

**Title:** Infection Susceptibility and the Influence of Stress

**Instructor:** Cindy M. Howard, DC, DABCI, DACBN, FIAMA, FICC

**Total Hours:** 2 hours

**Topic:** Nutrition

**Description:** We will cover the relationship of infection (viral, bacterial, parasitic, and fungal), chronic disease, stress and the changes that occur within the HPA axis. She will explore the connection of different types of stress: physical as well as emotional that will decrease one's resistance to infection. The role of neurotransmitters affecting immune cells will affect the HPA axis. In addition, cortisol imbalances and inflammation can relate to chronic infection. Research around chronic infection and the HPA axis will be presented. Treatment protocols to tackle even difficult cases of these types of conditions will be shared. Case studies on patients seen in practice will demonstrate the success in treating individuals with chronic HPA dysfunction, both with infection or at the risk of infection.

**Course Objectives:**

- Understand the Interplay between Stress, the HPA Axis, and Immune Function
- Identify Treatment Strategies for Chronic HPA Dysfunction and Infection
- Apply Clinical Insights through Case Studies and Practical Treatment Approaches

Hour 1:

- Review three case studies.
- Discuss how chronic stress will alter adrenal and neurotransmitter function.
- Review the relationship between oral infection, gut infection, and stress.

Hour 2:

- Discuss treatment with food and supplements for altered neurotransmitters.
- Explore how to find and treat the infection component in patients with chronic stress.

Instructor Methodology

Lecture: The instructor will deliver content through informative lectures, providing background information, statistics, and case examples.

Visual Aid: Slides will be used to visually reinforce key points, provide data, and showcase examples.