

The Pain Matrix

The Pain Matrix is 16 parts of the brain and spinal cord that work together like a web to monitor our entire body. Its job is to to **keep us safe**. Pain is an **alarm** that goes off when the Pain Matrix is triggered by **perceived threat**. All pain, regardless of the cause or location, is **felt in the brain**. Chronic, persistent pain happens when the Pain Matrix is turned on and does not turn off. This cycle can happen from a **severe trauma** or from a combination of **long-term triggers** that keep the **chronic pain cycle** active.

Threats - chronic pain triggers

1. Severe acute or long-term stress
2. Adverse childhood events
3. Tissue damage or injury
4. Inadequate sleep and rest
5. Inflammation
6. Chronic disease
7. Nutrient deficiency
8. Long-term high blood sugar
9. Long-term high blood pressure
10. Obesity / excessive organ fat
11. Social isolation and loneliness
12. Not getting enough exercise
13. Too much physical movement
14. Beliefs about pain or injuries



Alarms - signs/symptoms

1. Pain (aching, burning, sharp, etc)
2. Muscle tension
3. Nerve sensitivity (tingling, numb)
4. Inflammation
5. Avoidant thoughts and beliefs
6. Heart palpitations
7. Increased heart rate
8. Shallow breathing
9. Constricted blood vessels
10. Sensitivity to heat and cold
11. Agitation / irritability
12. Poor memory and concentration
13. Unexplained anxiousness
14. Unexplained fatigue