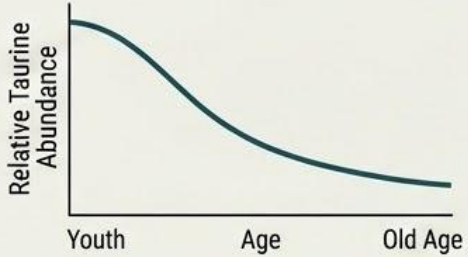
TAURINE: A KEY METABOLITE FOR HEALTHSPAN AND LONGEVITY

TAURINE DYNAMICS ACROSS AGING



- Taurine abundance **decreases** during aging.

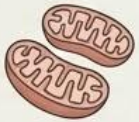


*"Moreover, we found that a **bout exercise** in blood, the antiaging effects of exercise."*

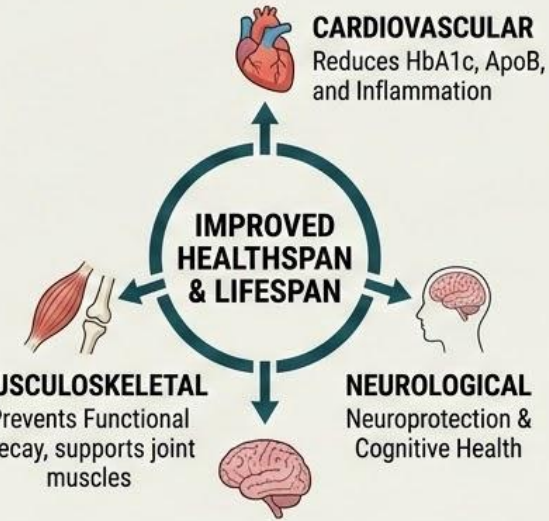
- Taurine abundance **decreases** during aging
- Supplying oral Taurine reverses decline



CORE BENEFITS FOR GENERAL HEALTH

1. PROTEIN FOLDING SUPPORT	2. MITOCHONDRIAL FUNCTION	3. CELLULAR HEALTH
		
PROTEIN FOLDING	**MITOCHONDRIAL**	**CELLULAR HEALTH**
Maintains Proteostasis	Enhanced ATP Production & Redox Balance	Suppress 'Zombie Cells' (Senescence), reduces SA-β-gal and p53
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LONGEVITY & SYSTEMS-WIDE IMPACT

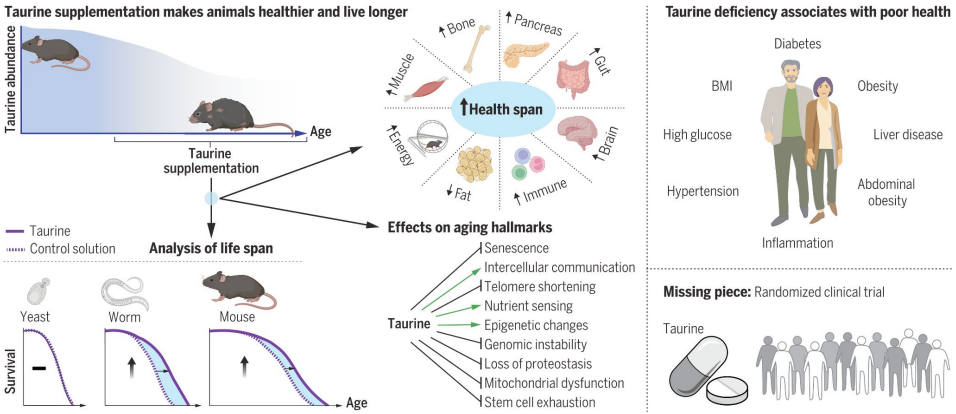


"A reversal of this decline through taurine supplementation increases health span and life span..."



TAURINE - needed for protein folding

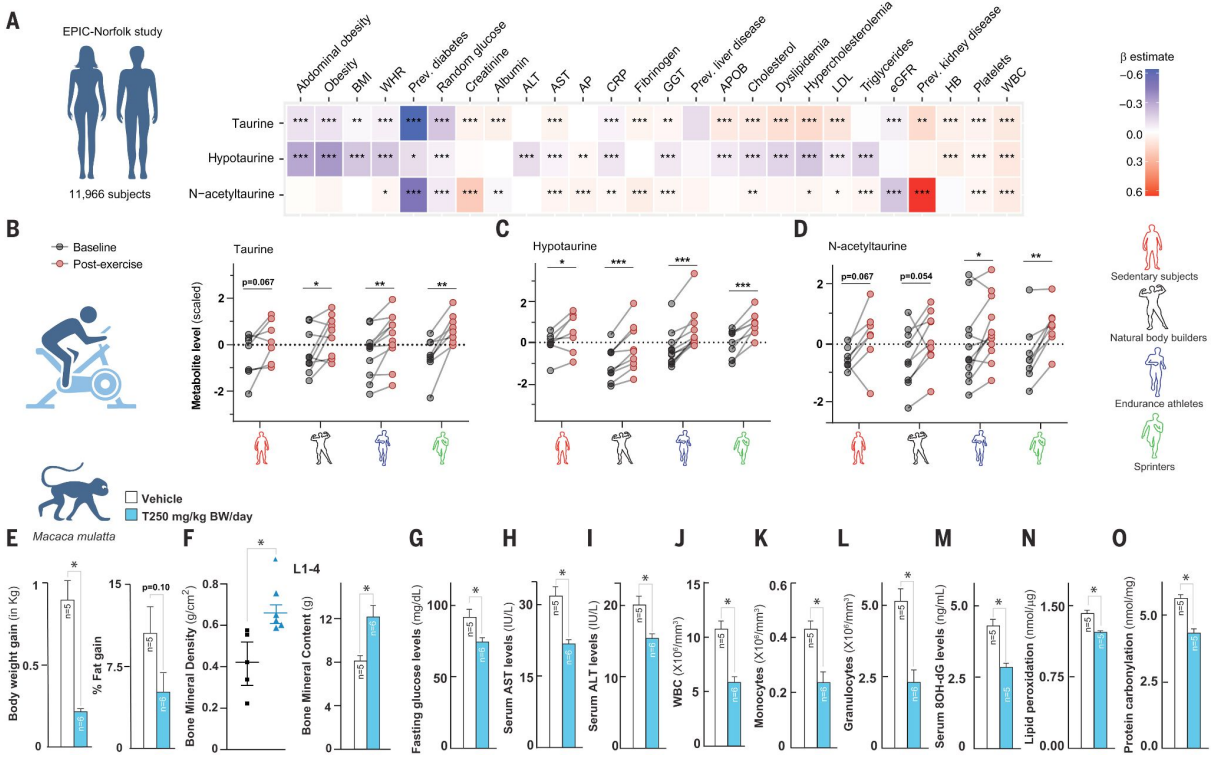
- **Taurine** abundance **decreases** during aging.
- A reversal of this decline through taurine supplementation **increases health span and life span in mice and worms and health span in monkeys.**
- The median life span of taurine-treated mice increased by 10 to 12%, and life expectancy at 28 months increased by about 18 to 25%**.**





*"Moreover, we found that **a bout of exercise** increased the concentrations of taurine metabolites in blood, which might partially underlie the antiaging effects of exercise."*

Taurine Pathway Benefits Health Span in Primates.



TAURINE & CELLULAR SENESCENCE (MARCH 2026)

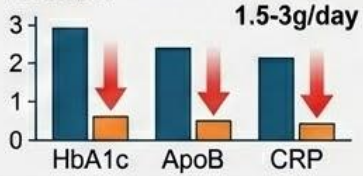
A pivotal study in the the *American Journal of Translational Research* (2026) highlights **Taurine** as a critical co-therapy for musculoskeletal aging:



- **Senolytic Action:** Taurine was found to suppress **Bmi-1 deletion-induced senescence**, effectively reducing "zombie cell" markers **(SA-β-gal** and **p53)** in muscle and skin tissues.
- **Tissue Homeostasis:** Taurine depletion has been definitively linked to **accelerated skeletal muscle senescence** and mitochondrial Complex 1 failure.
- **Clinical Application:** Clinicians are now recommending **3g/day of Taurine** to support the redox balance and mitochondrial health of joint-stabilizing muscles, preventing the "functional decay" often mistaken for normal aging.

Taurine research has matured into precise dosing for cardiometabolic health.

- **2026 Meta-Analysis (Examine):** A review of 34 RCTs confirms that a daily dose of **1.5g to 3g** for at least 8 weeks significantly reduces HbA1c, ApoB, and systemic inflammation (CRP).
- **Tissue-Specific Regulation:** New research indicates that Caloric Restriction (CR) and Taurine supplementation work via **mechanistically independent pathways**. CR primarily modulates intestinal taurine retention, while oral supplementation influences the hepatic pool, suggesting that stacking the two provides a dual-layer metabolic defense.





34 RCTs

