vitamin B6 has a direct impact on the synthesis of neurotransmitters, including N-acetylglutamate, and provides support for adrenal dysfunction, via its implication in the insulin response, making it an extremely important entity in adrenal support, as adrenal function is characterized by dysregulated sympathetic nervous system. In nacin deficient DNA repair models, a dramatic inhibition in DNA repair has been demonstrated to be an important factor in the production of apoptosis. A dysfunction in the mitochondrial function of pantothenic acid has been associated with adrenal atrophy.

Botanicals Beneficial for Adrenal Support
Rhodiola rosea (root). Rhodiola rosea has been utilized for decades to normalize HPA axis function. It is one of the most powerful adaptogens and is generally accepted as an extremely well-tolerated, safe, and effective herb. It is beneficial for stress response. The adrenocorticotropin response to stress was found to be significantly improved through the use of this herb. It is particularly effective for those suffering from chronic stress and anxiety. Rhodiola has been demonstrated to significantly improve cortisol levels and adrenocorticotropin levels in the body. In addition to its effect on the HPA axis, Rhodiola has been shown to improve cognitive function, reduce fatigue, and improve mood and energy levels. Additional Components Providing Support for Adrenal Function

N-acetyl-L-cysteine (NAC). NAC is a potent antioxidant that functions in intracellular glutathione synthesis and serves as a proven source of antioxidant enzymes, including those that function in the induction of TNF-alpha, IL-1 beta, IFN-gamma and iNOS. As a powerful antioxidant, NAC has been shown to significantly improve circulation and provide support for adrenal function.

Choline (as choline bitartrate). Choline is recognized as an essential nutrient in humans, primarily due to its role as the precursor of phosphatidylcholine, as well as its role in the production of acetylcholine. Acetylcholine functions as a crucial component for the structural integrity of the neuromuscular junction. The phosphorylation of acetylcholine results in the formation of the potassium channel, the major form of cellular choline. Over 1,000 genes are expressed in neural precursor cells, including those involved in cell proliferation, differentiation and apoptosis require choline for activity. Thus, choline is an essential entity in our overall health.

Superoxide Dismutase and Catalase (vegetable culture sources). Superoxide dismutase and Catalase are potent antioxidants, shown in human studies to decrease oxidative damage, as well as other types of damage to DNA. While adrenal health may potentially result in an increased production of reactive oxygen species, antioxidants may be an important adjunct for adrenal support.

Glandular Support
Adrenal Gland Concentrate (porcine), Lamb Pituitary/Hypothalamus Complex (ovine), Parotid Tissue (bovine). Glandular components serve to provide raw materials which aide in the functional support of the respective organ. Glandular components also contain vital chemical messengers, which are chemically locked in those with adrenal dysfunction. They function in supporting the adrenals by relieving the burden of underfunctioning adrenal glands, which may be particularly important in the initial phases of adrenal repair. They have also been demonstrated to speed recovery of the organ, and specifically with the pituitary, to allow the adrenals to recover function.

In addition to a good diet, natural adrenal support utilizing vitamins, minerals, botanicals and glandulars is essential for patients to assist in promoting the natu…