

Glandular Support for Weight Management

Starting this month, many people will focus on their New Year's resolutions, and for some, weight management and a healthy lifestyle will be a priority. But did you know January is also Thyroid Awareness month? The thyroid is a gland located in the front part of the neck, below the Adam's apple. The thyroid produces hormones that regulate metabolism and are important in regulating energy, body temperature, basal metabolic rate, the use of other hormones, as well as helping to regulate growth and development. The thyroid gland and the other endocrine organs may play a role in how the body responds to changes in diet and exercise.

With increasing age, metabolism naturally slows down. This occurs primarily because of normal muscle mass atrophy and a natural decrease in levels of hormones such as T3 and testosterone. An increase in the production of a hormone called cortisol, in response to stress, may also impact weight-management efforts.

T3, or triiodothyronine, is an iodine-containing hormone produced by the thyroid gland. It is synthesized under the influence of thyroid stimulating hormone (TSH) by attaching iodine atoms to the amino acid tyrosine. A lack of proper nutrition can have a negative effect on the thyroid and on metabolic rate. Nutritional ingredients that support optimal thyroid function include **Irish moss, kelp, black walnut, l-tyrosine, zinc** and **7-keto**.

Healthy thyroid status is dependent on the presence of multiple elements necessary for the synthesis and metabolism of thyroid hormones. Irish moss, kelp and black walnut are good sources of iodine. Iodine plays a central role in thyroid function, being both a major constituent of thyroid hormones and a regulator of thyroid gland function. Zinc intake is also important as suboptimal dietary intakes of zinc can adversely affect thyroid hormone function.¹ 7-keto, a metabolite of DHEA, may increase the production of T3, supporting metabolism and weight loss.²

Cortisol, a hormone produced by the adrenal glands, plays multiple roles throughout the body. In addition to its best-known role as the "stress hormone," it is involved in glucose metabolism, regulation of blood pressure and in immune function. Cortisol levels naturally fluctuate and are highest in the morning and lowest at night. Bursts of cortisol are also released in response to physical or psychological stress. While small amounts of cortisol have positive effects, research has shown that prolonged elevated cortisol levels are connected with increased amounts of abdominal fat and also cause increased consumption of calories.³ Nutritional ingredients commonly suggested to

counteract the physiological effects of stress associated with elevated cortisol levels include **magnolia bark extract, phellodendron extract, holy basil, l-theanine and DHEA.**

The combination of magnolia bark extract and phellodendron extract has been shown to help curb stress-related eating and mild anxiety.^{4,5} This was associated with reduced weight gain and some weight loss among study volunteers. Compounds naturally occurring in holy basil, an Indian herb, have positive effects on stress parameters and may help to decrease the effects of stress by normalizing the levels of stress-related hormones.⁶ L-theanine, a non-essential amino acid found in green tea, promotes the generation of alpha brain waves indicative of relaxation without causing a drowsy state or impairment of motor skills.⁷ DHEA is a hormone precursor produced by the adrenal glands. After about age 25, the body's production of DHEA declines, leading many experts to believe that DHEA plays a role in the aging process. Research shows that administration of DHEA decreases plasma cortisol concentration and may decrease weight, abdominal fat and insulin levels.^{8,9}

Additional nutritional ingredients with a history of successful use in supporting the glandular system include **licorice, parsley, schizandra, vitamin B5, vitamin C and manganese.**

References:

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