Condensed Version and key points from the study:

The effects of 6-month hydrogen-rich water intake on molecular and phenotypic biomarkers of aging in older adults aged 70 years and over: A randomized controlled pilot trial

This study looked at whether drinking hydrogen-rich water every day for 6 months could affect markers of aging in adults over age 70. Researchers wanted to know: Could hydrogen-rich water help people age better? What was the goal? Researchers were interested in whether hydrogen could influence things linked to aging, including:
DNA aging markers, brain health, strength and physical function, sleep, quality of life, inflammation and oxidative stress.

How was the study done?

- 40 adults aged 70+ .Average age: 76 years old. Randomized controlled trial (a stronger study design)

One group drank:
Hydrogen-rich water 500 mL (half a litre) daily high concentration (15 ppm hydrogen)
The other group drank:
Regular water (placebo)

Study duration: 6 months. What did they measure? Researchers checked lots of "aging markers," including:
Telomeres (protective caps on DNA linked with aging) DNA repair/methylation markers
Brain metabolism. Memory and cognition. Strength and mobility. Sleep. Skin health. Blood pressure.Quality of life.

Main findings
✅ Possible slowing of biological aging
One of the biggest findings was that the hydrogen group had better telomere outcomes.
What are telomeres? Think of them like:The plastic tips on shoelaces that stop them fraying.
Telomeres protect DNA, and shorter telomeres are associated with aging.

In this study:

- telomeres slightly increased in the hydrogen group
- telomeres decreased in the regular water group.

In plain English:
Hydrogen may have helped protect against age-related DNA wear and tear.
(Though this was a small early study.)
✅ Better brain metabolism. Brain scans suggested improvements in markers linked with: brain energy, neuron health,cellular function in certain brain regions.
✅ Improved lower body strength. Participants drinking hydrogen-rich water did better on chair-stand tests (standing up repeatedly from a chair).

To Read The Full Study CLICK HERE