

EMDR and the Brain

Brain illustrations can make an unfamiliar therapy easier to discuss, but they can also make uncertain science look settled. This seven-part guide separates useful metaphors from research findings.

The illustrations are educational artwork. They are not diagnostic scans, evidence of a particular person's brain changes, or a self-treatment protocol.

Use this series as a conversation aid, beginning with what you notice rather than a conclusion about your brain. A person might describe a memory that feels close, difficulty feeling settled, or uncertainty about treatment. These descriptions deserve attention without assuming that one diagram explains every experience. Invite your therapist to explain how assessment informs the treatment plan.

The before-and-after panel needs particular care. Its colors and shapes illustrate a possible change in distress; they are not measurements taken from a client. Ask what an actual study measured, who participated, and whether the findings were replicated. A change in symptoms and a change on a scan are different outcomes, and a visual comparison cannot establish why either occurred.

The session panel is also deliberately simplified. Before using it, discuss what preparation and consent look like in your own care. Afterward, use the final panels to choose personal indicators of progress and questions for follow-up. You could ask what has become easier, what remains difficult, and whether the current approach still fits your goals. Keep room for mixed experiences and for revising the plan together.

What the research says

Established evidence supports EMDR for PTSD. Mechanism research is less definitive: working-memory accounts and other psychological and neurobiological models have been investigated. The 2018 systematic review describes preliminary neural findings and methodological limitations; it does not validate these illustrations as a diagnostic test or establish one universal mechanism.

1. EMDR and the Brain

Trauma-related distress can involve thoughts, emotions, memories, and bodily reactions. This series uses illustrations to discuss those experiences.

Research note: The left/right imagery does not mean EMDR heals by switching on or balancing the two hemispheres. That is not an established mechanism. “Stuck” is a metaphor for distress that persists.

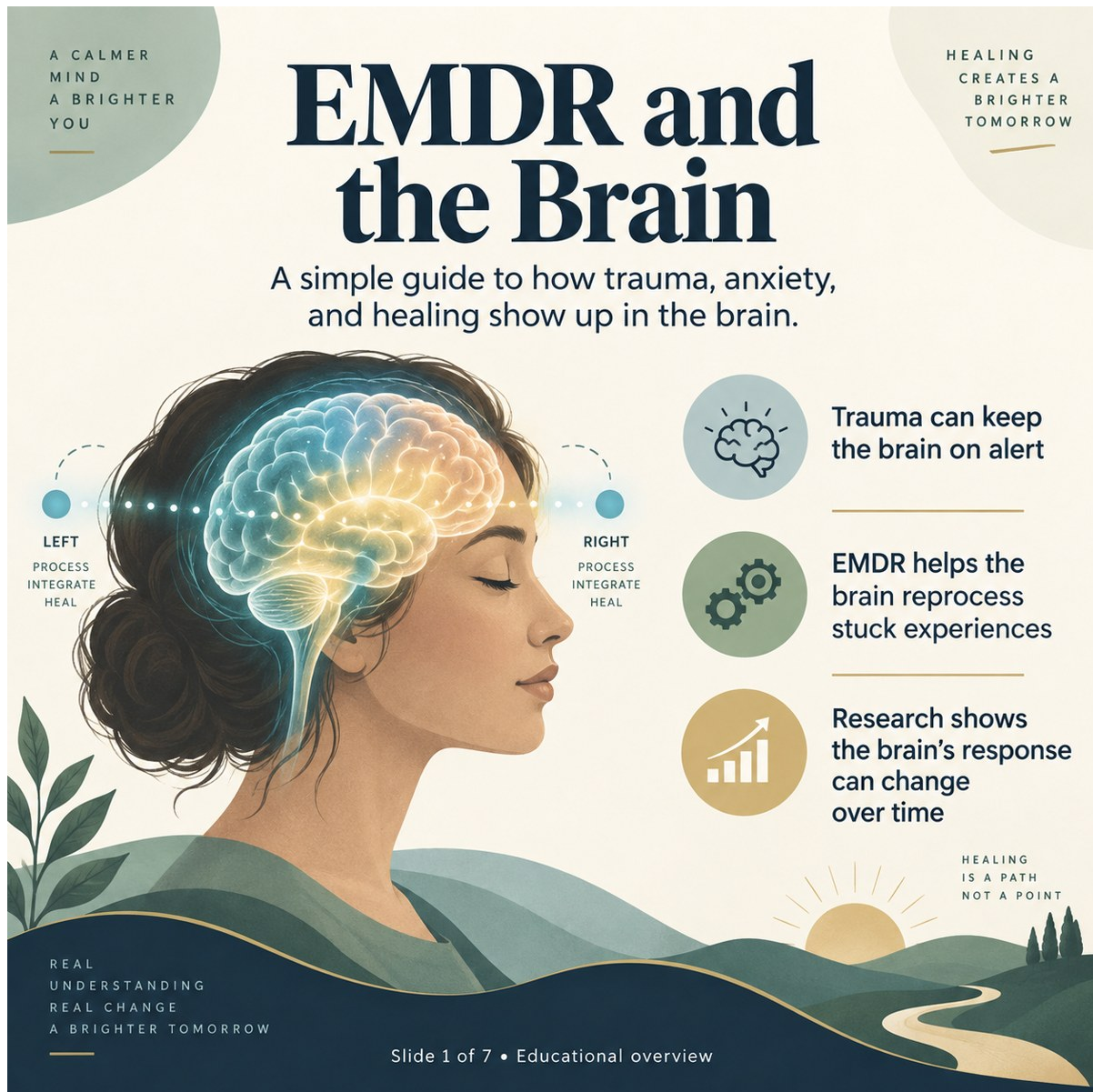


Illustration supplied by Building Hope Counseling. Read with the research note above.

2. How Trauma and Anxiety Show Up in the Brain

The image connects threat responses, memory context, and difficulty thinking clearly under stress. Body sensations can be part of distress, but they are not specific to one condition.

Research note: This is a simplified network illustration, not an individual diagnosis. Anxiety and bodily sensations have multiple possible explanations; a diagram cannot determine their cause.

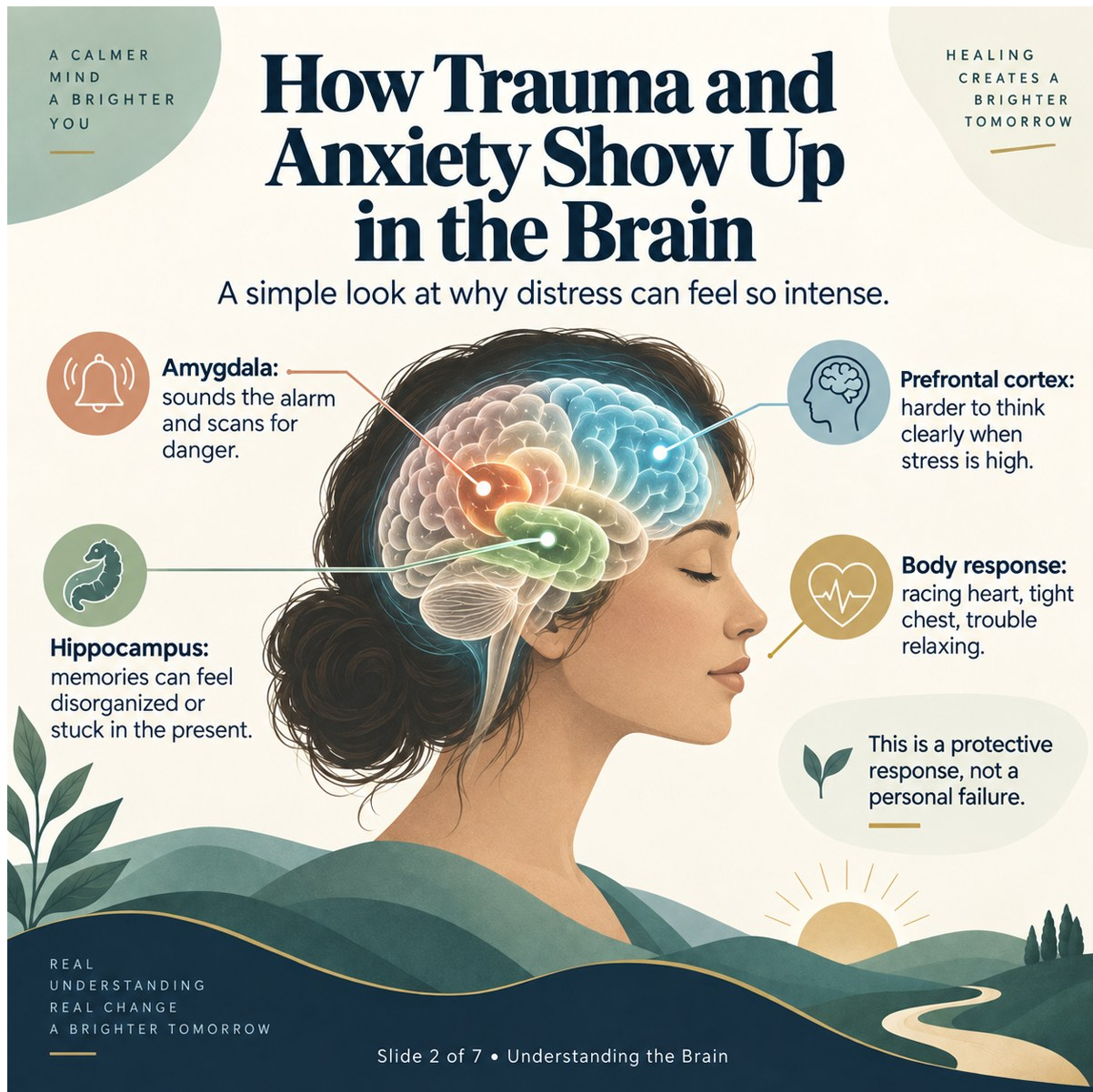


Illustration supplied by Building Hope Counseling. Read with the research note above.

3. Why Disturbing Memories Can Feel Stuck

Reminders may bring up images, beliefs, feelings, or sensations associated with a difficult experience. The panel uses “stuck” to describe how present those reactions can feel.

Research note: “Stuck memory” is a clinical metaphor, not a literal trapped object. Ask how the proposed explanation fits your experience without assuming that every symptom comes from trauma.



Illustration supplied by Building Hope Counseling. Read with the research note above.

4. What EMDR Is Doing in Session

The illustration shows selecting material, noticing reactions, using a dual-attention activity, and discussing what follows. The complete treatment includes additional phases.

Research note: The four illustrated steps omit assessment, preparation, closure, and follow-up. They are not instructions for self-directed trauma reprocessing. Bilateral stimulation alone is not equivalent to EMDR therapy.

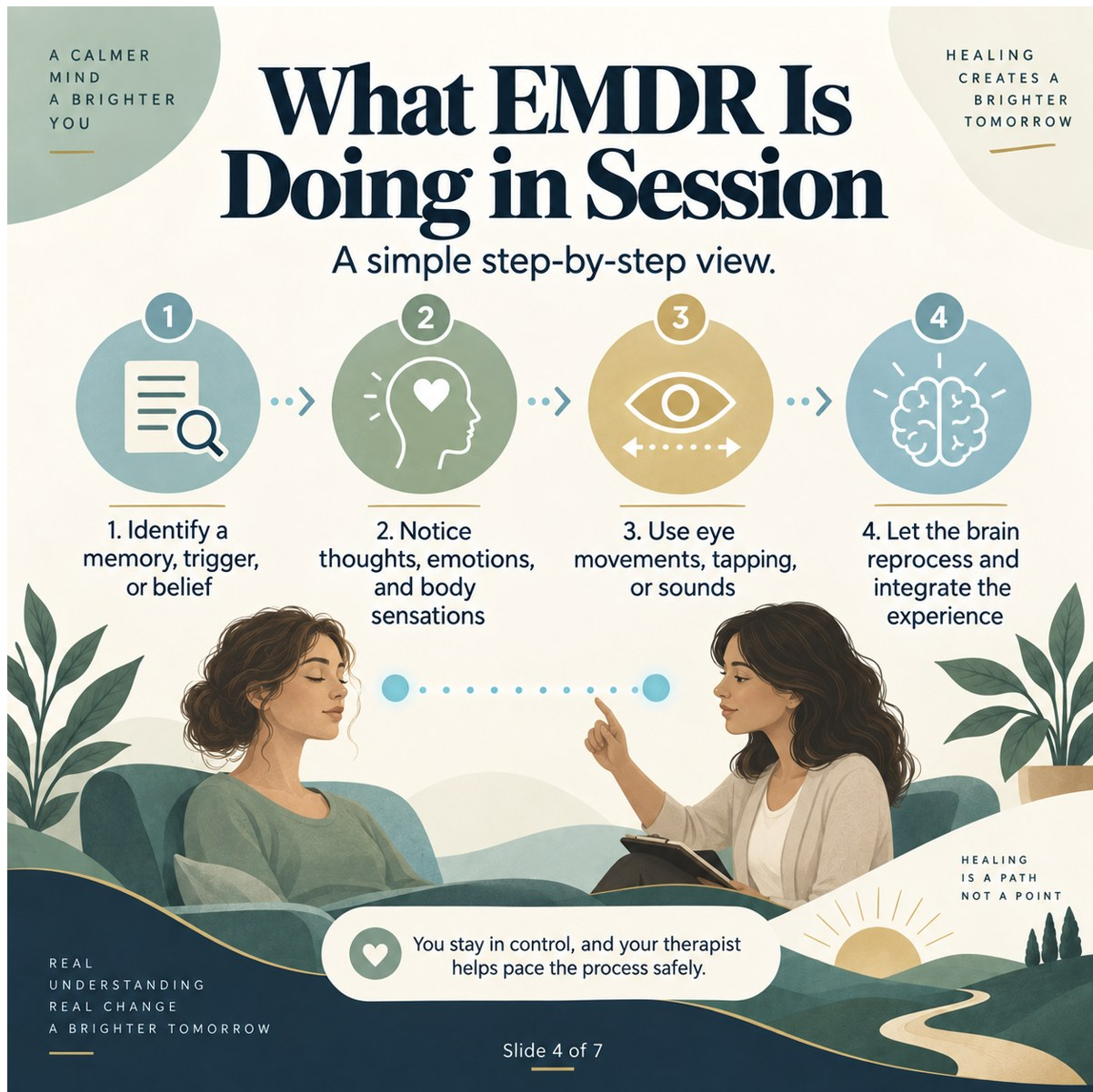


Illustration supplied by Building Hope Counseling. Read with the research note above.

5. What Research Shows Before and After EMDR

The panel contrasts greater distress with a possible calmer response to the same memory. It is a conceptual comparison, not a record of measured brain activity.

Research note: The pictures are illustrations, not actual patient scans or a validated before/after test. Preliminary neuroimaging findings do not establish a universal brain response, prove causation, or predict individual benefit.

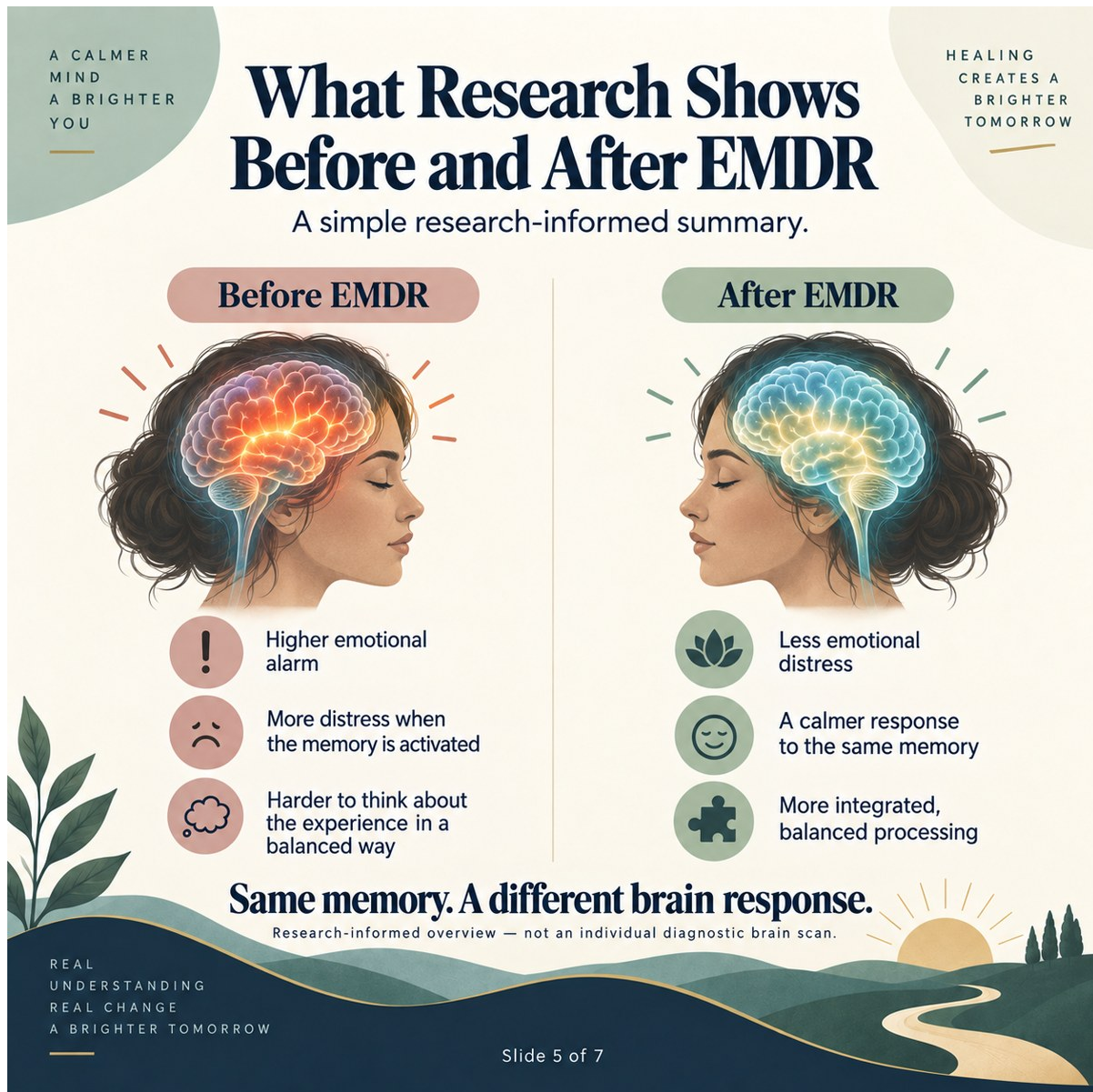


Illustration supplied by Building Hope Counseling. Read with the research note above.

6. What People Often Notice as Healing Happens

Possible changes to discuss include less intense distress, fewer reactions to reminders, and greater choice in daily life. They are not required milestones.

Research note: These are possible changes to discuss, not a guaranteed sequence. The statement that healing changes memory storage is a proposed explanation, not a settled finding. Track lived experience and functioning with your therapist.

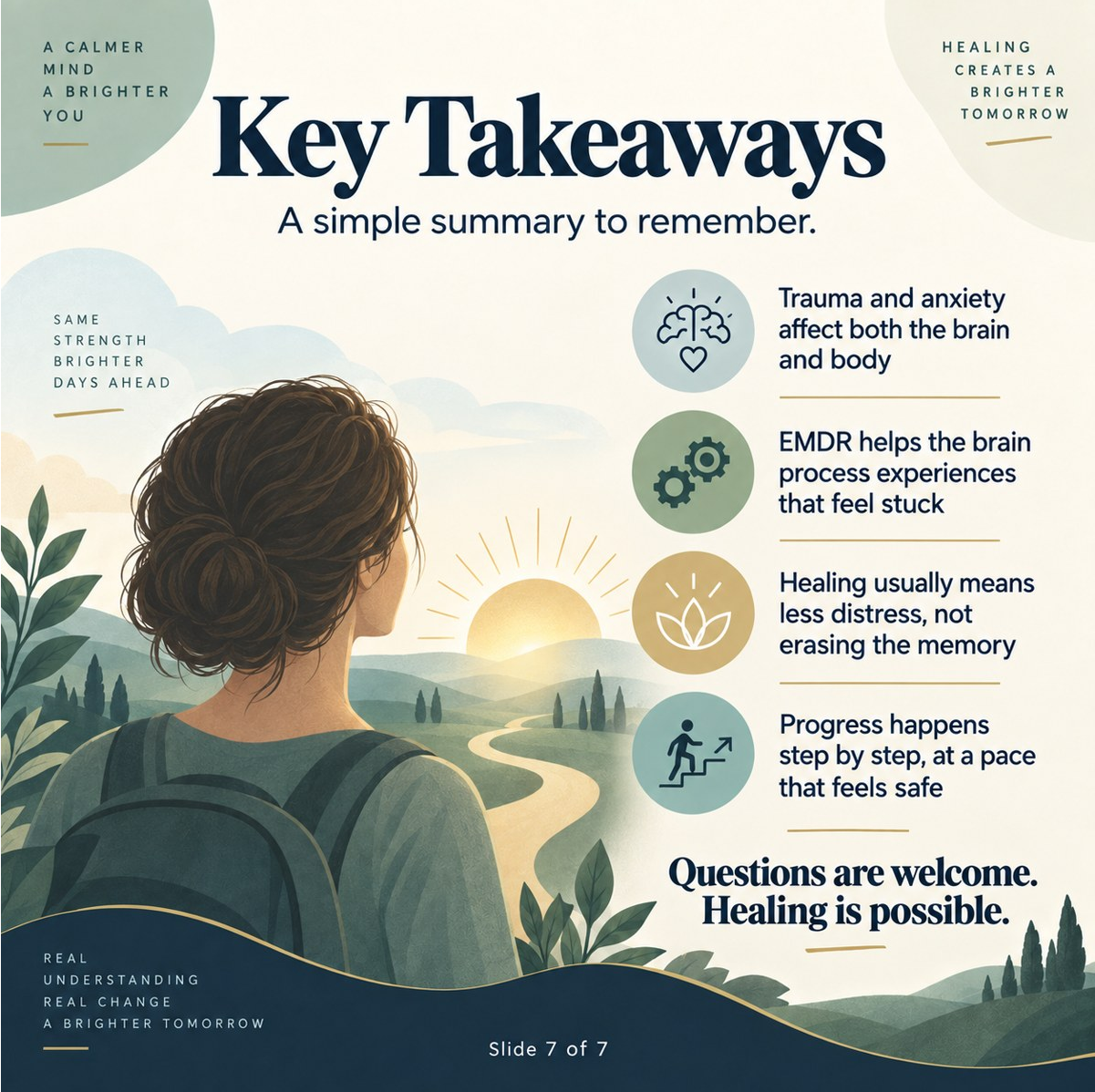


Illustration supplied by Building Hope Counseling. Read with the research note above.

7. Key Takeaways

Bring questions about the brain, treatment, and expectations to your therapist. The goal of this guide is informed discussion rather than a formula for recovery.

Research note: EMDR is supported for PTSD, while specific neural mechanisms remain under study. Progress can be uneven. Questions about fit, pacing, or alternatives are welcome throughout treatment.



The infographic features a central illustration of a person with dark, curly hair seen from behind, looking out over a landscape with a winding path leading to a bright sunrise. The background is a soft, warm yellow and orange. The text is arranged around this central image, with key takeaways listed on the right and motivational phrases on the left and bottom.

Key Takeaways
A simple summary to remember.

Takeaways:

- Trauma and anxiety affect both the brain and body
- EMDR helps the brain process experiences that feel stuck
- Healing usually means less distress, not erasing the memory
- Progress happens step by step, at a pace that feels safe

Questions are welcome. Healing is possible.

Motivational Phrases:

- A CALMER MIND
A BRIGHTER YOU
- HEALING CREATES A
BRIGHTER TOMORROW
- SAME STRENGTH
BRIGHTER DAYS AHEAD
- REAL UNDERSTANDING
REAL CHANGE
A BRIGHTER TOMORROW

Slide 7 of 7

Illustration supplied by Building Hope Counseling. Read with the research note above.

References and discussion prompts

National Center for PTSD. Overview of Psychotherapy for PTSD. Summary of the 2023 VA/DoD guideline.

https://www.ptsd.va.gov/professional/treat/txessentials/overview_therapy.asp

National Center for PTSD. Eye Movement Desensitization and Reprocessing (EMDR) for PTSD.

https://www.ptsd.va.gov/understand_tx/emdr.asp

Landin-Romero R, Moreno-Alcazar A, Pagani M, Amann BL (2018). How Does Eye Movement Desensitization and Reprocessing Therapy Work? A Systematic Review on Suggested Mechanisms of Action. *Frontiers in Psychology* 9:1395.

<https://doi.org/10.3389/fpsyg.2018.01395>

What would you like clarified before treatment?

Which parts of the illustrations fit your experience, and which do not?

How will you and your therapist decide whether the current approach is helping?

For general education, not diagnosis, individualized treatment, supervision, or emergency care. Discuss treatment decisions with an appropriately qualified healthcare professional.