What factors are involved in a man's health? In this issue, we offer general guidelines for good health and some specifics about the prostate, including the production and role of testosterone. Through proper nutrition, which includes both a good diet and nutritional supplements, a man can maintain youthful integrity and abundant vitality in all matters of expression, both physical and intimate.

BASIC NUTRITIONAL NEEDS
Each of us has different nutritional requirements. One's gender, behavior, lifestyle and interaction with the environment all impact these needs. Life's stresses, combined with years of poor health behavior (such as smoking and sedentary jobs), can seriously impair the body's ability to maintain homeostasis, a state of balance. But no matter how different people are in size, appearance, activity or age, we all need the same nutrients; what differs considerably is the amount of nutrients needed. Most of the once-daily type supplements in today's marketplace do not fully take into account a man's special nutritional needs, needs resulting from aspects such as larger body size and greater physical activity levels.

THE MIGHT OF MINERALS
This is particularly true when it comes to minerals, an essential component of nutrition. The typical once-daily supplement can be very low in mineral content, which could lull their consumers into a false sense of "mineral security" because we all have different individual needs, those who take only a once-daily supplement may not be getting all they need for good health in one tablet.

Generally, consumers have a fairly broad knowledge of vitamins and how they work in the body but may not have the whole picture when it comes to minerals. In the body, minerals act as the major transmission junctions and switches for the electrical impulses that flow from the brain to muscle receptor sites where they "tell" the muscle what to do. Minerals are engaged in almost every physical transaction in the body. One could not breathe, eat or drink without the aid of minerals. Minerals are absolutely essential for health.

TEENS’ SPECIAL NEEDS
Nutritional counselors are well aware of the need for certain nutrients at special times. Each time we form a nutritional program for someone, we draw on this knowledge. This principle is clearly illustrated in the varying amounts of zinc, calcium, B-complex vitamins, pantothenic acid and lipotropic vitamins that are needed at the different age levels of growing children and adults.

During their teen years, for example, young men need increased amounts of nutrients, especially those involved in the growth of bones (such as calcium) and for the reproductive system. Growth increases the need for structural materials, such as protein and minerals; calories, since energy is needed to build body tissue; and nutrients, to help regulate body processes. Zinc is important for healthy skin and in strengthening the immune system. Pantothenic acid should also be increased to help the teenager deal with the physical stresses of growing up and for its contribution to energy production. During this same period, a solid base of the lipotropic vitamins, such as choline and inositol is also desirable. Lipotropic vitamins promote and support the transport and utilization of fats and help to prevent accumulation of fats in the liver, while B-complex nutrients work in a variety of ways. They help the nervous system function and are essential for proper functioning of the liver and gastrointestinal tract, and for metabolism of carbohydrates, fats and proteins. Known for their contribution to energy enhancement, B-complex vitamins also contribute to healthy muscles, skin, hair and eyes.

THE PROSTATE
Similar in size and texture to a chestnut, the prostate is the largest accessory gland of the male reproductive tract. The prostate slowly increases in size from birth to puberty then grows at an increased pace until a man enters his 30s. Its size then becomes stable and remains so until about age 45, when further enlargement may occur. For reasons not yet completely understood, the prostate frequently enlarges in older men.

The prostate secretes a milky, slightly acidic fluid containing enzymes that balance the acid levels of interacting fluids and help sperm motility. Although the focus of intensive, ongoing research, the prostate remains one of the body’s least understood structures. It is known that the hormone testosterone stimulates zinc uptake and concentration in the prostate, which parallels its stimulation of citrate accumulation and secretion.
KEY PROSTATE NUTRIENTS

Zinc, a component of semen, plays an important role in the processes of fertility, reproduction and sexual maturation. It is believed that at least 1 mg of zinc is secreted in one ejaculum.

Magnesium is vital in muscle contractility, which is important to the prostate because the muscular contractility precedes secretion of prostatic fluid.

Calcium, involved in a multitude of processes, is also an activator of several enzymes involved in neuromuscular function.

THE TRUTH ABOUT TESTOSTERONE

Like other androgens, testosterone produces or stimulates the development of secondary male characteristics apart from the testes, referred to as masculinization. Although testosterone is the “stuff” that makes men act “like men,” women also produce and utilize this androgen in lesser amounts.

Testosterone stimulates metabolism and increases muscular strength. It accelerates tissue growth and stimulates blood flow.

It is essential for normal sexual behavior and the occurrence of erections, and normal growth and development of male accessory sexual organs. It also affects many other metabolic activities.

All steroid hormones in humans, including testosterone, are derived from cholesterol. Hormones function in a complex hierarchy. For example, although it is a steroid hormone, testosterone relies on other hormones to activate its production. Consequently, testosterone production depends on the endocrine system’s efficiency.

SUPPORT FOR TESTOSTERONE PRODUCTION

Vitamin C has a co-enzymatic function in metabolism of amino acids and biosynthesis of steroid hormones, such as testosterone.

Pantothenic acid has a role in synthesizing choline, cholesterol, phospholipids and steroid hormones. If this vitamin is low, the result will be lower levels of co-enzyme A, necessary for energy production. In turn, this will affect synthesis of cholesterol, a precursor to testosterone.

Niacin participates in the synthesis of fat and cholesterol, the raw material used for testosterone production.

Arginine, an essential amino acid, is a building block for enzymes, hormones, vitamins and structural proteins.

ABOUT MICHAEL’S PRODUCTS

MICHAEL’S NATUROPATHIC PROGRAMS combine the basics and the newest developments along with the finest ingredients and the most effective formulations for your total healthcare. Each program is designed to produce physical results you can feel, owing to innovative nutritional supplementation with specific, targeted FACTORS OF LIFE formulas. MICHAEL’S FACTORS OF LIFE formulas are synergistically complete. Each contains combinations of nutrients that work together to increase assimilation and reduce the amount of binders and fillers. The formulas contain organically grown herbs, when available, to ensure the highest quality. These high-potency, all-natural products are manufactured with food-grade fillers, binders and enteric coatings. Most are suitable for vegetarians and those who follow a kosher diet.

Every product includes a best if used by date to ensure freshness and is double safety-sealed with an outer shrink-wrap and inner-bottle freshness seal. As is normal with all-natural products, some color and texture variations may occur but this does not affect product purity, potency or assimilation.

FOR MEN

This daily multivitamin and herb formula contains specific nutrients in amounts appropriate for a man’s needs, including vitamin C, saw palmetto and ginseng.

TEEN BOYS

This formula is rich in B-Complex nutrients including pantothenic acid and B6, as well as vitamin D, vitamin E and zinc.

PROSTATE FACTORS™

This formula contains vitamins and amino acids important to the body plus zinc, magnesium and vitamin E, and is complemented with pygeum and saw palmetto berries, both standardized extracts.

TESTOSTERONE FACTORS™

This formula is rich in pantothenic acid and B6, as well as vitamin D and niacin, complemented with herbs to support normal testosterone and reproductive system function. It contains no glandular concentrates.

ESSENTIAL MINERALS

This formula contains a comprehensive spectrum of macro, micro and trace minerals essential to the body.

REFERENCES

4. Paige, 580.
6. Tabersconst, 97.
9. Lehninger, 748.

This statement has not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.
ESSENTIAL NUTRIENTS FOR MEN’S HEALTH

Beta Carotene. Preferred source of vitamin A due to its non-toxic nature. Converted by body into vitamin A only as needed. An antioxidant, much like vitamins C and E, and selenium. As an antioxidant, negates effects of free-radicals.

Biotin (vitamin H). Necessary for fatty acid biosynthesis; healthy skin; and, metabolism of carbohydrates, fats and proteins.

Calcium. A mineral necessary for healthy bones and teeth. Also important in blood coagulation, neuromuscular excitability, cellular adhesiveness, transmission of nerve impulses, maintenance and function of cell membranes, and activation of enzyme reactions and hormone secretion.

Choline. B-complex nutrient and one of the lipotropic vitamins. Important to the metabolism and transport of fats and cholesterol. Normal nerve transmission, gall bladder function and lecithin formation also involve this nutrient. Vital for healthy hair and thymus gland.

Chromium. Involved in carbohydrate, lipid and nucleic acid metabolism. Functions in carbohydrate and lipid metabolism as a potentiator of insulin action.

Essential fatty acids. Needed for growth. Linoleic acid, the most important, must be included in the diet.

Folic acid. Essential for growth, division of cells and formation of red blood cells. Helps with reproduction. Necessary for gland and liver health.

Inositol. A lipotropic vitamin. Important for hair growth, formation of lecithin, and metabolism of fats and cholesterol.

Iodine. Essential part of thyroxine and triiodothyronine, hormones required for normal growth and development, and for maintenance of a normal metabolic rate.

Iron. Essential in permitting oxygen and electron transport and for protein metabolism, immune system resistance, growth, healthy teeth, skin, nails and bones.

Magnesium. Essential for normal metabolism of potassium and calcium. Used in tissue growth, including bone growth and turnover replacement. Plays a key role as an essential prosthetic group in at least 300 enzymatic reactions in intermediary metabolism.

Niacin. B-complex nutrient. Promotes growth and proper functioning of nervous system. In addition to role in maintaining a healthy digestive system and skin, also aids in the metabolism of fats, carbohydrates and proteins.

Pantothenic acid. Stimulates growth and contributes to energy functions. Necessary for healthy skin.

Phosphorus. Plays fundamental roles in modifying the development and maturation of bone. This mineral is also essential for the metabolism of carbohydrate, fats and protein. Because it plays a role in bone resorption, mineralization and collagen synthesis, phosphorus has an integral part in calcium homeostasis.

Selenium. Preserves tissue elasticity and works with Vitamin E. Like vitamins A, C and E, it is an antioxidant.

Vitamin A. Fat-soluble nutrient important to immune system and in formation of bones, teeth and skin. Necessary for eyes, good night vision. Helps maintain outer layer of many tissues and organs; supports growth and repair of body tissues. Promotes healthy hair and vitality.

Vitamin B1 (thiamin). Essential for nerve tissue, muscles, digestion and normal functioning of the heart. Also necessary for carbohydrate metabolism and in maintaining health of the mouth, skin, eyes and hair.

Vitamin B2 (riboflavin). Important in the metabolism of fats, carbohydrates and proteins. Supports healthy eyes, hair, skin and nails.

Vitamin B6. Necessary for metabolism of fats, carbohydrates and proteins; healthy skin, nerves and muscles; and aids in antibody formation and digestion.


Vitamin C. Multiple uses: increases iron absorption, is essential for both the production of collagen and for the immune system, strengthens blood vessels, and helps maintain healthy teeth, gums and bones.

Vitamin D. Role is crucial in infancy and childhood, owing to its function in the assimilation of calcium, an essential mineral in healthy bone formation for all ages. Improves muscle strength and is essential for normal mineralization of bone and cartilage, and for healthy parathyroid glands and teeth.

Vitamin E. Protects fat-soluble vitamins and red blood cells. Works with other nutrients to help prevent blood clots; maintains healthy nerves and muscles; and strengthens capillary walls. Essential for hair, skin and mucous membranes.

Men’s Health Facts

Essential Minerals

Serving Size: Four (4) Tablets

Amount Per Serving % Daily Value
Calcium (as Calcium Citrate) 400 mg 16%
Iron (as Iron Amino Acid Chelate) 2 mg 17%
Iodine (from Kelp) 120 mcg 80%
Magnesium (as Magnesium Citrate) 400 mg 95%
Zinc (as Zinc Monomethionine†) 15 mg 13%
Selenium (as L-Selenomethionine) 15 mcg 22%
Manganese (as Manganese Amino Acid Chelate) 8 mg 348%
Chromium (as Chromium Polynicotinate**) 20 mcg 149%
Potassium (as Potassium Amino Acid Chelate) 80 mg 2%
Betaine Hydrochloride 100 mg

ConcenTrace™® Alfalfa 24 mg
(ionic Trace Mineral Complex from the Great Salt Lake, 72 naturally occurring minerals, plus other minerals found in seawater)

†Contains soy.
**Quatrefolic® is a registered trademark of Gnosis S.p.A. Patent No. 7,947,662.
***ConcenTrace® is a trademark of Trace Minerals Research.

WARNING: Accidental overdose of iron-containing products is a leading cause of fatal poisoning in children under six. KEEP OUT OF REACH OF CHILDREN. In case of accidental overdose, call a physician or Poison Control Center immediately.

OTHER INGREDIENTS: Stearic Acid, Dicalcium Phosphate, Microcrystalline Cellulose, Modified Cellulose Gum, Vegetable Magnesium Stearate, Silicon Dioxide and Pharmaceutical Glaze (Shellac, Povidone).

**ChromeMate® and OptiZinc® are Trademarks of InterHealth Nutraceuticals, Inc.
***ConcenTrace® is a Trademark of Trace Minerals Research.

Michael’s® Product Formulas

For Men Daily Multi Vitamin

Serving Size: Two (2) Tablets

Amount Per Serving % Daily Value
Vitamin A (as Beta Carotene) 4500 mcg 500%
Vitamin D3 (as Cholecalciferol) (from Lanolin) 10 mcg (400 IU) 50%
Choline (as Choline Bitartrate) 20 mg 13%
Calcium (as Calcium Ascorbate) 24 mg 2%
Magnesium (as Magnesium Citrate) 75 mg 16%
Folate (as [6S]-5-methyltetrahydrofolic acid equivalent 125 mcg DFE) 31%
Pantothenic Acid (as Calcium Pantothenate) 27 mg 540%
Zinc (as Zinc Monomethionine†) 15 mg 13%

Amount Per Serving % Daily Value
Vitamin A (as Beta Carotene) 2300 IU 333%
Vitamin D3 (as Cholecalciferol) (from Lanolin) 10 mcg (400 IU) 50%
Calcium (as Calcium Ascorbate) 20 mg 2%
Magnesium (as Magnesium Citrate) 58 mg 15%
Folate (as [6S]-5-methyltetrahydrofolic acid equivalent 125 mcg DFE) 31%
Pantothenic Acid (as Calcium Pantothenate) 27 mg 540%
Zinc (as Zinc Monomethionine†) 15 mg 13%

For Teen Boys Daily Multi Vitamin

Serving Size: Two (2) Tablets

Amount Per Serving % Daily Value
Vitamin A (as Beta Carotene) 3000 mcg 333%
Vitamin D3 (as Cholecalciferol) (from Lanolin) 10 mcg (400 IU) 50%
Calcium (as Calcium Ascorbate) 20 mg 2%
Magnesium (as Magnesium Citrate) 58 mg 15%
Folate (as [6S]-5-methyltetrahydrofolic acid equivalent 125 mcg DFE) 31%
Pantothenic Acid (as Calcium Pantothenate) 27 mg 540%
Zinc (as Zinc Monomethionine†) 15 mg 13%

For Teen Boys Tabs Daily Multi Vitamin

Serving Size: One (1) Tablet

Amount Per Serving % Daily Value
Vitamin A (as Beta Carotene) 3000 mcg 333%
Vitamin D3 (as Cholecalciferol) (from Lanolin) 10 mcg (400 IU) 50%
Calcium (as Calcium Ascorbate) 20 mg 2%
Magnesium (as Magnesium Citrate) 58 mg 15%
Folate (as [6S]-5-methyltetrahydrofolic acid equivalent 125 mcg DFE) 31%
Pantothenic Acid (as Calcium Pantothenate) 27 mg 540%
Zinc (as Zinc Monomethionine†) 15 mg 13%

Prostate Factors™

Serving Size: Four (4) Tablets

Amount Per Serving % Daily Value
Vitamin C (as Calcium Ascorbate) 1000 mg 1111%
Biotin 50 mg 1667%
Calcium (as Calcium Ascorbate) 24 mg 2%
Magnesium (as Magnesium Citrate) 400 mg 95%
Zinc (as Zinc Monomethionine†) 15 mg 13%

Supplement Facts

Serving Size: Two (2) Tablets

Amount Per Serving % Daily Value
Vitamin A (as Beta Carotene) 4500 mcg 500%
Vitamin D3 (as Cholecalciferol) (from Lanolin) 10 mcg (400 IU) 50%
Calcium (as Calcium Ascorbate) 24 mg 2%
Magnesium (as Magnesium Citrate) 75 mg 16%
Folate (as [6S]-5-methyltetrahydrofolic acid equivalent 125 mcg DFE) 31%
Pantothenic Acid (as Calcium Pantothenate) 27 mg 540%
Zinc (as Zinc Monomethionine†) 15 mg 13%

Prostate Factors™

Serving Size: Four (4) Tablets

Amount Per Serving % Daily Value
Vitamin C (as Calcium Ascorbate) 500 mg 555%
Biotin 100 mcg 333%
Calcium (as Calcium Ascorbate) 24 mg 2%
Magnesium (as Magnesium Citrate) 150 mg 27%
Zinc (as Zinc Monomethionine†) 15 mg 13%

Testosterone Factors™

Serving Size: One (1) Tablet

Amount Per Serving % Daily Value
Vitamin C (as Calcium Ascorbate) 1000 mg 1111%
Biotin 50 mg 1667%
Calcium (as Calcium Ascorbate) 24 mg 2%
Magnesium (as Magnesium Citrate) 400 mg 95%
Zinc (as Zinc Monomethionine†) 15 mg 13%

CAUTION: Not to be taken by pregnant or lactating women. Keep out of reach of children.

**Quatrefolic® is a registered trademark of Gnosis S.p.A. Patent No. 7,947,662.
***OptiZinc® is a Trademark of InterHealth Nutraceuticals, Inc.