

The Darwinian concept of stress

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Why do some people suffer from melancholic depression, whereas others have flare ups of autoimmune disease during a stressful period in their life? In this oral presentation possible explanations will be given by using different levels of analysis.

It will be discussed how benefits of allostasis and costs of adaptation (allostatic load) cause different trade-offs in health and disease, reinforcing a Darwinian concept of stress. This provides some explanation as to why individuals may differ in their vulnerability to different stress-related psychosomatic diseases and how this is connected to the different personalities in a population, especially aggressive “Hawks” and non-aggressive “Doves”.

A conceptual framework is presented showing that “Hawks”, due to inefficient management of mediators of allostasis (*deficit*), are more vulnerable to develop violence and impulse control disorders; chronic fatigue states and inflammation. In contrast, “Doves”, due to the higher release of mediators of allostasis (*surplus*) are more susceptible to anxiety disorders; metabolic syndromes; melancholic depression; psychotic states and infection.

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