

Physical Exercise as a Neurobiological Shield against adversity.

Physical exercise acts as a potent regulator of emotional states. It is an indispensable resource when facing individual crises or collective catastrophes, such as those we have recently experienced in our country.

There is a robust body of evidence supporting the fact that physical exercise is a first line treatment for managing stress and the pathologies it generates.

Physical training, especially aerobic exercises, reduces the clinical symptoms of anxiety and depression regardless of the individual's age.

Activities such as jogging, walking, and cycling stimulate the cardiovascular system, distracting the mind from intrusive thoughts generated by contingencies like the earthquakes that have recently struck us.

On the other hand, weight training provides a sense of control, self efficacy, and strength in the face of accumulated helplessness.

These disciplines not only preserve muscular and aerobic conditions but also shield mental health by processing the tensions accumulated in the body.

The physiological response to prolonged stress involves biochemical substances that, when altered, impair overall health. Cortisol and adrenaline become chronically elevated during crises, which weakens the immune system, disrupts sleep, and promotes anxiety and restlessness.

Likewise, the drop in neurotransmitters such as serotonin and dopamine is directly linked to states of depression and apathy.

Fortunately, exercise interrupts this decline by increasing the secretion of endorphins, a natural painkillers that generate well-being as well as the synthesis of brain derived

neurotrophic factor (BDNF), an essential protein for enhancing mental resilience and neuronal regeneration.

To obtain psychological benefits that counteract the anxiety caused by the tragedy that affected us, it is recommended to train 3 to 5 days per week.

Sessions should accumulate at least 35 minutes daily and an average of 150 minutes per week of moderate to intense activity.

Light walks or jogs of 15 to 20 minutes manage to mitigate acute anxiety immediately.

Sports are an excellent aid in managing stressful situations. However, there are times when specialized psychological help is strictly necessary.

It is recommended to seek specialized help when distress blocks the daily routine, chronic insomnia becomes persistent and does not yield to physical exhaustion, there are states of deep apathy or an absolute inability to experience any kind of pleasure (anhedonia), recurrent panic attacks occur, or there is a state of constant hypervigilance caused by trauma and self destructive thoughts, among other signs.

In conclusion, activating the body through physical exercise does not erase external tragedies, nor does it recover lost loved ones or material goods, but it modifies brain chemistry to help us endure and rebuild our environment.