday after which exercise becomes ineffective. It did not randomize humans to start training at different ages. Turning a mechanistic finding into “it may be too late” advice would answer a question the investigators did not test.

Experiments involving pathway-modifying compounds also do not make those medicines appropriate for self-directed muscle preservation. Clinical benefits, harms, dose and population have to be evaluated separately.

A useful direction for the next experiment

The translational question is whether the same pathway explains important variation in human muscle maintenance and exercise response. Reliable measurements could then help test targeted interventions, with function—not just a molecular marker—as a central outcome.

For readers, the study offers a deeper view of the work that accompanies movement. For an evidence platform, it is a reminder to keep mechanism and prescription in different fields. A diagram can explain a hypothesis without issuing instructions.

The larger healthspan purpose remains ordinary and important: getting up, climbing a path, carrying something, joining in. Understanding the machinery matters most when it eventually helps preserve those possibilities.

Sources and evidenceExercise suppresses DEAF1 to normalize mTORC1 activity and reverse muscle agingDecember 2, 2025; research revisit · Preclinical flies, mice and cultured cells Open research →

SOURCES & READING SCOPE

Keep the claim beside its evidence

1. Dhika Dharmansyah, Tirta Adikusuma Suparto, Sehabudin Salasa, et al. Protein-Based Strategies and Mediterranean-Style Diets Show the Most Consistent Benefits for Sarcopenia in Older Adults. The Journal of nutrition. 2026 Oct 21:101896. doi:10.1016/j.tjnut.2026.101896. PMID:42906854. Open source →

2. Sze Mun Choy, Kah Yong Goh, Wen Xing Lee, et al. Exercise suppresses DEAF1 to normalize mTORC1 activity and reverse muscle aging. Proceedings of the National Academy of Sciences of the United States of America. 2025 Dec 02;122(48):e2508893122. doi:10.1073/pnas.2508893122. PMID:41284871. Open source →

3. Marco Pahor, Jack M Guralnik, Walter T Ambrosius, et al. Effect of structured physical activity on prevention of major mobility disability in older adults: the LIFE study randomized clinical trial. JAMA. 2014 Jun 18;311(23):2387-96. doi:10.1001/jama.2014.5616. PMID:24866862. Open source →

Selected primary publication records and abstracts checked 25–26 October 2026. This is a focused reading companion, not a systematic review, a treatment protocol, or a complete appraisal of methods, supplements and later evidence. The following readings retain the complete article prose from the October 11–25 publishing package; original study context and limitations are preserved.

KEEP FOLLOWING THE IDEA

Part of a connected collection

Return to a subject, follow a related booklet, or explore the wider projects. These links organize reading; they do not imply that one scientific finding proves another.

This booklet online →

Booklet directory · all 48 →

Atlas · Review of 248 Studies Ranks Protein Plus Strength Training Top for Sarcopenia →

Arising Health website →

The Arising book →

The Long Game →

Listen & watch →

Related booklets

17 · The Capacity to Keep Going →

13 · Beyond the Nutrition Label →

02 · Beyond the First Prescription →

14 · The Fasting-Autophagy Gap →

19 · Midlife Deserves Its Own Conversation →

21 · The Energy to Become →

The online review collection is hosted in the shared Atlas. Its existing access settings apply. The public website remains a separate destination.