Special Report

What Menopausal Women Ought To Be Doing To Maintain Their Health

by Bill Sardi

American women approaching menopause are being confused and misled by so much health misinformation these days that it would help to provide an overview of what women should be doing as their ovaries begin to produce less and less estrogen. Conventional medicine's answer has been to take estrogen replacement therapy, which is now in disrepute, and high-dose calcium supplements, which should also be questioned.

Every woman is aware of the major changes experienced during menopause, primarily the possibility of hot flashes and mood changes and the onset of bone thinning. However, much more is involved, and the major change goes overlooked.

Menopause is not just a shortage of estrogen, it is also a period of life when iron overload begins.
Osteoporosis is not simply a calcium deficiency, as it is being treated in the USA.

1. With cessation of menstruation, women lose their ability to control iron. Early hysterectomy as well as menopause will induce a slow buildup of iron. Many women who had to work a great many years of their lives to stave off the fatigue of anemia may be uninformed about this change and mistakenly continue to eat large amounts of iron-rich red meat or take iron pills. Males begin to accumulate iron after they are fully grown, around age 18 or so, and by age 40 have twice the iron load as females and experience twice the rate of cancer, diabetes, infection and heart disease. After the onset of menopause, women begin to experience the same rates of disease as men due to the iron overload problem. Women (and men) must begin to learn how to control iron. Grapes, berries, cherries, citrus rind and green tea all contain bioflavonoids (also called polyphenols) that bind to iron. Whole grain, which contains bran, provides a molecule called phytic acid that binds to iron, keeping it under control. For example, we eat raisins for extra iron, but you never see a rusty grape because the bioflavonoids in the grape bind it tightly.

A quick way of crudely gauging whether you are anemic (iron deficient) or in iron overload is provided in the chart below.

Iron Deficiency (Anemia)	Iron Overload
• Pale Skin • Fatigue, esp. mental; frequent naps • Cold hands and feet • Craving acidic foods (tomatoes) • Lack of infections	• Dark bronze skin (iron stored in skin) • Fatigue • Elevated liver enzymes, cholesterol, sugar levels • Frequent infections

2. As long as iron has a place to go, in this case a baby's growing body inside the womb, or it gets dumped during monthly menstruation (80% of iron in the body is found in red blood cells), women are given a reprieve from the potential harmful effects of iron overload.

3. Postmenopausal women have difficulty controlling another mineral beside iron. Once estrogen production in the ovaries declines, there is a loss of a signal to hold calcium in bones. The inside of bones begins to waste

SIGNS OF CALCIUM OVERLOAD	SIGNS OF CALCIUM SHORTAGE	SIGNS OF MAGNESIUM OVERLOAD	SIGNS OF MAGNESIUM SHORTAGE
Calcifications (arteries, heart valves, kidney stones) Muscle cramps and spasms	Bone fractures* Rickets (kids)* Osteomalacia* (bone softening in adults) *May also be due to shortage of vitamin D	Loose stool	Muscle cramps & spasm Anxiety Sensitivity to noise Lack of deep sleep

away. Calcium is literally leached from bones into the blood circulation that can lead to arterial and breast calcifications. The failure to replace estrogen will accelerate bone wasting, which is called osteoporosis. However, osteoporosis is treated like a calcium deficiency rather than a hormonal shortage. American women consume 600-800 mg of calcium per day from their diet, 200-400 mg more than Japanese women who experience far fewer hip fractures in old age. Calcium supplementation has never been conclusively shown to prevent hip fractures, the primary preventive goal of bone health maintenance.

4. There are also other aspects of bone health beyond bone density. There is bone flexibility and bone hardness. Bone flexibility is encouraged by the consumption of magnesium that interrupts the brittle calcium crystals in bone. Bone hardness is encouraged by boron, an often-overlooked mineral.

5. Consumption of supplemental calcium does not stop the continued loss of calcium from bones. But women continue to be bombarded with bad advice to take high-dose calcium supplements. With calcium loss from bones and the intake of extra calcium from supplements, the arteries, muscles and breast tissues become clogged with calcium. Vitamin K from dark-green leafy vegetables as well as magnesium is needed to prevent these problems.

6. Women are misled by most health authorities on the amount of calcium needed during the post-menopausal years. The National Institutes of Health suggests 1200 milligrams of calcium from the diet plus supplements. The suppliers of dietary supplements provide the full 1200 milligrams as if the diet provided no calcium whatsoever. This is a serious mistake. Consumption of 1200 mg of calcium from supplements and 800 mg of calcium from the diet puts most women above the upper limit for calcium intake. Most post-menopausal women only need 400-600 milligrams of supplemental calcium, the rest coming from the diet. Excessive calcium intake can lead to calcium kidney stones, calcified arteries and heart valves (mitral valve), muscle cramps (eyelid twitches, heart flutters, backaches) and constipation. Magnesium is a natural calcium blocker and muscle relaxant as well as stool loosener.

7. Calcium and magnesium should be provided in near-equal doses to prevent problems. Note: while magnesium oxide is the most economical form of this mineral, only 4% of magnesium oxide is absorbed orally and it should not be used in dietary supplements. If you take a typical bone mineral formula that provides 1200 mg of calcium carbonate (about 30% of this is absorbed when taken with food), and 600 mg of magnesium oxide (about 4% absorbed), your body will actually absorb about 360 mg of calcium and only 24 mg of magnesium, a ratio of 15-to-1 in favor of calcium over magnesium! It's important for menopausal women to take ample amounts of magnesium with calcium. The 2-to-1 ratio of calcium to magnesium is a crude measure based upon the ratios of these minerals in bone. Few American women are deficient in calcium whereas up to 8 in 10 American women eat a diet that is short in magnesium. Americans typically consume 800 mg of dietary calcium and only 250-375 mg of magnesium daily, a ratio in favor of calcium by as much as 3-to-1.

8. Since calcium is alkaline, the body will not absorb more than 500 mg of calcium at one time to prevent over-alkalinity. Health authorities recommend women consume their calcium in between meals, 500 mg at a time. However, calcium carbonate is the common form of calcium supplement used, which requires stomach acid for absorption and stomach acid levels are low between meals. That is why calcium citrate should be the only form of calcium supplement used when taken between meals. The citrate form of calcium requires no stomach acid to be absorbed. Special note: there are many false claims that coral calcium or other forms of calcium are "98%" absorbed. If this were true, your body would become too alkaline. The body tightly controls calcium absorption to prevent overload.

9. Vitamin D is essential for calcium and magnesium absorption. Health authorities are just now recognizing that most Americans are deficient in vitamin D. Health researchers suggest 1000-2000 international units (IU) of vitamin D3 should be provided in supplements, but the National Academy of Sciences has mistakenly claimed that 2000 IU is the upper limit to prevent liver toxicity. However, recent studies show vitamin D toxicity doesn't begin till 40,000 IU, and then again, that amount must be taken for months for side effects to appear. Health authorities have frightened most women away from high-dose vitamin D without just cause. Consult any textbook (most are outdated due to the rapidly expanding number of new scientific studies), or seek consultation with a pharmacist or physician and they will likely warn post-menopausal women away from higher-dose vitamin D supplements. A terrible price is being paid for this misinformation. By the way, vitamin D also protects women from breast and uterine cancer and hypertension. Furthermore, intake levels of vitamin D of 800 IU and beyond have been demonstrated to reduce the risk of hip fractures. Vitamin D may be more important than calcium for bone health among postmenopausal women.

10. While menopausal women may be concerned about estrogen replacement of any kind, without estrogen their bones would wither rapidly and their mood would collapse (millions of women are inappropriately prescribed antidepressants for menopausal symptoms). Fortunately the body produces a backup supply of estrogen in the adrenal glands and fatty (adipose) cells. However, since breast tissue contains a lot of fat cells, excessive amounts of estrogen can be produced locally which signals for iron to come loose from binding proteins, which triggers the DNA mutations that initiate breast cancer.

11. The provision of plant estrogens (also called phytoestrogens) is likely to be of benefit since they are weak, about 1/1000th the strength of estrogen produced in the body. Plant estrogens help to take up parking spaces on the surface of living cells (called receptor sites) which dampens the effect of natural estrogen (the so-called estrogen-blocking effect accomplished by drugs such as Tamoxifen, Arimidex, Aromasin and Femara.) Soy phytoestrogens have widely been touted, but they are often provided as extracts without the natural iron-binding phytic acid found in whole soybeans. This is potentially dangerous. Flaxseed meal (crushed flaxseed) provides up to 8 times more phytoestrogens (called lignans) than flax oil and also provides an ample amount of phytic acid as an iron binder. Compared to flaxseed, soy extracts provide far less estrogen-like molecules and no iron-binders. Any plant estrogens provided without iron-binders like phytic acid may pose problems for women.

THE MANY WAYS FLAXSEED MEAL PREVENTS BREAST CANCER
1. Provides rich source of omega-3 over omega-6 oils, which inhibits growth of breast tumors. 2. Provides plant estrogens (lignans) that dull the effects of natural estrogen upon breast cells. 3. Provides phytic acid to bind and control iron.

12. Women's risk of breast cancer greatly increases with the onset of menopause. Only about 1.5% of breast cancer cases occur prior

	Soy phytoestrogen extracts	Flaxseed oil	Flaxseed meal
Weak estrogen-like molecules	Yes	Small amount	Provides 8 times more than flax oil
Iron-binding phytic acid	Small amount	None	Ample amount
Ratio omega-3 over omega-6	Small amount omega-3	Highest omega-3 over omega-6 ratio	Highest omega-3 over omega-6 ratio

to the menopausal years. It has repeatedly been demonstrated that breast tumor cells do not grow very well in omega-3 oil (flax, fish oils), but grow aggressively when placed in omega-6 oils (corn, safflower, sunflower oils). Recognize that the typical Western diet provides 14 times more omega-6 oils than omega-3s. For example, corn oil provides omega-6 oil in a ratio of 60-to-1 over omega-3 oil. Flaxseed provides the highest concentration of omega-3 found anywhere in nature, much more concentrated than fish oil. Whereas fish and flaxseed both provide omega-3 and omega-6 oils, flaxseed provides omega-3s in a ratio 3 to 5 times greater than omega-6s.

13. As the menopausal years are approached women become more and more dry. They chronically experience dry skin, hair, eyes, brittle nails, and dry mouth. This dryness is often caused by a shortage of oils, which help to hold water in cells. Omega-3 oils, particularly when combined with GLA oils from borage, evening primrose or black currant seed oil, will help to moisturize these tissues.

14. Estrogen boosts the production of a water-gelling molecule in the body called hyaluronic acid (HA). Hyaluronic acid fills the spaces between cells, called connective tissue. HA also fills and moistens the skin and hair follicles and cushions joints and nerves. With the onset of menopause, estrogen production dissipates and so does the production of hyaluronic acid, resulting in noticeable aging changes and loss of beauty in the skin and hair as well as joint problems. The skin wrinkles, bone rubs against bone in joints, hair withers and falls out. The antidote to these age-related changes is oral hyaluronic acid. Oral hyaluronic acid has been shown to be absorbed (most physicians believe otherwise). A trial course of oral HA should be employed by women who experience these aging changes. Many women taking oral HA supplements report disappearance of wrinkles, diminution of joint problems, thickening of hair, increased energy and other benefits.

Summary of what women should do to maintain health in the (post)menopausal years:

A. Take 1-2 tablespoons of flaxseed meal (not oil) every day. (Forti-Flax by Barlean's is a good economical brand that can be stored in the refrigerator.) This will provide the estrogen-like lignan molecules along with iron-binding phytic acid, and additional fiber and ample omega-3 oil. This should help women ward off hot flashes, thwart bone thinning, preserve mood, and prevent breast cancer. In active forms of breast cancer, extra phytic acid (called IP6 in health food stores) should be consumed for a time (3 months or so) to remove excess iron, taken with water on an empty stomach.

B. Take supplemental calcium, as easy-to-absorb calcium citrate, no more than 500-600 mg per day, in between meals, along with near-equal amounts of magnesium (400-500 mg) and ample amounts of boron (3 mg or more). A good bone mineral formula should also provide no less than 800 IU (20 mcg) of vitamin D3.

C. After you have stopped having monthly menstrual cycles, do not take

supplemental iron in multivitamins or other dietary supplements. Obtain your iron from food.

D. Try oral hyaluronic acid, up to 150 mg HA per day, to ward off aging changes in the skin, hair, eye and joints.

E. Women living in northern climates where the UV content of sunlight is limited may need to supplement with vitamin D, particularly during the winter months. At least 2000 IU should be taken daily.

F. Taking drugs for osteoporosis is inappropriate, particularly if women are not first following the above outlined nutritional supplement regimen. Drugs like Fosamax and Evista are often emphasized by physicians, while nutritional and hormonal regimens are slighted.