Condensed version and key points from the study:

Molecular Hydrogen Affected Post-Exercise Recovery in Judo Athletes

📌 What's it about?

- Looked at whether drinking hydrogen-rich water (H2) before exercise helps athletes recover faster after intense effort

👥 Who was studied?

- 5 male judo athletes
- Average age ~24 yrs, well-matched in weight and height
- Small pilot study (important to keep in mind)

🧪 How was it done?

- Randomized, double-blind, placebo-controlled crossover — the gold standard design
- Athletes drank either H2 (6.4g) or a placebo ~30 min before a Repeated Special Judo Fitness Test (RSJFT)
- Then swapped groups (crossover), so each athlete tried both
- Measured blood lactate (3, 5, 15 min post-exercise) and heart rate (multiple points up to 15 min)

📊 Key Results

- ✅ Blood lactate was significantly lower in the H2 group vs placebo (7.23 vs 9.22 mmol/L)
- 📉 Heart rate showed a downward trend in the H2 group, but it wasn't statistically significant ($p = 0.111$)

✅ Conclusion

- Hydrogen-rich water may help clear lactic acid faster after intense exercise
- Could be a useful recovery tool for combat sport athletes

⚠️ Limitations to keep in mind

- Very small sample (only 5 athletes) — results need replication in larger studies
- Only tested on judo athletes, so may not apply to all sports
- Short-term study — no data on long-term use or safety at this dose

To Read The Full Study Please CLICK HERE