SUPER AGE

Meditation May Slow the Aging Process and More

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Every few months, meditation research unlocks something new.

From genetic markers of aging to white matter brain scans, new studies are mapping how and why mindfulness affects the mind and body. This year's findings offer both confirmation of long-standing wisdom and surprising new angles, especially around breathwork, time-of-day habits, and brain aging.

Meditation May Slow the Aging Process

A study published in *Biomolecules* compared long-term Transcendental Meditation (TM) practitioners with non-meditators and found:

- Reduced expression of aging-related genes (including a protein called SOCS3, which helps regulate inflammation and energy use in the body. When it's overactive, it can accelerate aging by disrupting cellular repair and increasing stress responses.)
- Better cognitive performance in areas that typically decline with age
- Healthier regulation of the stress-response system.

Together, these findings suggest TM can reduce allostatic load (the cumulative stress burden on the body and brain). The study also points to a potential metabolic shift during and after meditation that may benefit long-term health.

Is There a Best Time to Meditate?

A large-scale behavioral study in *Behavioral Sciences* analyzed meditation app usage from over 4,000 people. The findings?

- People who meditated around the *same time every day* were more likely to stick with the habit long-term.
- But people with *inconsistent timing* actually meditated more often on average.

This shows habit formation isn't one-size-fits-all. Some people benefit from routine. Others are driven by emotion-based cues, like meditating when they feel stressed. Motivation and emotional rewards may play just as important a role as timing.

Your Breathing Style May Influence Brain Health

Daily mindfulness practice with *slow breathing* may significantly reduce plasma amyloid beta (A?), a biomarker linked to Alzheimer's risk, according to a recent **study**. Surprisingly, meditation with *normal breathing* caused A? levels to increase.

This adds to the growing evidence that breathwork is a powerful lever in meditation. Slow breathing may enhance the neuroprotective effects of mindfulness, particularly for aging brains.

Meditation Reshapes the Brain's Emotional Wiring

A *PLoS One* study found that meditation practitioners had:

- Stronger white matter connections between the amygdala, anterior insula, and anterior cingulate cortex
- Enhanced interhemispheric connectivity (especially between emotional regulation centers)

These structural changes suggest that regular meditation may rewire the brain to support emotional resilience and top-down control—traits often reported by long-term meditators.

Does More Meditation Always Mean Less Stress? Not Exactly.

A *Clinical Psychological Science* study found mixed results when exploring how meditation app use correlated with psychological distress:

- The impact of meditation on stress varied depending on how researchers measured both dosage and distress
- This suggests we need more nuanced tools to track how and why meditation works

It also reinforces that meditation isn't a panacea. Its benefits often depend on intention, consistency, technique, and personal context.

Meditation Isn't One-Size-Fits-All

Meditation is a powerful longevity tool. But the newest science reminds us: *how*, *when*, and *why* you meditate can shape your results. Whether you're looking for emotional clarity, cognitive resilience, or long-term brain health, the key is finding a style that works for *you*.

Want help getting started? Check out our latest guide: **The Best Meditation Apps for Every Kind of Practice**

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