Here’s a fun question: When we stub a toe, does it hurt in our toe or in our brain? According to recent medical science, the answer is sort of both. The toe gets stubbed. An alarm travels via nerves through the spine and to the brain. Then, different areas of the brain fire up and connect to perceive and process the signal as pain.

As if that weren’t complicated enough, according to pain management pioneers like researcher and physician Amy Baxter, the intensity and quality of the pain are determined not only by the severity of the injury but also by the way our minds engage to process it.

In other words, the pain happens in the toe, and the brain registers the pain, but it’s the mind that perceives the injury and determines how much it will hurt.

Mind. Brain. What’s in a Name?

Clearly, the mind is a powerful thing. But what is the mind and how does it differ from the brain? That’s a hotly debated topic amongst psychologists, but for the most part, modern psychology describes the difference this way:

**THE BRAIN**

A physical organ (including the nervous system) made of neurons and tissue that carries information, regulates bodily functions, and stores memory.

**THE MIND**

The element, faculties, or consciousness that process the information carried by the brain and nervous system into thoughts, emotions, and awareness.

Think of a book with pages, a cover, a binding, writing, and maybe pictures, all designed to carry information. That’s the brain part. The actual information in the book – the story, the themes, the emotion—that’s the mind.
Is It All in Our Heads?

We’ve written before about how behaviors and choices that impact our physical bodies influence our minds as well. Things like a healthy diet, good sleep hygiene, and exercise all have powerful effects on our mood and mental and emotional wellbeing.

Because that connection is so profound, it makes sense that it also operates in reverse.

- Feeling anxious can tighten chest muscles, cause us to hyperventilate, develop head or backaches, and raise blood pressure, cortisol, and blood glucose levels.

- Sudden anger starts in the mind but is often felt first in the body as heat or an intense surge of energy.

- Feeling down or depressed can cause physical exhaustion and impair the immune system, making it harder for our bodies to fight illness and infection.

The mind-over-body influence isn’t all bleak. We can hack it to generate some serious upsides, too.

Minding Our Own (Body) Business

By incorporating more mindfulness into our daily routines, we can set up a benefit loop that positively impacts physical, mental, and emotional wellbeing.

Distract from Pain – Remember Dr. Baxter from the start of this newsletter? Her research demonstrates that pain can be managed and even reduced by purposely engaging and redirecting the mind*. The next time you have a minor injury that hurts like crazy or a headache that’s not going away, try these tricks:

- Put a hand in ice water to cause the brain to assess a new discomfort and categorize it as “annoying, but not dangerous.” This can lessen the perception of pain in other parts of the body.

- Generate cognitive conflict by doing this simple brain teaser; look for a printed sentence (online, on a billboard or sign, in a magazine or book, etc.) and count the number of circles. For example, the sentence “It’s going to be fine!” has 7 circles in it. Can you find them?

Train Your Attention – Mindfulness meditation can help us more easily refocus when anger, fear, or anxiety have taken over our consciousness. This meditation trains the mind to recognize when strong emotions appear so we can readily address them in a more thoughtful and less reactive way.

- Find a calm, quiet place, and sit in a comfortable position.

- Close your eyes or lower your gaze and concentrate on the in and out of your breathing.

- As thoughts and emotions come and go, practice naming and observing them without judgment.

- Gently bring your attention back to the sensation of breathing.

Practice this simple meditation for 2 – 3 minutes every day to help it become second nature.

Use Your Resources – Concern takes the guesswork out of living with greater mindfulness.

- Access eM Life through our digital platform for guided mindfulness programs built specifically to help reduce stress and anxiety and improve physical health.

- Visit our topical services and resource pages for focused self-help content on managing emotions, stress & anxiety, and resilience & mindfulness.

The content of this newsletter is not meant to replace medical guidance or advice. If you are experiencing a medical emergency, dial 911 right away. If you need help with chronic pain or physical ailments related to anxiety or stress, contact your primary care provider.

*For more on Dr.Baxter’s pain relief solutions, visit paincarelabs.com.