

Creatine. From paper to dossier.

A traceable synthesis for R&D and scientific marketing.

EXECUTIVE SYNTHESIS

The two muscle trials combine creatine with training: findings remain tied to those protocols and samples [S01, S02]. The cognition trial retains a possible small signal without reaching $p < 0.05$ in either main test [S03]. These three studies do not establish a single conclusion about creatine efficacy in every setting.

SCOPE / Three public abstracts selected to teach the method. Neither a systematic review nor an updated literature review. Doses describe the trials; they are not recommendations.

	SAMPLE AND PROTOCOL	EXTRACTED FINDING AND LIMITATION
S01 Volek et al. 1999 n = 19	19 healthy resistance-trained men; creatine n=10, placebo n=9. 25 g/day for 1 week, then 5 g/day; 12 weeks of resistance training in both groups.	Bench-press strength increased 24% with creatine and 16% with placebo. Squat increases were 32% and 24%. Small, male-only sample. The finding concerns creatine combined with training, not supplementation in every setting.
S02 Chrusch et al. 2001 n = 30	30 men; mean age about 70 years. Creatine n=16, placebo n=14. 0.3 g/kg/day for 5 days, then 0.07 g/kg/day; 36 training sessions, 3 per week.	Lean tissue: +3.3 kg with creatine and +1.3 kg with placebo. The difference between changes is 2.0 kg, an editorial calculation. Older men undertaking training. This does not establish the same effects in women, sedentary people or a different formulation.
S03 Sandkühler et al. 2023 n = 123	123 participants; about half vegetarian and half omnivorous. Randomised, double-blind crossover trial; creatine 5 g/day and placebo, 6 weeks each.	BDS: $p=0.064$; RAPM: $p=0.327$. Neither main test meets $p < 0.05$; the Bayesian analysis suggests a possible small benefit. Does not support a general promise of cognitive efficacy. Side effects were reported more often with creatine; $RR=4.25$, $p=0.002$.

Review changes the conclusion.

Two teaching corrections. A repeatable check.

Initial sentences are simulations, not outputs attributed to a specific model.

SYNTHESIS TO CORRECT / S02

Creatine adds 3.3 kg of muscle compared with placebo.

CORRECTED VERSION

In the trial of older men undertaking training, lean tissue increased 3.3 kg with creatine and 1.3 kg with placebo: a 2.0 kg difference between changes.

SYNTHESIS TO CORRECT / S03

5 g per day significantly improves memory and reasoning.

CORRECTED VERSION

At 5 g/day for 6 weeks, neither main test meets $p < 0.05$. A possible small effect appears in the Bayesian analysis and needs further investigation.

Before delivery

- 01 Verify numbers, units and comparator against the source.
- 02 Distinguish abstracts from full texts actually read.
- 03 Separate results, editorial calculations and interpretations.
- 04 Retain uncertain and negative findings, and adverse events.

Original sources

S01 / Volek et al. (1999) / PMID 10449017

<https://pubmed.ncbi.nlm.nih.gov/10449017/>

S02 / Chrusch et al. (2001) / PMID 11740307

<https://pubmed.ncbi.nlm.nih.gov/11740307/>

S03 / Sandkühler et al. (2023) / PMID 37968687

<https://pubmed.ncbi.nlm.nih.gov/37968687/>

S01 and S02: PubMed abstracts. S03: abstract and open-access full text (DOI). References checked on 2 October 2026. Regulatory review, transferability and product safety remain open.