

Homeostasis in the body, particularly during a biological change, requires that nutritional levels be closely maintained and, when necessary, adequately supplemented. In the process of estrogen production, the ovaries and the adrenal cortex play a key role.¹⁴ Providing the body with the proper nutritional support for these organs makes good sense because of the relationship between a decrease in estrogen production and osteoporosis.¹⁵

In fact, osteoporosis is more closely related to menopause than it is to a woman's chronological age.¹⁶ Adequate diet and exercise are the mainstays for preventing osteoporosis.¹⁷ Among the nutrients essential for maintaining homeostasis during menopause are:

CALCIUM is an essential mineral which is necessary for healthy, strong bones. Adequate calcium circulation is needed for muscle use, blood clotting, sending nerve impulses, and secreting various hormones.¹⁸ If there is not enough calcium in the blood for muscle use, calcium is "borrowed" from the bone.¹⁹ According to the National Institute of Health, a healthy premenopausal woman should have about 1,000 to 1,200 mgs per day. The Institute further suggests that a postmenopausal woman consume 1,200 to 1,500 mgs per day to help avoid bone loss.²⁰

VITAMIN C plays a role in the formation of collagen, the organic portion of bone matrix which gives bone its tensile strength.²¹ It promotes iron absorption and accumulation in bone marrow and is important in promoting normal muscle and nerve activity.

VITAMIN E is an antioxidant that protects fat-soluble vitamins, and contributes to the normal structure and functioning of the nervous system.

VITAMIN B-6 serves as the coenzyme in reactions necessary for the formation of neurotransmitters and neurohormones related to the functioning of the nervous system.²² It also serves as a coenzyme for a number of reactions essential to the metabolism of amino acids.²³ Vitamin B-6 plays a role in nerve and muscle growth and digestion.

PANTOTHENIC ACID contributes to energy functions. This vitamin is a constituent of coenzyme A and therefore has many metabolic roles.²⁴ It also plays a role in production of antibodies, in the healthy maintenance of the central nervous system, and in the synthesis of sterols and steroid hormones.²⁵


IODINE (KELP) is an essential trace element that is an integral part of the thyroid hormones, thyroxine and triiodothyronine. These hormones help to regulate metabolism and activity of the nervous system. Kelp provides a rich source of iodide.

HOW TO OBTAIN NUTRITIONAL SUPPORT

MICHAEL'S® MENOPAUSE FACTORS™ is a specific formula composed of important vitamins and minerals essential to the female body for a healthy "change of life." This dietary supplement, complemented with natural herbs, was specifically created for women who are moving from pre- to postmenopause. **MENOPAUSE FACTORS™** allows them to take responsibility for their own health, even when they can't or don't eat an adequate diet. Clearly no one has all the answers about menopause, but everyone agrees that a well balanced diet is important for good physical and mental health. Don't fight your body -- allow the changes that are happening to become a part of you, a part that is natural and that you accept.²⁶

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?

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| Menopause Factors™ | |
| Supplement Facts Serving Size: Two (2) Tablets Servings Per Container: 30 | |
| Amount Per Serving | % Daily Value |
| Vitamin C (as ESTER-C®) | 35 mg 60% |
| Vitamin E (as d-alpha Tocopheryl Succinate) | 100 IU 335% |
| Vitamin B-6 (as Pyridoxine) | 35 mg 1750% |
| Pantothenic Acid (as Calcium Pantothenate) | 50 mg 500% |
| Calcium (as Calcium Amino Acid Chelate) | 50 mg 5% |
| Iodine (from Kelp) | 150 mcg 100% |
| Magnesium (as Magnesium Amino Acid Chelate) | 100 mg 26% |
| Mexican Wild Yam Root (Dioscorea villosa) | 150 mg * |
| Borage GLA Concentrate (Herb) (Borago officinalis) | 100 mg * |
| Dong Quai Root (4:1 Extract) (Angelica Sinensis) | 100 mg * |
| Licorice Root (Glycyrrhiza glabra) | 100 mg * |
| Soy Isoflavones (Daidzein Glycosides 5.5%, 5.5 mg, Glycitein Glycosides 3%, 3 mg, Genistein Glycosides 1.9%, 1.9 mg) | 100 mg * |
| Black Cohosh Root (Cimicifuga racemosa) | 50 mg * |
| Passion Flower (Herb) (Passiflora incarnata) | 50 mg * |
| Red Clover Extract (8% Flavones, 4 mg) | 50 mg * |
| PABA (Para-aminobenzoic Acid) | 25 mg * |
| Hesperidin | 10 mg * |
| Boron (Aspartate) | 1 mg * |

*Daily Value not established.

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OTHER INGREDIENTS: Terra Alba (Calcium Sulfate), Maltodextrin, Stearic Acid and Magnesium Stearate.

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, corn, 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**.

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MENOPAUSE FACTORS™

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About 36 million women in the United States, more than one-third of all American women, have been through menopause.¹ With whispers of “hot flashes” and “mood swings” swirling around the physical facts of the matter, the issue has been doomed to veritable silence for years. The majority of menopause veterans probably began the process very uncertain about what to expect physically or psychologically. For generations, mother’s have neglected talking to daughters about “the change” as it signalled to them not simply the end of menses, but the end of life -- or rather the start of old age and death. The “Baby Boom” generation is making menopause a big issue because of their sheer numbers, and because they’ll live with it much longer than their grandmothers did.²

MENARCHE TO MENOPAUSE

The female body’s ability to procreate and give birth is the result of an intricate combination of chemical, physical and emotional interchanges within the body. As women mature from puberty, their bodies establish a cycle of care for the reproductive system which includes a monthly maintenance program of cleansing and the redevelopment of the hormonal components essential to the system. A young woman’s first physical manifestation of the cycle, known as the menarche, is the onset of the life giving process. At this time, the body begins a monthly process involving menstruation and two stages of the ovarian cycle, preovulatory and postovulatory phases.

The female reproductive system has a time-limited span of fertility between menarche and menopause, menopause being the cessation of the menses.³ The physiological reason for the onset of the cycle is the preparation of the uterus to receive a fertilized egg. Fertility declines with age, possibly as a result of less frequent ovulation and the declining ability of the uterine tubes and uterus to support the young embryo.⁴ The primary events in the cyclical process are controlled by hormones and the physical manifestations of female menopause are thought to be brought on by the decrease of estrogen production. In this period women must readjust their lives from one that has been physiologically stimulated by estrogen and progesterone production to one that is devoid of these feminizing hormones.⁵

MENOPAUSE

Menopause is a natural phenomena that occurs, in most cases, between 40 to 50 years of

age and happens to both men and women. In women, it was believed that the main reason for the physical changes was the concept that the ovaries were “burned out.”⁶ A better explanation is that the ovaries become less responsive to the stimulation of gonadotropic hormones resulting in a decline in the production of estrogen and progesterone, which interrupts the normal development of the primordial follicles in the ovaries.

Changes in gonadotropin releasing hormone patterns and luteinizing hormones, which stimulate the production of estrogen and progesterone and aid in ovulation, also contribute to the onset of menopause.⁷ Throughout a woman’s reproductive life, these primordial follicles grow into testicular follicles and ovulate, the “burn out” occurs because the primordial follicles decrease with age. As they decrease in number, the ability of the ovaries to produce estrogen also decreases. By the age of 45, only a few of the primordial follicles remain, therefore the production of estrogen decreases, until the follicles become atrophic and estrogen production by the ovaries ceases.

In men, the transition is called “The Male Climacteric,” and while it may not be comforting to women, they may experience hot flashes and other menopausal symptoms.⁸ Men begin to exhibit slowly decreasing sexual functions in their late 40s or 50s, but often retain reproductive capacity into their 80s or 90s.⁹ This decline is related to a decrease in the secretion of the male hormone, testosterone.

EFFECTS OF MENOPAUSE

It is interesting to note that not all women experience the same levels of physical and psychological reactions as their bodies go through this transition -- some women experience virtually no effects at all. During the course of menopause, women may suffer an array of physical concerns including: hot flashes, headaches, hair loss, muscular pains, vaginal dryness, weight gain and mood swings.

Osteoporosis, a condition in which bones become thin, fragile, and highly prone to fracture, is also a possible occurrence, due to the diminished levels of estrogen.¹⁰ Estrogen helps bones absorb the calcium they need to stay strong.¹¹ Beginning at age 30, and accelerating greatly around age 40 to 45, bone loss continues until as much as 30% of the calcium in bones is

lost by age 70.¹²

Psychological effects could include: irritability, fatigue, anxiety, feelings of stress and depression. There are many factors thought to affect these symptoms, such as lack of physical exercise and poor nutrition which can exaggerate the changes taking place.

ESTROGEN PRODUCTION

The female hormone estrogen is primarily produced in the ovaries. However, the adrenal glands also produce estrogen and progesterone, and healthy adrenals may account for the ability of some women to experience fewer symptoms associated with the menopausal transition.

The adrenals are located on top of each of the kidneys and consist of two regions, the adrenal cortex and the adrenal medulla. The adrenal cortex is responsible for the production of gonadocortoids, the sex steroid, which include estrogens and androgens. Adrenal androgens are hormones which contribute to sex drive and effect other sexual behavior in women. More importantly, these hormones may be converted to estrogen, which is significant when ovarian estrogen secretion diminishes during menopause.

NUTRITIONAL SUPPORT FOR MENOPAUSE

With a life expectancy of about 81 years, a 50-year-old woman can expect to live more than one-third of her life after menopause.¹³ While menopause is a natural and evolutionary part of the female reproductive system, the extent of side effects of the process may produce some unnatural and unnecessary discomfort. Good health, good nutritional habits and a good exercise regimen are the cornerstones of a long and happy life throughout the various changes associated with aging. The body, through these important practices, maintains a state of balanced and harmonious existence which has become known as homeostasis.

Homeostasis 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, ions, nutrients, and water; (2) maintains the optimal internal temperature and; (3) has an optimal fluid volume for the health of cells.