MOTS-c

Human associations · treatment benefit unestablished.



Guide prepared November 13, 2026 · profile review dates retained

KEEP IN MIND Evidence applies to the studied formulation, route, population and outcome—not every product sharing a name.

01 What is it?

MOTS-c is a peptide encoded within mitochondrial DNA and studied as a metabolic signal. Research connects it with cellular stress responses and insulin sensitivity, but measuring naturally occurring MOTS-c is different from proving that administering it benefits people. [1]

02 Potential benefits

Participates in experimental metabolic and stress-response biology. Early human research has explored exercise and metabolic questions. [1]

03 Evidence & its limits

The founding treatment experiments were performed in mice. Human associations between circulating MOTS-c and metabolic traits do not show that injected MOTS-c improves those traits. Efficacy, route-specific safety, and long-term outcomes require direct human treatment evidence. [1]

04 Risks & unknowns

No approved therapeutic use. Human efficacy, long-term safety, and meaningful clinical outcomes remain uncertain. [1]

05 Status & scope

No approved therapeutic use. [1]

06 The question to ask

Does the evidence match the exact product, route, condition and outcome being discussed? Check the full record and its review dates. This summary is selective; the product label and clinical assessment contain additional warnings and contraindications.

SOURCES / Tap a reference to open

[1] Full evidence record, references and review dates
[2] Original cell and mouse research, 2015
[3] Observational study of circulating MOTS-c and insulin sensitivity, 2018
[4] FDA MOTS-c safety information

Selective educational summary, not treatment or dosing advice. Existing profile review dates retained; no independent clinical review.