**THE THYROID**

The thyroid gland is located in the neck, just below the larynx (voice box). It is made up of two lobes connected in the middle by a mass of tissue, known as an isthmus. The thyroid gland is slightly heavier in women than in men and becomes larger during pregnancy. The thyroid is composed of microscopic sacs called thyroid follicles. Within the sacs are follicular cells, and it is these cells that are responsible for the secretory function of the gland. Both the follicular and the parafollicular cells manufacture hormones; the former produces thyroxine and the latter calcitonin.

The functions of the thyroid’s hormones are threefold. They are responsible for cellular metabolism, growth and development, and oxygen use and basal metabolic rate. The thyroid gland releases the hormone thyroxine directly into the blood, after it is produced and secreted by the follicular cells. The hormone calcitonin, produced in the parafollicular cells, is essential in the body because it influences calcium homeostasis. These two hormones require the nutrient iodine, a trace mineral, for production.

The thyroid hormones are thyroxine and a metabolic bi-product, triiodothyronine. Thyroxine is produced in greater quantities and contains one more atom of iodide than the bi-product. The production of the thyroid hormones is important for a number of reasons. Its very production is a homeostatic function because it raises the body’s internal temperature. A response to a cold environmental temperature stimulates the thyroid to release the hormones into the blood, increasing the metabolic rate and raising body temperature.

Thyroid hormones regulate basal metabolic rate, (that is, the rate of oxygen consumption while at rest,) by stimulating cellular oxygen use. This produces a rise in body temperature and enables us to withstand freezing temperatures.

**THYROID & METABOLISM**

Another function for the hormones is the regulation of metabolism. Metabolism is the term used to describe the sum of all chemical processes that take place in the body. There are two main types of metabolism; building up, known as anabolism and breaking down, known as catabolism. The thyroid hormones stimulate protein synthesis, enhance cholesterol excretion in bile (which aids in fats digestion and thus reduces cholesterol levels), and increases the use of glucose in the production of ATP, the main energy-producing chemical in cells.

The presence of thyroxine, triiodothyronine, and calcitonin is crucial to the body’s health and well-being. Because of its role in the production of the thyroid hormones, iodine is equally crucial.

**HOMEOSTASIS & THE THYROID**

A properly functioning thyroid gland is important for the body to remain in homeostasis. In cases of thyroid imbalance, the thyroid becomes either sluggish or overactive. When sluggish, it retards the body’s basic metabolism and therefore the body retains fluids, adds weight and disrupts the natural flow of a woman’s cycle. In the

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**EDITOR’S NOTE**

Homo Sapiens are a biological masterpiece. Every human being has the capacity to rapidly comprehend what is taking place in its surroundings, to observe and react to profound and subtle environmental changes, to respond in a calculated and deliberate manner to the things that happen around it and to think and make critical judgments that can often have permanent effects. These amazing abilities are all part of the intricate process that we simply refer to as “life”. These abilities are made possible by a seemingly endless number of interdependent factors, including efficient functions that occur in the cells, organs and systems that make up the human body.

Through the process of digestion, assimilation and, ultimately, metabolism, our bodies have the ability to transform simple and complex chemicals and substances found and nurtured in our environment to vital nourishment that enables each of the body’s cells to thrive, to repair damage and to perpetuate a healthy existence. Miraculously, the body performs these intricate functions in a state of nearly constant and sustained balance known to modern science as “homeostasis”.

Understanding the human body is critical to understanding yourself. We must each have some knowledge about the complex structures and interrelated functions of this profound biological organism in order for us to achieve states of unconditional happiness and optimal health.

_Self Care News®_ is designed to help provide its readers with crucial information about how the body, its structures, and various physiological functions depend so critically on nutrition. When you understand more about how nutrition and human functions are so closely interrelated, you will be better equipped to nurture your body into and maintain an excellent state of health.

Every issue of _Self Care News®_ will feature vital information about the body’s structures, organs, systems and their unique and interdependent functions, in conjunction with details about one or more of _MICHAEL’S®_ formulas. These publications will not describe how to treat, prevent or cure any illness or disease. Instead, they will focus on those things that are essential for proper, efficient, healthy functioning of the human body.

_MICHAEL’S®_ formulas are the result of more than two decades of counseling and research into the importance of nutrition in maintaining proper health. Some formulations were created to help family members and cherished friends seeking additional dietary support.

Requirements for nutrition are different in every person, due to health status, dietary habits and the environment. Each one of my unique, synergistic combinations is unconditionally guaranteed to elevate your nutritional status, or your money back. I welcome your thoughts, and most of all, your personal experiences with my One Tablet Solutions.

Be Well,

Michael Schwartz
overactive mode, it creates nervousness and tension. It also causes inability to gain weight because the metabolism becomes so high that the body burns up everything that it takes in and the nerve cells work overtime, until they become taxed and can affect homeostasis.

Homeostasis (homeo=same; stasis=standing still) is defined as balance and harmony within the body. It is the condition created when each cell in the body functions in an internal environment which remains within certain physiological limits. Homeostasis can be achieved when the body: (1) has the proper amounts of gases, nutrients, ions, and water; (2) maintains the optimal internal temperature and; (3) has an optimal volume for the health of the cells. When homeostasis is disturbed, it may affect health.2

NUTRITIONAL SUPPORT

The thyroid, like every other gland, organ, or particular system of the body, requires very specific nutrients in order to function properly. The thyroid absolutely needs iodine for its nutritional support. Iodine is an integral part of the thyroid hormones thyroxine and triiodothyronine and is rapidly absorbed and transported to the thyroid for synthesis.

Other nutrients necessary for the proper functioning of the thyroid include:

MANGANESE is a mineral that is necessary for the production of thyroxine. Thyroxine is one of the thyroid hormones that must be present for the regulation of basal metabolism.

CHROMIUM is a mineral involved in carbohydrate, lipid (fats), and nucleic acid metabolism. Some trace minerals, like chromium, are essential for the proper function of enzymatic transactions.

TYROSINE is an amino acid that is important to the health and functioning of the thyroid, as well as to the adrenal glands and pituitary.

IRISH MOSS, like Kelp, is high in Iodine.

HOW TO OBTAIN NUTRITIONAL SUPPORT

MICHAEL’S® THYROID FACTORS™ is the ideal way of acquiring a synergistically-complete nutritional supplement. THYROID FACTORS™ contains iodine, manganese, and tyrosine, complemented with the herbs Irish moss, gentian root, and bladderwrack, each known for its healthful attributes.

About MICHAEL’S® Products

Seasoned health food shoppers already know that a combination of nutrients is always more effective than taking single nutrients one at a time. Add in the cost savings of taking combinations, with herbs included, and the math proves to be more efficient, too. Combinations increase assimilation and reduce the amount of binders and fillers. That’s why MICHAEL’S® created the FACTORS OF LIFE® programs. Your life is busy enough as it is. Why worry when synergistically complete nutrition is conveniently at hand?

MICHAEL’S® products include an expiration date to ensure freshness. He personally guarantees purity and specified content. Each product is hypo-allergenic with no artificial colors or flavors. The formulas contain cold-pressed or organically grown (when available) herbs to ensure the highest quality. Additionally there is no sugar, wheat, gluten, sodium, or anything artificial in any of our supplements. These high-potency, all-natural products are even manufactured with food-grade fillers, binders and enteric coatings. Most are suitable for vegetarians and tell you so right on the front label. Every product is double safety sealed with an outer shrink wrap and inner bottle freshness seal. As is normal in all-natural products, some color and texture variations may occur, but do not affect product purity, potency or assimilation.

Above all else, all MICHAEL’S® NATUROPATHIC PROGRAMS are designed to produce physical results you can feel, due to the innovative nutritional supplementation with specific, targeted FACTORS OF LIFE® programs. As always, the newest developments, the finest ingredients and the most effective formulations for your total healthcare from MICHAEL’S® NATUROPATHIC PROGRAMS.

Sources Cited:

**Stearic Acid.

*Daily Value not established.

OTHER INGREDIENTS: Dicalcium Phosphate, Maltodextrin, Cellulose, Magnesium Stearate and Stearic Acid.

*Trademark of InterHealth Nutraceuticals Inc. Vegetarian & Kosher Dietary Supplement

Supplement Facts

Serving Size: Three (3) Capsules

<table>
<thead>
<tr>
<th>Amount Per Serving</th>
<th>% Daily Value</th>
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<tbody>
<tr>
<td>Vitamin B-6 (as Pyridoxine)</td>
<td>75 mg .......... 3750%</td>
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<tr>
<td>Iodine (from Kelp)</td>
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<tr>
<td>Chromium (as Chromium Polynicotinate**)</td>
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<tr>
<td>Manganese (as Manganese Amino Acid Chelate)</td>
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<tr>
<td>Gentian Root (Gentiana lutea)</td>
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<td>Irish Moss (Whole Plant) (Chondrus crispus)</td>
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<td>Bladderwrack (Whole Plant) (Fucus vesiculosus)</td>
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<tr>
<td>Tyrosine (as L-Tyrosine)</td>
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**Stearic Acid.