Tualang Honey & Human Memory Research

A simple research summary from Bee-Licious Honey



A Tualang Tree Hosting Multiple *Apis dorsata* Colonies

A mature Tualang tree (Koompassia excelsa) can support numerous colonies of giant honeybees, Apis dorsata. Each colony builds a single exposed comb beneath a large branch, creating one of the rainforest's most extraordinary natural sights.

Photo by T. R. Shankar Raman (Sabah, Borneo). Cropped from the original.
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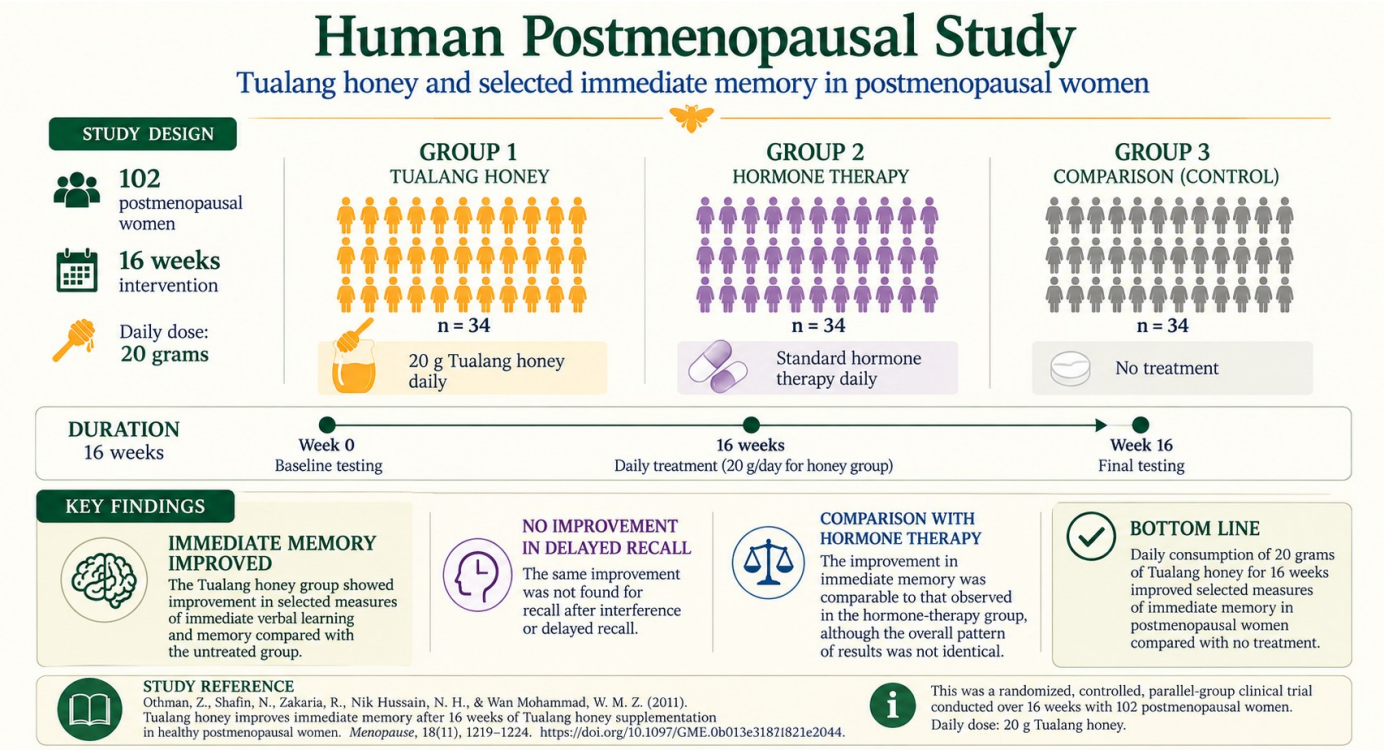
Why Tualang Honey Has Attracted Scientific Interest

Tualang honey is a wild rainforest honey produced by the giant honey bee, *Apis dorsata*, and collected from large exposed nests built high in Tualang trees. Over the past two decades, researchers have examined Malaysian Tualang honey in laboratory, animal, and human studies. The research has explored its chemical composition, antioxidant activity, memory, bone health, wound healing, antibacterial activity, inflammation, and other areas.

Much of the published research has been conducted in laboratories and animal models. A major milestone came in 2011, when researchers published a randomized human trial examining verbal learning and memory in healthy postmenopausal women.

Human Study at a Glance

102 healthy postmenopausal women | 16 weeks | 20 g Tualang honey daily
Three groups: Tualang honey, estrogen-plus-progestin therapy, and an untreated comparison group.



Why Study Postmenopausal Women?

During and after menopause, declining estrogen levels can be associated with changes in memory and cognitive function. Researchers chose this population because it offered a meaningful way to test whether observations from earlier Tualang honey research might also be reflected in human memory performance.

Study Design

- 102 healthy postmenopausal women were recruited and randomly assigned to three groups.
- The Tualang honey group consumed 20 grams daily for 16 weeks.
- A second group received estrogen-plus-progestin therapy.
- A third group received no treatment and served as the comparison group.
- Researchers evaluated verbal learning and memory before and after the intervention.

Key Finding

Women in the Tualang honey group improved on selected measures of immediate verbal learning and memory after 16 weeks compared with the untreated group. The authors described this improvement as comparable with the hormone-therapy group, although the overall pattern of test results was not identical. The study did not find the same improvement in delayed recall.

Why This Study Matters

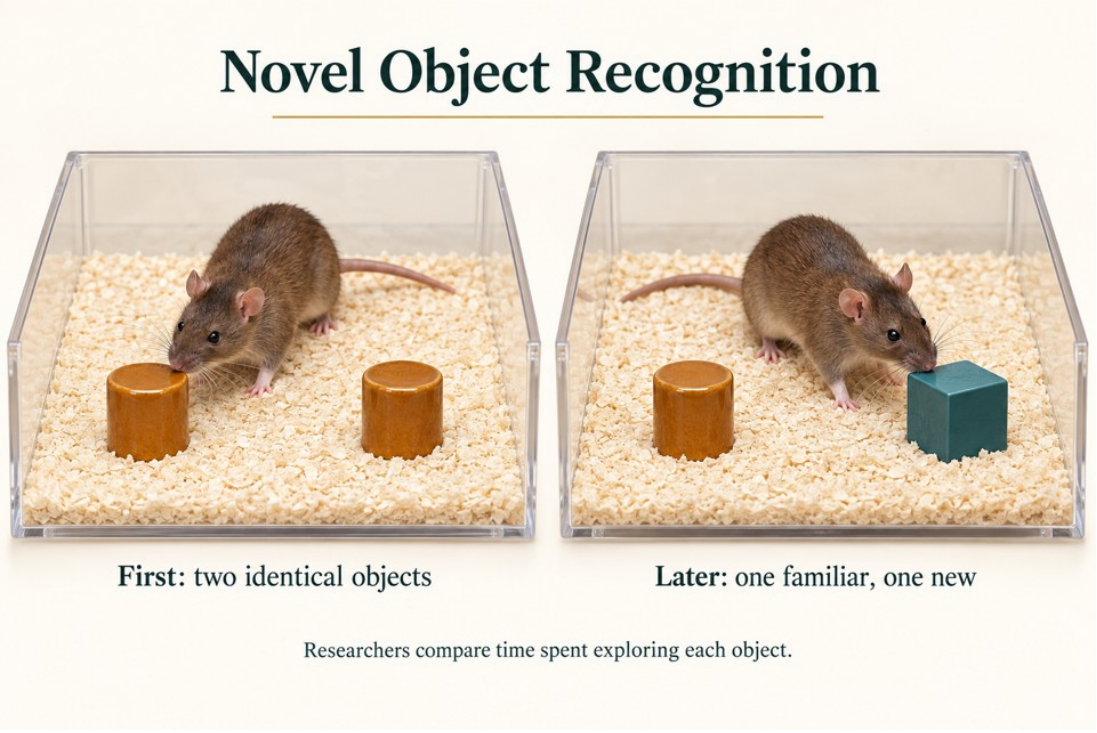
This study was important because it added a human clinical finding to a research literature that had relied heavily on laboratory and animal studies. It does not prove that Tualang honey prevents or treats dementia or other neurological disease, and it does not replace established medical care. It does, however, offer a useful starting point for continued scientific investigation.

How Is Memory Studied in Animal Research?

Researchers also use animal models to examine how Tualang honey may affect memory under controlled conditions. These studies can measure behavior alongside changes in oxidative stress, brain signaling, and areas such as the hippocampus. Their findings can help researchers identify questions for further study, but they do not establish the same effects in people.

What Is Novel Object Recognition?

Novel object recognition is a common animal research test of recognition memory. During the first stage, a rodent explores two identical objects. Later, one familiar object is replaced with a new one. Because rodents usually spend more time investigating something new, researchers compare the time spent exploring each object. Several Tualang honey studies have used this test to evaluate memory in rats exposed to conditions such as stress, aging, or low oxygen. This test was not part of the human postmenopausal study.



Additional Human Research

Human research continued after the 2011 memory trial. A 2014 study examined oxidative-stress markers in postmenopausal women after 16 weeks of Tualang honey supplementation. A 2024 systematic review summarized more than two decades of Tualang honey research across human, animal, and laboratory studies.

Read the Original Human Memory Study

Othman Z et al. Improvement in immediate memory after 16 weeks of Tualang honey (Agro Mas) supplement in healthy postmenopausal women. *Menopause.* 2011;18(11):1219–1224. doi:10.1097/GME.0b013e31821e2044.

Direct study link

Continue Exploring the Science

- Tualang Honey Supplementation Reduces Blood Oxidative Stress Levels/Activities in Postmenopausal Women (2014).
- Tualang Honey: A Decade of Neurological Research (2021 review).
- Medicinal Activities of Tualang Honey: A Systematic Review (2024).

A Note About the Evidence

Research on Tualang honey includes human trials as well as animal and laboratory studies, and the strength of evidence varies by topic. Findings from animal or laboratory research cannot automatically be assumed to occur in people.

Looking Ahead

The 2011 memory study added an important human finding to a growing body of research. Scientists continue to investigate Tualang honey's composition and potential applications.

About the Author

Jennifer Lytle is the co-founder of Bee-Licious Honey and a beekeeper who reviews published Tualang honey research and translates complex findings into clear educational resources. She is also the author of the upcoming book, *The Story Behind Tualang Honey*.

About Bee-Licious Honey

Bee-Licious Honey is an Oregon-based family business founded by beekeepers **Jeff Garner** and **Jennifer Lytle**. Through carefully sourced specialty honeys, Honey House tastings, and educational articles, we help people discover the origins, flavors, and science behind honey.

For educational purposes only. This summary is not medical advice. Tualang honey is not intended to diagnose, treat, cure, or prevent any disease. If you have questions about memory changes, dementia, menopause, medications, or treatment, talk with a qualified healthcare professional.