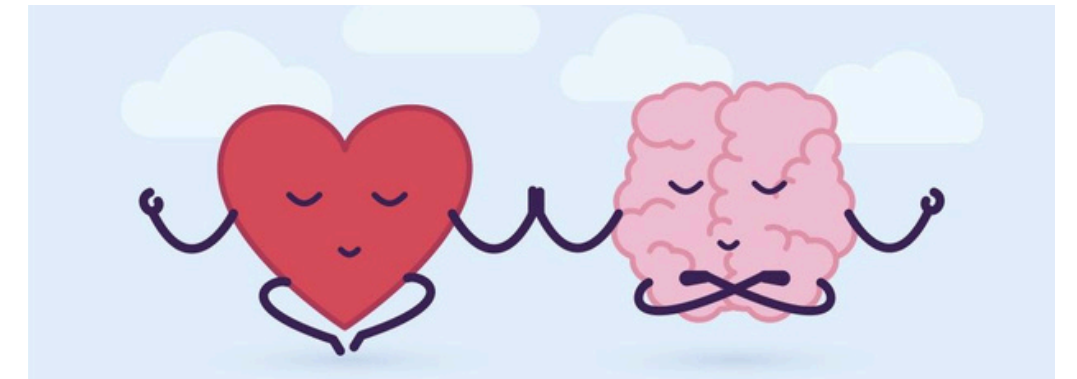


Mindfulness, Selective Attention, and Sleep



What is Mindfulness?

- Focusing on being aware of our body sensations, thoughts, and feelings in the moment without judgement or interpretation
- Mindfulness looks different for everyone! It can be practiced through:
 - Meditation
 - Yoga
 - Tai Chi
 - Guided imagery



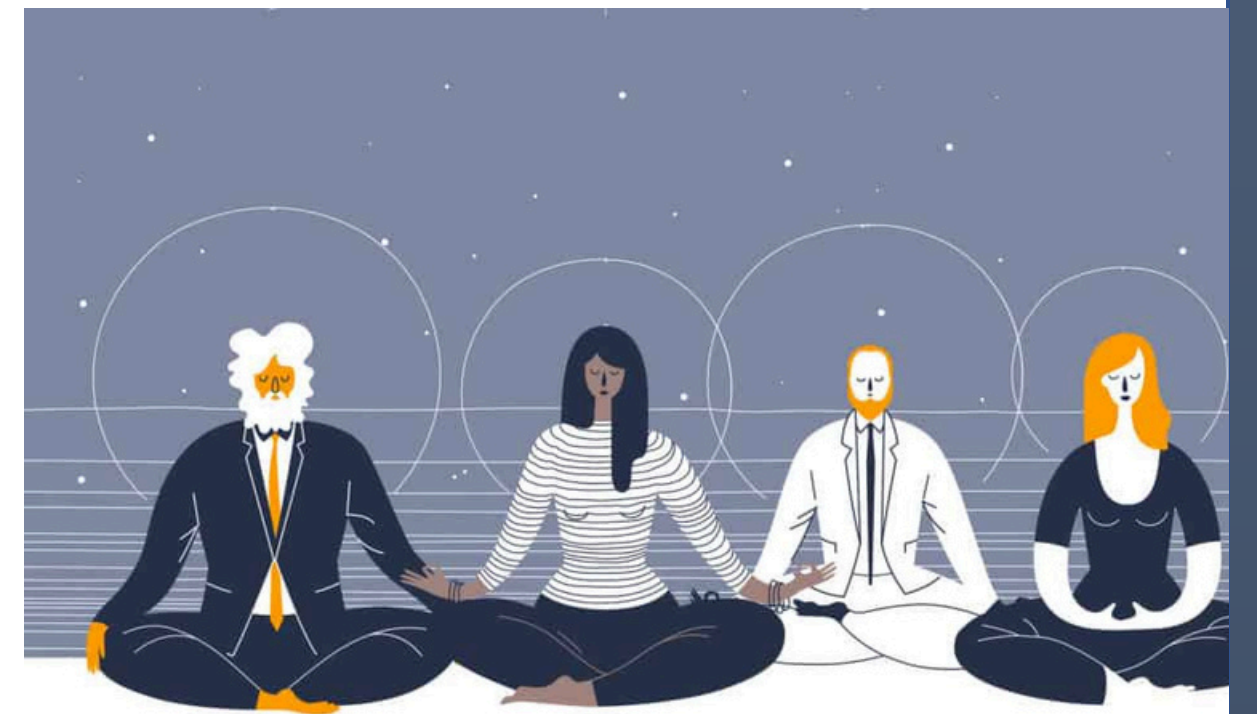
What are Some Benefits of Mindfulness?

- ↑ Increases brain connections
- ↑ Improves attention
- ↑ Improves sleep

- ↓ Slows age related changes in the brain
- ↓ Reduces stress
- ↓ Reduces symptoms of depression

Mindfulness Meditation

- One way to practice mindfulness is through **mindfulness meditation**. This type of meditation focuses on **awareness** and **acceptance**
- Focus on:
 - Sounds in your environment
 - How your body feels
 - Emotions
 - Thoughts
 - Your breath
- When your mind wanders, gently bring it back to the present.



Lots of information from the world around us



Relevant information our brains process

Selective Attention

What is it?

- Directing our attention to important information
- Ignoring other information that we don't need



Why is it important?

- Our brains are constantly flooded with information
- Selective attention helps our brains from getting overwhelmed

Selective Attention is like a coffee filter for your brain!

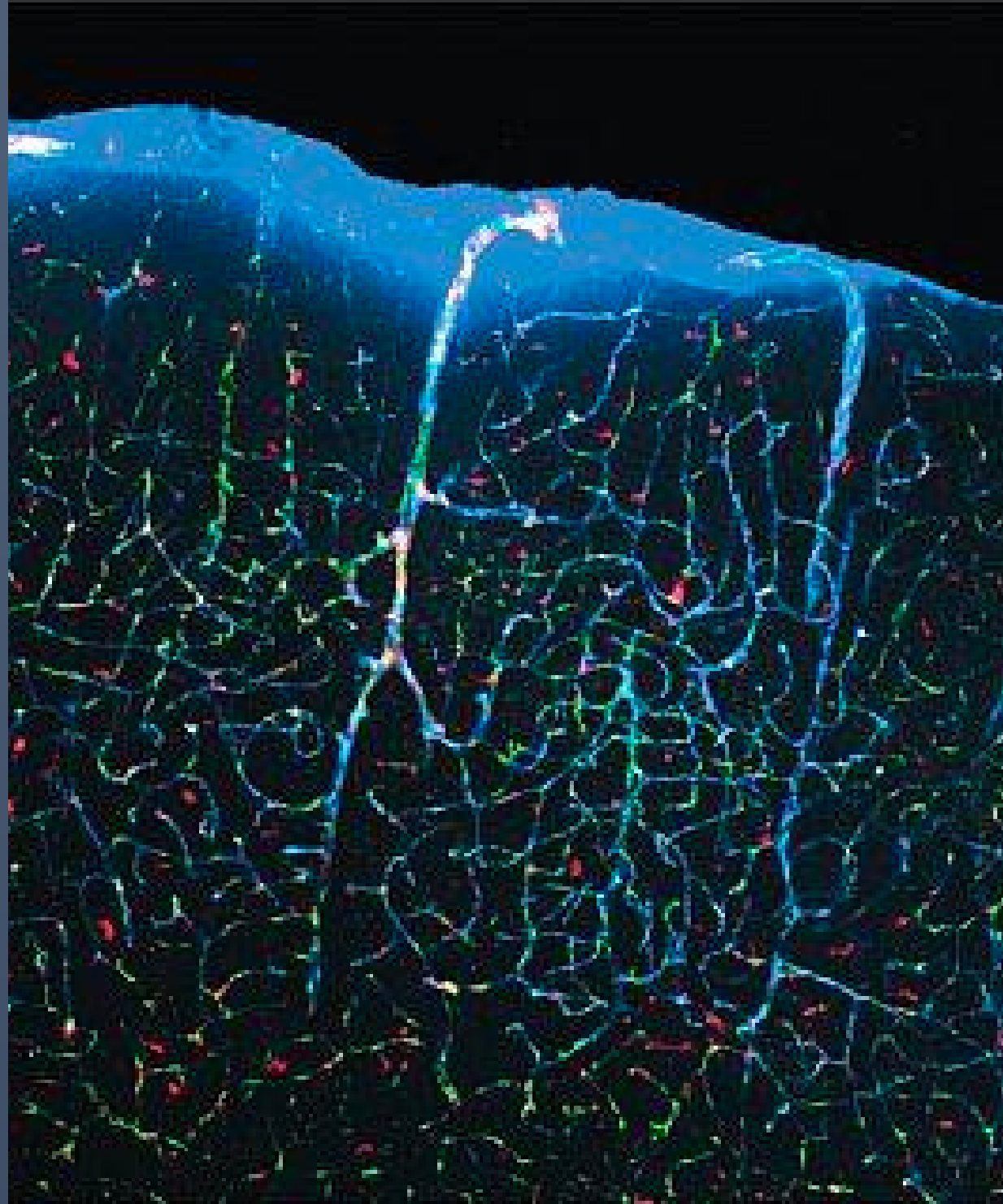
Working the Attention Muscle

Attention is a mental muscle. We strengthen it through practice!

- We can practice controlling the focus of our attention (selective attention).
 - *For example, we may focus on our breath as it goes in and out of our lungs.*
- We can practice holding our attention on the same thing for an extended time (sustained attention).
 - *For example, we may hold our focus on our breath for 1 minute*



A Quick Word on Sleep



- Sleep is important to forming and storing memories and restorative function
- Lack of sleep impairs our reasoning, problem-solving, attention to detail, and other consequences
- Researchers have some new ideas about why this might be!
- **Researchers from the University of Rochester discovered a system that drains waste products from the brain**
 - Cerebrospinal fluid, a clear liquid surrounding the brain and spinal cord moves through the brain along a series of channels that surround blood vessels – called the *glymphatic system*
 - This system also removes beta-amyloid – a main protein deposit in Alzheimer’s Disease from brain tissue
 - This seems to happen following a night of sleep; and it may not clear as well in people with dementia

The “Rinse Cycle”

- <https://youtu.be/eEszNmVFFm4>

