



SPECIAL MENOPAUSE ISSUE

ASK THE NUTRITIONIST

Natural Alternatives to Hormone Replacement

Q: I am a 46 year old woman beginning my change of life. My doctor thinks I should start estrogen replacement therapy to stave off hot flashes and reduce my risk of osteoporosis. Is this really necessary? Please suggest some effective, natural alternatives.



Teresa Kerr, RD, MA, is the co-owner of Pioneer Nutritional Formulas, Inc. She has been a medical dietician in private practice for over 20 years.

Teri: A woman's change of life is biologically signaled by a number of hormonal changes. Most significant of these are 1) estrogen levels decline for a period before stabilizing at a new, lower baseline level, and 2) progesterone levels decrease steadily until they essentially disappear.

The scientific discovery of these hormonal changes led to the widespread, medical misconception that menopause is a disease of, primarily, estrogen deficiency. Estrogen Replacement Therapy (ERT) was developed by doctors and pharmaceutical companies to treat this "disease" and its associated symptoms, which may include osteoporosis. Unfortunately, the risks of such treatment are high: women receiving ERT exhibit a 4-10 times greater incidence of breast and reproductive cancers.

Of course, menopause is not a disease. The cessation of menses is a vital and natural part of every woman's reproductive life cycle. In fact, menopausal difficulties are virtually unknown in non-Western parts of the world where physically active lifestyles and plant-based diets are still the norm. Perhaps the modern American experience of menopause is more influenced by our unnatural eating habits and sedentary lifestyle than it is by lack of hormones.

And while osteoporosis is also rare in "undeveloped" countries, current research shows that most Americans, both male and female, experience a steady loss of minerals from bone throughout their adult lives. Osteoporosis is a particular concern for women because this bone loss has been shown to accelerate when estrogen levels are declining during the change of life.

To strengthen your bones, prevent osteoporosis, and counteract the other symptoms that may accompany your change - hot flashes, night sweats, depression, anxiety, vaginal dryness - I recommend a combination of exercise, proper diet, and supplementation. Hormone replacement may be indicated in severe cases, so always check with your health care practitioner before starting any form of treatment. My experience, both personal and professional, has shown the vast majority of women obtain great benefit from effective, natural alternatives.

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ASK DR. JIM

Ipriflavone: Helpful for those at risk for osteoporosis?



Jim Lemkin, N.D., C.N.S., is founder and co-owner of Pioneer Nutritional Formulas, Inc. He is a naturopathic and homeopathic physician in private practice since 1980.

Q: I am a 62 year old woman who entered menopause about 9 years ago. I recently had a DEXA bone test and my doctor says I have moderate bone loss and am at risk for osteoporosis. As an alternative to estrogen replacement, which I don't want, she recommended ipriflavone. What is it, does it really work and is it safe?

Dr. Jim: First, let me say that for most women (and men!) osteoporosis is very much preventable. It is a big mistake to resign yourself to bone loss and fractures later in life - *there is plenty you can do now, regardless of your age!* I'm very glad you are monitoring your bone health with a good test, the DEXA. I strongly recommend that a baseline measure of bone density be done for women approaching menopause, and for men over 55. I recommend taking *two* tests: a low-radiation DEXA test which measures how much bone you have in your "bone bank," and a urine test - *type 1 collagen* test or the *f-Dypr* (free deoxyypyridinium) test - which measures how fast you are taking bone out of the bank. If you have bone loss, then it is important to retest at 1-2 year intervals depending on your doctor's findings.

Your doctor's choice of ipriflavone may be a very good alternative to estrogen. More than 150 studies of ipriflavone (7-isopropoxyisoflavone), a derivative of the soy isoflavone daidzein, have clearly shown great promise in the prevention and treatment of various bone diseases including osteoporosis.

Several studies have shown that when taken with calcium (the studies usually use 1000 mg) it can stop bone loss and actually enhance bone formation.¹ Ipriflavone has been shown to decrease fracture rates in osteoporotic women as well as prevent bone loss associated with chronic steroid use or from immobility,

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THE OTHER SIDE OF SOY

The soybean is one of nature's greatest dietary gifts for many reasons, including its high isoflavone content. There are many varieties of soy foods now available on the market. This makes them a convenient, healthful, and delicious addition to the menu for most individuals.

But did you know that soybeans contain FIVE types of plant chemicals that, in sufficient quantities, can be toxic to humans?

1. Most of us know about soy **allergens**, which may affect up to 20% of our population.

In addition, soybeans contain:

2. **phytates**, which can bind to and prevent absorption of essential minerals,
3. **protease inhibitors**, that may interfere with the function of protein-digesting pancreatic enzymes,
4. **genistein**, which inhibits at least three metabolic pathways needed to maintain normal brain function, and
5. **goitrogens**, that can latch on to iodine, preventing its absorption.

Of course, these compounds are generally present in small enough quantities as to not be a concern. Providing you are not allergic, do enjoy soy in moderation. But be cautious of over-consuming the more processed products, such as soy protein isolates and powders, that may provide undesirable concentrations of soy toxins.

Instead, emphasize whole, preferably fermented soy foods, like tempeh and miso. While relatively new to us, these items have been a tried and true, health-promoting mainstay of the traditional Japanese diet for centuries.

(For more info on women's health, soy, progesterone-related issues, and more, see the John Lee Medical Letter, c/o Publishers' Mgmt Corp., PO Box 84900, Phoenix, AZ 85071.)

Effective, natural alternatives...

EXERCISE

A combination of aerobic and weight bearing exercise has been proven to help increase bone density. The minimum amount seems to be at least 20-30 minutes, five times a week, or one hour, three times a week. The catch is that gains in bone density attributed to exercise will be lost if you stop exercising! Finding activities you really enjoy is the best way to achieve the rewards of a lifetime commitment to exercise.

DIET

In general, your best bet for nutrition will always be a whole foods diet. Eat plenty of fresh fruits (2-4 servings) and vegetables (3-5 servings) every day. Get most of your carbohydrates from unrefined whole grains, and look primarily to plant sources for protein - beans, seeds, nuts. Soybean products can be a particularly good choice because in addition to protein, they contain isoflavones (see below). Calcium-rich foods are crucial for bone health - dark green leafy vegetables, dairy products, and oily fish with bones (salmon, sardines) are all excellent sources. Avoid sugar, processed foods, and caffeine - they weaken your digestive and eliminative systems, put stress on the adrenal glands, and despite the quick fix, ultimately drain your energy reserves.

SUPPLEMENTS

So many vitamins, minerals and herbs are beneficial throughout life. Many of these are specifically indicated during menopause. The following suggestions can help promote overall health, decrease the symptoms associated with the change of life, strengthen the skeletal system, and prevent - even reverse - osteoporosis.

- **MULTIPLE VITAMIN & MINERAL** In today's high stress, fast paced world, it is almost impossible to meet all of our nutritional needs through diet alone. For this reason, I always recommend a high dose multivitamin/multimineral supplement or multivitamin/mineral system as basic nutritional insurance.

Perhaps the modern American experience of menopause is more influenced by our unnatural eating habits and sedentary lifestyle than it is by lack of hormones.

- **CALCIUM & MAGNESIUM** Consider taking a high quality calcium supplement if dietary intake does not supply your minimum requirement (1,000-1,500 mg/day) of this vital nutrient. Studies are showing magnesium, which helps calm and quiet the body, to be as important as calcium, so make sure your supplement contains at least a 2:1 ratio of calcium to magnesium, as well as Boron and Vitamin D to maximize absorption.

- **VITAMINS C & E** Water soluble Vitamin C (up to 5,000 mg/day), and fat soluble Vitamin E (400-800 iu/day) have both been found to relieve hot flashes. These powerful antioxidant nutrients also help combat the cell damage, increased cancer risk, and premature aging associated with free radical exposure.

- **HERBS & PHYTOESTROGENS** Herbal medicine provides many effective remedies for easing the various symptoms of menopause. For example, St. Johns Wort counteracts depression, while a tea made from calcium-rich nettles and silicon-rich horsetail can help promote healthy bones. I am particularly fascinated by current research showing that several traditionally respected women's herbs actually contain phytosterols - plant based substances that resemble human hormones or hormone precursors and, therefore, are able to bind to either estrogen or progesterone receptor sites in your body. One class of phytosterol herbs, the phytoestrogens, normalizes estrogen balance in the body by competing for estrogen binding sites. Phytoestrogens have the remarkable ability to increase estrogenic effects when

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estrogen levels are low, and decrease them when levels are too high. Among the better-researched phytoestrogen herbs is Black Cohosh, proven in numerous clinical trials to be as effective as ERT in reducing the symptoms of menopause. Others include Vitex, Hops, Licorice, and Dong Quai. Consult a good general use or women's herbal to learn more. (Note: Herbs often work on a subtle level that can be profoundly influenced by the general state of health. Each individual's body needs time for a given herb to reach effective levels in the bloodstream. It can take up to three months before the desired effect fully manifests, so don't give up after a week!)

- **ISOFLAVONES & IPRIFLAVONE** A particular class of phytoestrogens, the isoflavones, are gaining increasing respect and popularity as the result of several clinical studies. Isoflavones are naturally present in certain herbs - notably red clover and astragalus - and in legumes, especially soybeans. Early findings report extensive health benefits of consuming 30-60 mg of isoflavones per day - lessening of hot flashes and other menopause symptoms, protection against osteoporosis, bone loss, heart disease, and breast cancer, and reduced cholesterol levels. A well-absorbed isoflavone derivative, ipriflavone, has been proven to reverse osteoporosis by increasing bone mass (see *Ask Dr. Jim* for details).
- **PROGESTERONE CREAM** Replenishing lost progesterone is another way for women to help maintain a healthy hormonal balance. An emollient cream laced with pure progesterone allows the hormone to be readily absorbed through the skin. Progesterone cream has helped many women combat and overcome the hot flashes, vaginal dryness, and osteoporosis associated with menopause, and some information indicates that it may even help with reproductive cancers. Beyond menopause, progesterone cream can also be efficacious in treating PMS, and (men take note!) shrinking enlarged prostate tissues.

RECOMMENDED READING

Better Bones, Better Body; Brown, Susan, PhD; Keats Publications, 1996
Natural Hormone Replacement for Women Over 45; Wright, Jonathan V., M.D., & Morgenthaler, John; Smart Publications, 1997
The Osteoporosis Solution; Germano, Carl; Kensington Books, 1999
What Your Doctor May Not Tell You About Menopause; Lee, John R.; Warner Books, 1996
Herbal Healing for Women; Gladstar, Rosemary; Simon & Schuster, 1993
Menopausal Years - The Wise Woman Way; Weed, Susun; Ash Tree Publishing, 1992

NOTE: Health professionals at Pioneer Nutritional Formulas have developed a *free* comprehensive, informative brochure on the natural way to bone health called *Osteoporosis and Bone Health*. Call for a copy or find it on the Pioneer website: www.pioneernutritional.com.

TIDBITS... FROM TERI

Whole grains inhibit heart disease.

A study of nearly 35,000 postmenopausal women revealed a definitive association between increased whole grain consumption and decreased risk of ischemic heart disease, the number one killer of both men and women in this country. The study, conducted at the University of Minnesota between 1986 and 1995, suggested that a number of whole grain constituents including fiber, minerals, antioxidants, vitamins, and phytoestrogens such as lignans, all lacking or missing in refined grains, may be responsible for their documented beneficial effects. (*American Journal of Clinical Nutrition*, 1998; 68:248-257)

Too good to be true department.

Remember last August's finding that chocolate is a health food? For those of you who missed the story, Dutch researchers had discovered that catechins, important antioxidants contained in green tea, were present in chocolate as well. Chocoholics everywhere rejoiced. Well, the bad news is it turns out you'd have to eat 70 candy bars (roughly 100 ounces of chocolate) to get the 1,600 mg of catechins thought needed to be effective against cancer. Better to skip the 910 grams of fat and 250 teaspoons of sugar also included in all that chocolate, and brew yourself up a nice pot of green tea instead. (*Natural Health*, Nov/Dec 1999)

Do you get enough vitamin E?

According to scientists at the Atlanta-based Centers for Disease Control and Prevention, 27% of American adults don't. The result: increased risk of cardiovascular disease and cancer. The CDCP study, which took six years to complete, pinpointed African Americans as having the most severe vitamin E deficiencies (41%). Black Americans also exhibit higher mortality rates from heart disease and cancer, a disturbing coincidence.

(Ford, Es, et al. "Serum Alpha-tocopherol status in the U.S." *Amer J Epidemiol*. 150:290-300)

and it may also help folks with certain hormonal and metabolic diseases that affect bones, like Paget's disease and hyperparathyroidism.

It is important to note that ipriflavone appears to promote bone growth *without side effects*. This is a distinct advantage over estrogen (hormone replacement), bisphosphonates (Fosamax®), and selective estrogen receptor modulators (Raloxifene®), all of which can have mild to serious side effects.¹

ABOUT SAFETY. Some women have concern about taking too much estrogen. Ipriflavone appears to lack direct estrogenic effects even though it seems to influence bones in a way similar to estrogen. Many women can fully benefit from taking only ipriflavone and calcium, yet some studies suggest that ipriflavone combined with small amounts of certain estrogens may augment estrogen's desirable effects while minimizing the risks.² Virtually all ipriflavone studies have pointed to its safety and almost total lack of side effects, unlike the prescription medicines mentioned above.³

All in all, presently ipriflavone seems to be the safest and most beneficial of supplements for helping halt and reverse bone loss. Be sure to take a good multivitamin/multimineral supplement with your calcium and ipriflavone. Bones demand a wide array of nutrients for optimum health - *not just calcium*. Take all of these nutrients with food. Studies show that food enhances the absorption of ipriflavone.⁴

References

1. Head, K, *Ipriflavone: An Important Bone Building Isoflavone*, *Altern Med Rev* 1999; 4(1):10-22
2. Yamazaki, I, Kinoshita, M, *Calcitonin Secreting Property of Ipriflavone in the Presence of Estrogen*, *Life Sci.* 1986;36:1535-41
3. Agnusdei, D, Bufalino L, *Efficacy of Ipriflavone in Established Osteoporosis and Long Term Safety*, *Calcif Tissue Int* 1997;61:23-27
4. Saito, AM, *Pharmacokinetic study of ipriflavone (TC80) by oral administration in healthy male volunteers*, *Jap Pharm Ther J*, 1985;13:7223-7233

Should we begin taking calcium in the teenage years?

Common wisdom says that we don't need to start taking calcium and other bone minerals until bone loss begins to be a possible threat, say in our 30's or, at least, in our 40's. However, evidence is building that how much bone we build even in our teenage years can partly determine our fracture risk much later in life.

In two placebo-controlled, double-blinded studies at the College of Medicine, Penn. State University, young teenage girls, average age about 12 years, were given 500mg of *calcium citrate-malate* along with their regular diet for 18 and 24 months respectively. The supplemented group exhibited about a 1.5% increase in bone mineral density, bone content and overall area of increased bone density, particularly in the lumbar spine and pelvis, compared with those girls who just ate their normal diet. If those small increases of 1.5% were repeated throughout the maturing process of bone well into adulthood, it could provide protection against future risk of osteoporosis.

Lloyd, T et al, *The effect of calcium supplementation and Tanner stage on bone density, content and area in teenage women*, *Osteoporos Int*, 1996 6(4):276-83 and Lloyd, T et al, *Calcium supplementation and bone mineral density in adolescent girls*, *JAMA* 1993, Aug 18;270(7):841-44

LOOKING AT LABELS

Understanding Labels and the New Labeling Laws

Supplement labels can be confusing.

Since the newest U.S. DSHEA took effect in 1999, many old, familiar labels have taken on a whole new appearance. LOOKING AT LABELS offers pointers on deciphering the details in supplement labels to help you distinguish a better product from an inferior one.

Previously, we explored the "PIXIE DUST" phenomenon, a deceptive tactic wherein tiny amounts of an ingredient are added to a supplement to make it look more complete than it really is.

In this issue, we'll investigate another way that manufacturers can misleadingly pad their label: the "MYSTERIOUS BLOSSOMING" of ingredients. This practice involves listing the naturally inherent constituents of a single food or substance as separate ingredients to give the illusion of a more complete formula.

Consider this example:

A POOR LABEL	A BETTER LABEL
Spirulina 250 mg	Spirulina 250 mg
9 Essential amino acids . . 100 mg	Containing:
Gamma linolenic acid . . . 3.4 mg	9 Essential amino acids . . 100 mg
Chlorophyll 2.9 mg	Gamma linolenic acid . . 3.4 mg
	Chlorophyll 2.9 mg
	(or)
	Chlorophyll (from spirulina) 2.9 mg

Note that spirulina normally contains 9 essential amino acids, gamma linoleic acid, and chlorophyll. A poor label might list spirulina and its constituents as *four separate ingredients*, rather than one ingredient with three relevant parts. A better label will inform consumers of constituent parts by indenting the list of components, or using parenthesis to indicate that spirulina is the source of the ingredient.

For more information on supplement labels request a copy of our free poster
How to Read the Label of a Nutritional Supplement.

Call PIONEER toll free at 800.458.8483
 or find the poster on our website: www.pioneernutritional.com