


Can Mindfulness modulate our immunity?

Evelin Capellari Cárnio¹

 <https://orcid.org/0000-0002-8735-4252>



Mindfulness, the activity that is carried out through the practice of awareness and acceptance without judgment of the experience lived moment by moment, is considered a potentially effective antidote against common ways of psychological suffering, anxiety, worry, fear, anger, etc.

Recently, the idea that such mental states can also participate in the homeostatic regulation of our body has been widely discussed. According to studies by researchers at the Massachusetts General Hospital in Boston and at the University of Massachusetts Medical School in Worcester, which evaluated brain images of people who perform mindfulness routinely, these show structural differences when compared to individuals who do not perform it. The neuro-structural effects of mindfulness have been detected in the brain with structural changes in both gray and white matter, particularly in areas related to attention, memory, interoception, and sensory or self-regulation processing (including control of stress and emotions)⁽¹⁾. Neurofunctional changes were also cited, such as a decrease in the activity of cortisol and noradrenaline, neurotransmitters linked to the stress situation; and also an increase in the activity of dopamine, melatonin and serotonin, substances that are related to the induction of sleep and to the feeling of well-being and happiness.

In a study carried out in our group, we demonstrated in an animal model subjected to the situation of systemic inflammation, that the central administration of serotonin was able to attenuate the activation of the inflammatory reflex, decreasing the inflammation response⁽²⁾. In this way, we wondered if we could extrapolate that the practice of mindfulness, which in some way stimulates the production of serotonin in areas of the central nervous system, may improve our immune system response.

¹ Universidade de São Paulo, Escola de Enfermagem de Ribeirão Preto, PAHO/WHO Collaborating Centre for Nursing Research Development, Ribeirão Preto, SP, Brazil.


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I believe in the growth of this area of knowledge and that new studies will soon bring great advances, answering questions where brain functions and other physiological and pathophysiological areas could be integrated.

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Corresponding Author:
Evelin Capellari Cárnio
E-mail: carnioec@eerp.usp.br
 <https://orcid.org/0000-0002-8735-4252>

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