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### Menopause

#### Description

- Menopause refers to the cessation of menses, a normal process in a woman's life. It marks the ending of a woman's reproductive years, and the beginning of a new stage of life known as the climacteric stage. Menopause usually occurs near the age of fifty, but can begin in the early forties.<sup>1,2</sup>
- During menopause, the production of ovarian hormones, including androgens, decreases. This can result in a wide range of symptoms, including hot flashes, mood swings, depression, vaginal dryness, excessive perspiration, headaches, memory impairment, digestive disturbances, and sleeplessness.<sup>3</sup> At the time of menopause there is an increase in the production of androgens from other androgen-producing sites in the body. Androgens act as weak estrogens, helping the body to adjust to the hormonal changes that are occurring.
- The stronger the woman's adrenals, and the better her nutritional status, the easier is her transition into menopause. Chronic stress over long periods of time can lead to adrenal depletion. If a woman is nutritionally depleted and emotionally stressed, she may require hormonal, nutritional, or other support.<sup>2</sup>

#### **Prevention and Management**

- Regular physical exercise is necessary to protect against bone loss. Exercise has many other benefits as well.
- A diet that is low in saturated fats and cholesterol and high in complex carbohydrates, such as grains<sup>4</sup>, fruits and vegetables is important.<sup>2</sup>
- Vitamin E supplementation may reduce symptoms such as hot flashes, night sweats, dizziness, palpitations, fatigue, and breathing difficulties.<sup>5,6,7</sup>
- Calcium is important in maintaining bone mass.<sup>8</sup>
- Vitamin D enhances calcium absorption.<sup>9</sup>
- Magnesium intake is often low in women with osteoporosis. Low magnesium intake is associated with low bone mineral content (BMC).<sup>10</sup>
- Boron reduces urinary calcium loss and increases serum levels of 17 estradiol (estrogen).<sup>11</sup>
- Essential fatty acids can help prevent dryness of the hair, skin and vaginal tissues.<sup>12</sup>
- Soy supplementation has been suggested as a possible alternative to hormone replacement therapy.<sup>13</sup> Soy isoflavones act as estrogen-like compounds. Forty-five grams of dietary soy, per day for 12 weeks was shown to decrease post-menopausal hot flashes.<sup>14</sup>
- Certain herbs such as black cohosh, chasteberry, licorice and dong quai have shown to have a beneficial effect in managing many of the symptoms association with menopause.<sup>15</sup>

#### Abstracts

Angus RM, Sambrook PN, Pocock NA, Eisman JA. Dietary intake and bone mineral density.

**Bone Miner 1988 Jul; 4**(3):265-277. Osteoporosis, a major health problem in all Western countries, is a condition in which many dietary factors have been implicated. To determine the influence of diet on bone mass in the proximal femur, the intake of 14 nutrients was measured in 159 Caucasian women, aged 23-75 years and bone mineral density (BMD) quantitated in the hip by dual photon absorptiometry. BMD was also measured in the spine and bone mineral content (BMC) in the forearm by single photon absorptiometry. No significant correlation was found between current calcium intake and bone mass at any site. Iron was a positive predictor of BMD in the femoral neck and alcohol intake a positive predictor of BMD in the trochanteric region of the proximal femur in premenopausal women by

multiple regression analysis. Iron, zinc and magnesium intake were positively correlated with forearm BMC in premenopausal women. Iron and magnesium were significant predictors of forearm BMC in premenopausal and postmenopausal women respectively by multiple regression analysis. These results suggest that bone mass is influenced by dietary factors other than calcium.

## Choay P, Lafond JL, Favier A. Value of micronutrient supplements in the prevention or correction of disorders accompanying menopause. Rev Fr Gynecol Obstet 1990 Dec;85

(12):702-705. The risk of nutritional disturbances, in particular vitamin and trace element deficiencies, is high during the menopause. Such deficiency, revealed by nutritional surveys, results for life style as well as the natural events of aging, together with hormonal disturbances. The consequences of these deficiencies concern sensitivity to estrogens, structure of the skin and its accessory structures, bone metabolism, immune function and increased risk of degenerative pathology, in particular cardiovascular. Balanced and appropriate, multivitamin and mineral supplements i.e. containing all vitamins (A, B2, B5, B6, B9, E) and minerals (Cr, Cu, Mg, Se, Si, Zn), thus appear to be justified.

#### References

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<sup>3</sup> Werbach M. Healing Through Nutrition. New York:Harper Collins; 1993. p 247.

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<sup>12</sup> Sinatra ST. Optimum Health. New York: The Lincoln-Bradley Publishing Group. 1996. p168.

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