

“Effect of hydrogen-oxygen inhalation on sleep disorders and abnormal mood: a single-blind, randomized controlled trial”



Study:

Researchers tested whether breathing hydrogen-oxygen gas could improve sleep disorders, sleep quality, and mood.

What was the goal? Researchers wanted to answer:

Can hydrogen-oxygen inhalation improve sleep and mood in people with sleep disorders?

They were interested because hydrogen has been linked to anti-inflammatory, antioxidant, and stress-reducing effects, but its role in sleep had not been well studied.

How was the study done?

- **66 adults with sleep disorders**
- Randomly divided into:
 - Hydrogen-oxygen inhalation group
 - Control group
- **Treatment:**
 - Nasal inhalation for 7 days
- **Researchers measured:**
 - sleep quality
 - sleep duration
 - waking during the night
 - anxiety and depression symptoms.

What did they measure? They used:

- Pittsburgh Sleep Quality Index (PSQI) → overall sleep quality
- Actiwatch monitoring → objective sleep tracking
- Self-Rating Depression Scale (SDS) → mood/depression
- Self-Rating Anxiety Scale (SAS) → anxiety.

Main findings

- ✓ People slept longer. Total sleep time increased in the hydrogen-oxygen group.
- ✓ Sleep quality improved. Sleep efficiency improved (more actual sleep, less tossing/turning).
- ✓ Less waking during the night. Wake time during sleep decreased.
- ✓ Mood improved somewhat. Depression/stress scores improved.
- ✗ Anxiety did not improve significantly. Anxiety scores weren't clearly different from the control group.



To Read The Full Study Please

