

Stress and your Immune System



Stress can have a significant impact on the immune system. Our stress response involves the release of certain hormones, such as cortisol and adrenaline, which can influence various aspects of immune function. Here is how stress impairs the immune system:

Cortisol release: Stress activates the release of cortisol, a hormone that helps the body deal with immediate threats. However, prolonged exposure to high levels of cortisol can suppress the immune system. It inhibits the function of immune cells, such as T-cells and B-cells, and reduces the production of antibodies.

Inflammatory response: Chronic stress can lead to a prolonged state of low-level inflammation, which is associated with various health problems.

Discover Chiropractic (408) 985-1111 1305C N. Bascom Ave San Jose, CA 95128 https://chiropractor-sanjose.com/ Inflammation is a part of the immune response, but when it becomes chronic, it can contribute to immune system dysfunction and increase susceptibility to infections.

Decreased white blood cell count: Chronic stress leads to a decrease in the number of white blood cells, including lymphocytes, which play a crucial role in the immune response. Reduced numbers of these cells can compromise the body's ability to fight off infections.

Altered cytokine production: Stress can influence the production of cytokines, which are signaling molecules that regulate immune responses. Imbalances in cytokine production may contribute to immune system dysregulation, potentially leading to increased susceptibility to illness.

Impaired wound healing: Chronic stress negatively impacts the process of wound healing. Stress-induced changes in immune function may slow down the healing process and increase the risk of infections.

Disruption of the gut microbiome: Stress affects the balance of the gut microbiome. An imbalance in the microbiome may compromise the body's ability to maintain a healthy immune response.

It is important to note that there are good stressors that can actually boost our immune system. Exercise is an example of a <u>temporary</u> stressor that can actually boost your immune system. Once stress becomes chronic, that's when our health starts to fall apart.