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[Review](#) [Psychiatry Res.](#) 1999 Jan 18;85(1):7-15. doi: 10.1016/s0165-1781(98)00139-5.

Stress, depression and immunity: the role of defense and coping styles

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Abstract

It is by now widely recognized that acute and chronic stress have an impact on the immune system. Acute stress may have a stimulating effect on the immune system, while in the case of chronic stress--and in particular in depression--the immune system may be down-regulated. However, there is considerable individual variability in the immune response to stress. This seems to a large extent to be determined by the subject's way of dealing with stress. The perception and evaluation of a stressor and the specific ways of stress coping may in different ways be related to various aspects of the stress response: sympathetic nervous system (SNS) activation and activation of the hypothalamic-pituitary-adrenal (HPA) axis, both systems affecting the immune system. Prolonged exposure to stressors or to severe life stresses may outweigh the person's coping resources leading to feelings of depression. The affective changes with the accompanying changes in the HPA axis are one of the hypothesized mechanisms underlying the immune changes in depression. It should be noted that the relationship between depression and immunity is affected by several other factors, such as gender and age and other personal resources. Increasing the subject's abilities to cope with stress and to reduce the negative affect by psychological interventions may on the other hand have a beneficial effect on the immune system.

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Jamner LD, Leigh H.

[Psychiatry Res.](#) 1999 Jan 18;85(1):17-31. doi: 10.1016/s0165-1781(98)00134-6.PMID: 10195313 [Clinical Trial](#).

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