



HPA (Axis) LF

90 Veggie Capsules



Matrix Nutritional Series

Target Hormonal HPA Axis, Immune, Trauma

Matrix Nutritionals Series was designed as an eclectic offering for the Physica Energetics line of remedies primarily to assist in the "reactivation of the mesenchyme" (Dr. Reinhold Voll), via the nutritional complement pathways. These pathways are present in every system throughout the body and require balanced attention. In keeping with the principles of BioEnergetic Medicine, the remedies nourish and support these systems without punishing them with overstimulation or imbalancing factors, which, ultimately, is counterproductive. This approach has been carefully and respectfully designed to provide the necessary natural (organic where available), synergistic factors in proper energetic and biochemical ratios, to ensure assistance towards yielding a deep and lasting result. They are not to be confused with replacement therapy nutraceuticals that may seem to help for the moment, until the patient stops taking them or the condition is driven deeper. These remedies honour The Legacy of BioEnergetic Medicine, and are known by both patient and practitioner to be exceptionally effective.

The hypothalamic, pituitary, adrenal (HPA) axis is the central stress response system. The HPA axis has been accurately described as a *dynamic inter-weaving dance between the central nervous and endocrine systems*. In fact, you also might well refer to it as the *ultimate hormonal adaptogenic cascade*.

As such the HPA axis is responsible for the *central adaptation component of the stress response*, regulated by a complex system of "negative feedback" loop mechanisms.

When the hypothalamic, *cortico-releasing hormone* (CRH) binds to CRH receptors on the anterior pituitary gland, adrenocorticotrophic hormone (ACTH) is released. ACTH binds to receptors on the adrenal cortex and stimulates adrenal release of cortisol. In response to *perceived stress*, cortisol will be released for several hours after encountering the stressor. When the necessary levels of cortisol blood concentration is reached, "protection" is considered achieved and cortisol signals a "negative feedback" for the hypothalamic release of CRH and the pituitary release of ACTH to redress stress activated imbalance. (see diagram)

However, in the case of a **suppressed HPA axis**, there is a **malfunction** in one or several of these **signalling feedback mechanisms** causing the **inefficient looping to be stuck** producing hormones at lower than ideal levels. Studies suggest that the Hypothalamic-Pituitary-Adrenal (HPA) axis controlling the body's levels of cortisol and other stress hormones, play a role in inhibiting the inflammatory response resulting in various inflammatory disease conditions.

With repeated exposure to a wide representation of stressors including pathogens, physical and emotional trauma, environmental triggers, etc, body, mind and heart will begin to entrain with these stressors creating repeated and sustained HPA axis activation.

Under conditions of normal exposure to cortisol, tissues only experience glimpses of alarm catecholamines and cortisol. However, with **repeated exposure to stress**, the sensitized HPA axis may continue to hyper-secrete CRH from the hypothalamus. Over time,

CRH receptors in the anterior pituitary will become **down-regulated**, producing **depression** and **anxiety symptoms**.

Clearly, it is important to support healthy cortisol levels in order to ensure the hypothalamus and pituitary glands maintain the appropriate level of sensitivity to the negative feedback of cortisol.

With aging, the hypothalamus and pituitary are less sensitive to negative feedback from cortisol and both ACTH and cortisol levels rise. Older women secrete more cortisol in response to stress than older men. Young women, however, produce lower levels of cortisol in response to stress than young men. Women at all ages produce more IL-6 (Interleukin-6) and TNF α (tumour necrosis factor: a cell signaling protein, adipokine, which is involved in systemic inflammation and is one of the cytokines that make up the acute phase reaction) as a part of the initial, resistance phase of the stress response.

In addition, the HPA axis is largely influenced by the **amygdala and hippocampus**, aspects of the limbic system responsible for the processing and storage of memory and emotions. The **limbic brain** is rich in cortisol receptors and can become damaged due to prolonged stress. Physical, mental and emotional trauma has a direct and impactful expression upon the function of the limbic system and thus the body's stress response.

Emotionally charged events or trauma "early or even later in life" can have a significant impact upon the coordination of the HPA axis and the patterns of the body's stress reaction/response.

As we are addressing the various health consequences of stress, it is vital to also address the axis of reaction/response itself while attempting to restore balance and ultimately, physical and BioEnergetic function to the HPA axis.

HPA (Axis) LF has been designed to nutritionally support the specific pathways and components which are in fact, a significant *Causal Chain Adaptogenic Cascade Design* in and of themselves.

Veggie capsules (2) contains:

- * (bovine lyophilized/BSE free New Zealand)
- * Pituitary anterior 200mg
- * Adrenal 40mg
- * Hypothalamus 40mg

- Manganese citrate 25mg
- Ashwagandha 4:1 250mg (1000mg)
- N-acetyl-L-tyrosine 250mg
- Rhodiola rosea (standardized to 1% salidroside and 3% rosavins (4:1) 100mg (400mg)



Patient Reference