

Cannabinoids and Human Immunocompetence: A Comprehensive Review.

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Abstract

Despite anecdotal evidence suggesting phytocannabinoids interact with the human immune system, the precise mechanisms of these interactions remain largely unknown. Even so, numerous publications have reported remarkable concentrations of endo cannabinoid receptors and related proteins in various immune tissues, thus implicating the system as an integral part of immunological function. Recent clinical researchers further evidence to support endocannabinoids and related endogenous fatty acid derivatives as potent regulators of immune activity. However, the ultimate effect of these molecules binding to their associated receptors is highly contingent upon the particular type of immune cell being studied. Furthermore, specific combinations of endocannabinoids and fatty acid derivatives are demonstrated to induce distinct downstream effects. Distilling general assertions to their overall impact on human immunocompetence has remained difficult. As asserted in prior comprehensive reviews, the variable and bi-directional nature of endocannabinoids on immune activity suggests they are vital to maintaining immunological homeostasis within the human body. The nascent field of affective immunology has established compelling links between human behavior, emotional affect, inflammation, and immunocompetence.

Biograph :

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