# **Endocrine Complete**<sup>™</sup> A Hormone Specific<sup>™</sup> Multi-Nutrient

## DESCRIPTION

Endocrine Complete <sup>™</sup> is a comprehensive combination of vitamins, minerals, nutrients and phytotherapeutic compounds specifically formulated to provide support of endogenous hormone production by the endocrine system. <sup>†</sup>

Endocrine Complete<sup>™</sup> includes a wide variety of herbs that act as hormonogenic agents, a subclass of phytocrine activities that maintain endocrine gland health, first defined by Joseph J Collins, RN, ND in 2005. As a Hormone Specific Multi-Nutrient, this formulation can be used as a foundation of hormone health with any of the Hormone Specific Formulations manufactured by Douglas Labs, and formulated by Dr. Collins.

#### **FUNCTIONS**

Vitamins and minerals are used as cofactors for the various enzymes throughout the body that affect the health of every tissue. Proper levels of vitamins and minerals are required for both the production of hormones, and the ability of tissues to respond to hormones. Studies show that a high percentage of adults in North America and other developed areas eat less than the minimum daily allowance of 10 or more essential nutrients.

In addition to inadequate dietary intake of endocrine essential nutrients, the function of nutrients may be limited because of genetic variations that limit the conversion of the nutrient to its activated form. These genetic limitations are recognized as single nucleotide polymorphisms (SNPs). Specific SNPs are known to affect the conversion of beta-carotene to vitamin A. The conversion of folate to its active form L-methylfolate is also limited due to SNPs. Activated vitamin B-6, as well as the methylated form of vitamin B-12 is also required for optimal endocrine health. In addition to the general benefits of vitamins, mineral and other nutrients, there are a number of very hormone specific benefits from each. For example, folate, best used as L-methylfolate, the most active form, is required for proper health of gonadal and adrenal tissue. Vitamin B-12, as methylcobalamin, is required to maintain adequate levels of estrogen and progesterone and modulate cortisol levels. Riboflavin and thiamine are required for proper metabolism of thyroid hormones as well as the adrenal gland hormones. Benfotiamine, a lipid soluble form of thiamine, supports insulin synthesis and healthy glucose metabolism. Vitamin K benefits go beyond bone health, as vitamin K helps to control the insulin response.

## Endocrine Complete<sup>™</sup> Phytocrine<sup>™</sup> Blend

Adrenocorticotropic hormone (ACTH) from the anterior pituitary gland preserves adrenal weight and function. *Bupleurum falcatum*, which contributes to the release of ACTH from the pituitary gland, results in healthy adrenal function and the ability of the adrenal glands to respond to stress. *Rehmannia glutinosa* also has adrenotrophic properties and helps the body respond to stress. *Panax ginseng* supports adaptation abilities by maintaining baseline levels of ACTH, and also by modulating excessive stress induced ACTH production. *Rhodiolia rosea* helps to decrease the stress-induced negative changes of ACTH and cortisol levels. The gonadotrophic hormones from the anterior pituitary gland include Luteinizing hormone (LH) and Follicle-Stimulating Hormone (FSH). These hormones support function of testes and ovaries. LH promotes sex hormone production, and FSH promotes oogenesis and spermatogenesis. *Withania somnifera* supports healthy serum levels of LH, and subsequently serum testosterone in human studies. *Panax ginseng* supports both healthy FSH and LH levels in human studies. *Rhodiola rosea* contains salidroside, which has a protective effect on the function of LH in the hypothalamic-pituitary-gonadal axis and can help maintain testosterone production.

Thyrotrophic cells in the anterior pituitary gland produce Thyroid-Stimulating Hormone (TSH), which preserves thyroid gland weight and function, and promotes the release of thyroid hormones. Thyroid hormones are produced by the thyroid gland under the influence of TSH. Forskolin, an active ingredient in *Coleus forskkohlii* helps with T3 & T4 secretion from thyrocytes in a fashion similar to TSH, including organification of iodine though independent from TSH. *Withania somnifera* also supports normal thyroid hormone production.†

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Rhodiola rosea was shown to help normalize the stress-induced negative changes of thyroxine and triiodothyronine concentrations.<sup>†</sup>

Pancreatic beta-cells produce insulin based on the needs of the body. Gymnema sylvestre is beneficial for supporting healthy beta-cell function. † Panax ginseng and Withania somnifera have the ability to maintain healthy blood glucose levels and support pancreatic beta-cells. Rehmannia glutinosa can support the insulin response by helping promote glucose utilization and balancing cortisol levels.

## **INDICATIONS**

Endocrine Complete<sup>™</sup> may be a useful dietary supplement for those who wish to consume the essential nutrients plus herbs for hormone health and endocrine system support.

## FORMULA (#202133-120X)

Serving Size	ze 4	Vegetarian	Capsules:
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Vitamin A (as 80% beta carotene/5,000 IU
20% Vitamin A Palmitate)
Vitamin C (as Ascorbic Acid)500 mg
Vitamin D-3 (as Cholecalciferol)1,000 IU
Vitamin E
(as d-alpha tocopheryl succinate plus mixed tocopherols)
Vitamin K-2 (as Menaquinone-7) 40 mcg
Thiamine (as Thiamine HCI)
Riboflavin (as Riboflavin-5-phosphate)10 mg
Niacin/Niacinamide
Vitamin B-6 (as Pyridoxal-5-phosphate) 20 mg
Folate (as L-Methylfolate, Metafolin®) 400 mcg
Vitamin B-12 (as Methylcobalamin) 250 mcg
Biotin300 mcg
Pantothenic Acid25 mg
(as Calcium Pantothenate)
Calcium (as Calcium Citrate Malate) 50 mg
lodine (from Kelp)150 mcg
Magnesium (as Magnesium Citrate)50 mg
Zinc (as Zinc Monomethionine, Opti-Zinc®)15 mg
Selenium (as I-Selenomethionine)100 mcg
Copper 0.25 mg
(as Copper Amino Acid Chelate)
Manganese 2 mg
(as Manganese Amino Acid Chelate)
Chromium120 mcg
(as Chromium Amino Acid Chelate)
Molybdenum100 mcg
(as Molybdenum Amino Acid Chelate)
Inositol25 mg
Boron (as Boron Citrate)2 mg
Benfotiamine25 mg
Endocrine Complete™
A Phytocrine™ Proprietary Blend500 mg
Bupleurum falcatum root Extract, Rehmannia
glutinsosa root Extract, Rhodiola rosea root Extract
(standardized to 3% rosavins), Ashwagandha root
(January), Monthaganana 1000

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and leaf Extract (*Withania somnifera*, standardized to a minimum of 10% withanolide glycoside conjugates and 32% oligosaccharides), *Coleus forskohlii* Extract (root, standardized to 10% forskolin), *Gymnema sylvestre* Extract (leaf, standardized to 25% gymnemic acids), *Panax ginseng* Extract (root, standardized to 3% ginsenosides).

Other ingredients: Hydroxypropyl methylcellulose (capsule), cellulose and silica.

## SUGGESTED USE

Adults take 4 capsules daily with food, or as directed by a healthcare professional. This product is best taken in the AM or Noon.

**Warning:** This product contains Vitamin K, which interferes with the prescription drug Coumadin (Warfarin). Consult your physician before taking this product.

If pregnant, nursing, or taking prescription medications, consult your healthcare practitioner before taking this product.

#### SIDE EFFECTS

No adverse effects have been reported.

STORAGE

Store in a cool, dry place, away from direct light. Keep out of reach of children.

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## For more information on Endocrine Complete™ visit douglaslabs.com

† These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

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You trust Douglas Laboratories.
Your patients trust you.

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