Perimenopause & Strength Training

Research Sources & Further Reading

Day Zero With Surbhi

Fitness, health, wellness, mindset and realistic lifestyle inspiration for women over 40. This series shares practical fitness tips, strength training guidance, healthy habits, self-care, confidence, nutrition and motivation to help you feel stronger, healthier and more confident in your 40s and beyond.

This is the full reference list behind the recent carousel on strength training and perimenopause. Every source below is a peer-reviewed study, a government clinical trial registry, or the original published journal article — not a magazine writeup or secondhand summary. Tap or click any link to read the primary source yourself.

01

Transdermal Estrogen Therapy Improves Gains in Skeletal Muscle Mass After Resistance Training

Frontiers in Physiology — hosted on PubMed Central (NCBI/NIH)

Randomized trial showing estrogen therapy amplified the muscle-building response to resistance training in postmenopausal women — direct evidence for how estrogen decline affects training results.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7853242/

02

Resistance Training for Hot Flushes in Postmenopausal Women: A Randomised Controlled Trial

Maturitas (peer-reviewed journal)

A 15-week RCT in which resistance training nearly halved the frequency of moderate-to-severe hot flushes compared with a no-exercise control group.

https://www.maturitas.org/article/S0378-5122(18)30761-8/fulltext

03

Resistance Training Reduced Luteinising Hormone Levels: A Substudy Exploring the Hot-Flush Mechanism

PLOS ONE (peer-reviewed journal)

Follow-up analysis proposing the biological pathway — a hormonal mechanism — behind resistance training's effect on vasomotor symptoms.

https://journals.plos.org/plosone/article?id=10.1371%2Fjournal.pone.0267613

04

Impact of Exercise on Perimenopausal Syndrome: A Systematic Review of RCTs

PubMed Central (NCBI/NIH)

A broader review of randomized trials concluding exercise clearly helps mild-to-moderate perimenopausal symptoms overall, while noting real uncertainty remains specifically around hot flashes.

https://pmc.ncbi.nlm.nih.gov/articles/PMC12008710/

05

Effect of Resistance Training Volume on Body Adiposity, Metabolic Risk, and Inflammation in Postmenopausal Women

PubMed Central (NCBI/NIH) — Systematic Review & Meta-Analysis

Pooled analysis of multiple RCTs on how resistance training affects visceral fat, insulin sensitivity, and inflammatory markers after menopause.

https://pmc.ncbi.nlm.nih.gov/articles/PMC10980902/

06

High-Intensity Resistance Training + Creatine in Perimenopause (Active Trial)

ClinicalTrials.gov — U.S. National Institutes of Health registry

A currently active, officially registered clinical trial studying resistance training specifically during perimenopause — evidence that this exact question is still being researched in real time.

https://clinicaltrials.gov/study/NCT07027800

07

Resistance Training for Hot Flushes in Postmenopausal Women: Trial Protocol

PubMed (NCBI/NIH)

The published study protocol underlying the resistance-training and hot-flush research — useful for anyone who wants to see the exact methodology used.

https://pubmed.ncbi.nlm.nih.gov/26857887/

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