MOTS-C PROTOCOL

Mitochondrial signaling for metabolic efficiency -- optimizer

A mitochondria-derived peptide that improves cellular energy regulation, insulin sensitivity, and metabolic efficiency.

What it is

MOTS-c is a mitochondria-derived signaling peptide (a *mitokine*). Translation: it's made by the mitochondria to talk back to the nucleus and muscle tissue when energy efficiency matters. It activates AMPK, improves glucose handling, and pushes cells to burn fuel smarter—not harder.

Result: Improves insulin sensitivity, glucose utilization, and metabolic efficiency while supporting fat oxidation and lean mass preservation. Patients typically experience steadier energy, improved body composition, and reduced metabolic resistance without stimulant effects.

This isn't a stimulant. It's a systems optimizer. Think *metabolic governance* , not brute force.

Axis: Mitochondrial

Vial Composition

Component	Amount
Mots-C	20 mg
Total per vial	**20 mg**
Reconstitution: bacteriostatic water	1 mL
Final concentration: mg/mL (total peptide/ml)	20.0 mg/mL

Dosing Protocol

Parameter	Specification
Injection timing	Morning (AM)
Dose (total) [10-50mg]	**5.0 mg**
Mots-C	5.0 mg
Injection volume	0.25 mL (≈25 insulin units)
Frequency: days/week	5

Protocol Length

	Time Frame
Total duration: weeks	12
Active dosing days: days	60
Vials:	15

Supply Calculation

Item	Quantity
Total peptide required	300 mg
Vials required	15 vials (20 mg each)
Insulin syringes	60
BAC water	15 mL (recommended 2-10 mL vials

MOTS-C PROTOCOL NOTES

MOTS-c is a mitochondria-derived signaling peptide that operates at the control-system level of metabolism rather than acting as a stimulant or exogenous hormone. It activates AMPK-mediated energy regulation pathways, improving how cells sense, allocate, and utilize fuel. By enhancing glucose uptake, increasing insulin sensitivity, and promoting fatty-acid oxidation, MOTS-c helps correct the inefficiencies that drive metabolic slowdown, stubborn fat retention, and energy volatility—especially in aging or metabolically stressed patients.

Clinically, MOTS-c supports cleaner body recomposition by making fat loss less adversarial to lean mass. Patients often experience steadier energy, improved exercise tolerance, and reduced metabolic fatigue without appetite dysregulation or CNS stimulation. Importantly, MOTS-c does not force outcomes; it restores signaling fidelity, allowing nutrition, training, and adjunct therapies to work more effectively. For this reason, it is best positioned as a foundational metabolic optimizer within fat-loss, insulin-sensitivity, mitochondrial, and GH-axis protocols—quietly improving efficiency while compounding the results of the entire stack.