



## What is MOTS-c?

MOTS-c is a mitochondrial-derived peptide that is primarily used for fat loss but has also shown efficacy for muscle building, improved physical performance, and as an anti-aging peptide by reversing cellular senescence\*. Interestingly, the long-lived Japanese people (population with the most extended lifespan in the world) have demonstrated the phenotypic expression and biological link between MOTS-c and an extended lifespan.

## How does MOTS-c work?

MOTS-c functions to activate the mitochondrial genome, thereby increasing mitochondrial biogenesis. This process all happens through the inhibition of the methionine-folate cycle, resulting in purine synthesis and increased PCG-1 alpha and AICAR, all of which play vital roles in energy metabolism via AMP-activated protein kinase (AMPK). By stimulating AMPK, \*cellular senescence is, in part, reversed.

## Indications:

- Decreases insulin resistance
- Better transport of sugars to muscle cells
- Fat loss
- More energy
- Greater resistance to metabolic stress
- Improved health and lifespan

## What you need to know:

When cells are damaged, they sense their damage, and they can pause. This process is called cellular senescence or cellular arrest. Cells are programmed to do this because they don't want to replicate with damage.

Instead, they pause until the immune system can clear them. Until cleared, senescent cells secrete signals that cause harm to the body. These signals increase inflammation, exhaust stem cells, and cause the body to age more rapidly. While senescence is natural, clearing senescent cells is vital to stop the aging process.

## PATIENT BENEFIT:



FAT BURN



IMPROVE  
MUSCLE CELLS

