

## Understanding Menopause

**How to support the body with diet, supplements, botanical support and homeopathy during this normal time of life.**

Lecture notes: by Peter Brodhead CN

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Brighter Day Natural Foods Market

1102 Bull Street (corner of Park & Bull on the south end of Forsyth Park)

Savannah, GA 31401 912-236-4703

### **Menopause – Statistics:**

Currently there are 40 million American women who are post-menopausal. This is expected to increase 50% by the year 2010. By 2015 – 50% of women in the US will be menopausal. The term Menopause means to stop menstruation. The average age is estimated to be between 50 and 52. **Peri-menopause** the period of time before menopause occurs on average at 47 years and lasts 4 – 5 years. During perimenopause the number of eggs reaches very low levels from 1-2 million at birth to a few thousand. The menstrual cycle shortens. The levels of FSH (follicle stimulating hormone) in the body increase. Ovarian production of estradiol, progesterone and testosterone decrease with the onset of true menopause. Signs of decreased hormone levels in peri-menopausal women are varied and unpredictable, these include menstrual irregularities, hot flashes, vaginal dryness and thinning, skin changes, fatigue, decreased libido, mood swings, depression, changes in memory and cognition, sleep disturbances, hair loss on the head, hair growth on the face, palpitations, nausea, headaches, UT infections, joint pains and beginning stages of osteoporosis and heart disease.

“**Puberty in reverse**” Just like the hormonal highs and lows of puberty brought sleeplessness, acne, mood swings and unpredictable menses – the end of the spectrum has its own hormonal fluctuations of hot flashes, insomnia, mood swings, acne, poor concentration and memory, and unpredictable menses again.

**Changes in hormone production** – 50% of testosterone comes from the ovaries and adrenal glands – the other 50% comes from different parts of the body – liver, skin and brain – but they come from pre-cursor hormones made in the ovaries and adrenals. The adrenal glands also produce androstenedione, which is converted to estrogen (estrone) in the body fat and to a lesser degree in other tissues and organs including muscle and skin. Women who have more body fat or more muscle mass may do better. The adrenals produce their maximal amount in the presence of fully functioning ovaries. In natural menopause the ovaries continue producing androgens that help maintain the potential for sexual arousal.

### **Menopause Symptoms:**

**Hot Flashes**, night sweats, insomnia and palpitations – these are referred to clinically as vasomotor symptoms. Hot flashes – 75% of women experience hot flashes and 15% are severely affected, the occurrence is highest in the 1<sup>st</sup> 2 years of past menopause. In some women it lasts for 5 – 10 years. Frequency varies from every hour to several episodes a year. The clearest explanation is they appear to be the body's response to a sudden transient downward re-setting of the body's thermostat, located in the hypothalamus. The primary problem for many women with hot flashes is sleep disturbance. Some women are awakened during sleep due to a night sweat. Sleep disturbances and early morning awakening are also signs of depression and anxiety.

**Depression & Anxiety** – are mostly correlated pre-menopausal depression and was higher for women who remained in perimenopause for at least 27 months – it is considered transient as women move through post menopause their rates of depression decline.

**Loss of memory and cognition** – Short-term memory impairment is a common cognitive change in women with natural menopause. Difficulty concentrating, decrease in memory and lack of mental clarity which are worsened by difficulty sleeping and sleep interruptions.

**Vaginal dryness and thinning & Urinary Dysfunction** – Vaginal dryness, vaginal thinning usually don't become troublesome until several years after menopause. Estrogen is responsible for the thickened elastic, lubricated tissue of the vagina and vulva. When estrogen declines the vulva loses its collagen fat and water retaining ability. The vagina shortens and narrows; it becomes flattened thin and dry in 2 out of 3 women.

**Changes in sexual response and sex drive** – At menopause the ovaries continue to secrete androgens – mainly testosterone and androstenedione. A woman's total estrogen production decreases by 70 – 80 %

while androgen production decreases by 50%. Total testosterone is reduced the ovaries also continue to produce a significant amount of estrogens and androgens. Most but not all sexual problems in postmenopausal women are related to estrogen loss to the genitals. At least 86% of postmenopausal women experience some form of decreased libido. Testosterone plays an important role.

**Acne, facial hair and hair loss** – Women can have individual sensitivities to androgens. Some women only react to very high levels, while other are sensitive to normal levels. Acne is always triggered by androgens, excessive hair growth occurs in areas where hair follicles are the most androgen sensitive – face, chin, skin under jaw, upper sideburn area and cheeks. Thinning of the hair is the most common on the top of the crown. Saw Palmetto, & nettle root or seed (DHT inhibitors) works well for women experiencing an over expression of androgens.

**Irregular Bleeding** – Initially there is a decrease in progesterone, which causes shorter cycles. Eventually the longer a woman goes without ovulating she will end up with an estrogen dominant state in the presence of too little progesterone.

**Progesterone** – is synthesized by the body from cholesterol and is secreted by the ovary, mainly from the corpus luteum during the second half of the menstrual cycle. Secretion starts just before ovulation in the ovarian follicle that has become dominant – it is also synthesized in the adrenal cortex & placenta. In the adrenals it is the precursor for testosterone, estrogen, estradiol and corticosteroids. It functions as an anti-estrogen, it helps maintain water balance, is a precursor for other hormones, helps in thyroid function and blood sugar metabolism, it has a direct effect on breast growth, exerts effects on the central nervous system and is involved in skeletal growth and weight regulation. In menopause progesterone can be used for the relief of many menopausal symptoms. The highest progesterone binding herbs and spices are oregano, turmeric, thyme, red clover and damiana. **Natural Progesterone creams** are used as a sole agent to correct “estrogen dominance”. As women enter perimenopause estrogen remains and progesterone drops. The creams are applied topically \_ to \_ teaspoon 2X a day on the upper body rotating locations where the skin is more delicate (this avoids supersaturating the skin in 1 spot). They are used for 3 weeks on and 1 week off. It is important that the creams contain 400mg of USP natural progesterone per oz. Side effects from the creams are reported by less than 4% of women using them include breast tenderness, drowsiness, depressive moods, headaches and irritability. In general women tolerate the cream extremely well and find it a very satisfactory solution for their menopausal symptoms. Dr Tori Hudson recommends it as a management tool for menopause. Not to be used for the prevention of Heart Disease, Osteoporosis and Breast Cancer, Uterine cancer or hyperplasia

### **An overview of Alternative Treatments – Goals**

Relief from common menopausal symptoms

Prevention of Osteoporosis and Heart Disease and other diseases of aging

A diet rich in whole “natural” and unprocessed foods with an emphasis on fruits, vegetables, whole grains, beans, seeds, nuts, and healthy oils and low in animal fats.

**How to increase foods high in phytoestrogens** – Legumes, nitrogen-fixing plants- in their ability to take nitrogen from the air and fix it to the soil through the action of bacteria in the roots as a group have the highest levels of phytoestrogens in them. The sprouts from legumes have even higher amounts of phytoestrogens than the legumes themselves, such as alfalfa and clover sprouts. The most important phytoestrogens are the phenolic phytoestrogens that contain isoflavones and lignans. Phytoestrogens act between 100 & 1000X weaker than real estrogens. They act as agonists and antagonists by occupying receptor sites on the cell for estrogens – when estrogens are too low they help boost lower levels when they are too high they block the over-expression of estrogens. 3 types of naturally occurring estrogen like compounds found in plants are 1) resorcylic acid lactones (caused by fungi & molds) 2) Steroids – Estrone, Estradiol found in Pomegranate and Dates other plants include licorice root, apple seed, french beans and rice. 3) Phenolics – dominant phytoestrogens their potency varies 0.01 – 0.5% of estradiol phenolic estrogens are present in almost all plants to some degree and are members of flavanoids. Cereal grains rice, barley, corn and wheat, onions and red wine, celery, fennel and thyme - proper gut flora (acidophilus) enhances absorption. Red Clover leaves contain the highest amounts also alfalfa and especially alfalfa sprouts and red clover sprouts.

**Soy** – contains 1 – 2 mg. of isoflavones per gram. The isoflavones in soy are 1) Genistein, 2) Daidzein, 3) Glycitein. Soy protein usually contains 1.2mg/gram of genistein and 0.5mg/gram of daidzein.

Soy's effects are diverse – hot flashes, vaginal dryness, bone health, mental function and prevention of breast and uterine cancer.

In a diet with high phytoestrogens using soy and flax seeds - the best reductions in menopausal symptoms were in hot flashes and vaginal dryness. A diet containing 76mg of isoflavones in 12 weeks showed a 26% drop in hot flashes in 3 weeks, a 33% drop in 4 weeks and a 45% drop in 12 weeks. The range of isoflavones should be between 50 – 150 mg. a day. In pre menopausal women who eat a diet high in phytoestrogens – these weak plant “estrogens” stimulate estrogen receptors and perform some of the same functions as our own body's estrogens. When our system says we have enough it produces less in response. Phytoestrogens compete with estradiol for the binding of estrogen receptor sites. It has been estimated that 200mg of Isoflavones are approximately equal to 0.3mg of Premarin.

**Flax** – contains 2 lignans – matairesinol and secoisolariciresinol are known to have estrogenic activity and anti-estrogenic activity. The oil is the best vegetable source of omega 3 fatty acids especially alpha linoleic acid. The meal is richest in the lignans which are very protective in preventing both breast cancer in women and prostate cancer in men. The fiber from flax is excellent for lowering cholesterol and helping with cardiovascular health. Omega 3 fatty acids are excellent for reducing inflammation in the body (cancer cells thrive on inflammation).

**Foods for Bone Health** – Peak bone mass occurs at the age of 35 – 40 in caucasian women. One of the best dietary preventative habits is to eat a lot of dark leafy greens – kale, collards, romaine lettuce, spinach, swiss chard are a rich source of vitamins, minerals (such as magnesium), vit K and boron both of which are essential for bone formation and development. Low fat dairy especially yogurt and kefir, baked beans, soy, sesame, salmon, sardines, tofu and amaranth.

**Foods for Heart Health** –

Fats should be 30% of the diet, Olive Oil, cold water fish, nuts - always avoid trans-fatty acids as found in partially hydrogenated oils. Soluble fibers (raw carrots may lower cholesterol than oat bran

### Nutritional Supplements

**Bioflavonoids** – Rutin, hesperidin (found in the white pulp of oranges), and quercetin, are known for anti-oxidant and anti-inflammatory properties. Quercetin is an excellent support for people with allergies and has very potent anti-cancer properties. Some evidence exists to show flavanoids with vitamin C will help relieve hot flashes. 1 gram of flavanoids taken with an equal amount of vitamin C every day for 4 weeks in a study produced relief of hot flashes in 53% of women and reduced hot flashes in 34%.

**B-6** – Is an important B-Vitamin involved with the metabolism of proteins, neurotransmitters and hormones, an insufficiency of B-6 may cause insomnia and irritability 50-200mg a day.

**Evening Primrose Oil** – EPO, effective for relieving breast pain.

**Gamma Oryzanol** – 100mg. taken 3x a day. Gamma Oryzanol is derived from rice bran oil the compound Ferulic Acid found in gamma oryzanol has been found useful in relieving menopausal hot flashes. 67% of the women taking it had a 50% or greater improvement in their menopausal symptoms. In a later study 85% of the women found it effective.

**Vitamin E** – Early studies in the 1940's showed benefit – no real recent studies

**Magnesium** – An important mineral for the cardiovascular system and for the nervous system and muscles. Magnesium levels often drop and are generally low in the American diet. Magnesium is a great anti-stress mineral, it helps to take the edge off of irritability and can help prevent muscle spasms and enhance sleep quality.

**DHEA** 5 – 25mg. a day is given to women who are experiencing fatigue, loss of vitality or low sex drive. It offers good adrenal support for individuals who are under chronic stress. It is a hormone so it must be used with knowledge. You can get a saliva test done by Great Smokies Lab in Asheville North Carolina and work with your physician to find your optimal dose. Small doses like 5 mg a day are generally safe.

### Botanical Medicines

**Black Cohosh** – The primary constituents are triterpenoid glycosides – specifically actein and cimicifugoside.

Daily use of the standardized extract is 2 – 40mg. caps 2X a day. The results should be evident within 2 to 4 weeks. – Clinical studies show it helps with hot flashes, depression and vaginal atrophy. Black Cohosh appears to suppress the secretion of pituitary hormone LH but does not affect prolactin & FSH. Used in Germany since the 1940's a big German study with 629 women – clear improvement was seen in 80% of

the women after 6 to 8 weeks. Complete disappearance of symptoms occurred in 50%. In another study and estrogen like stimulation of the vaginal mucosa happened in 4 weeks. Black Cohosh should not be considered a substitute for the prevention of osteoporosis and heart disease. It is considered safe for women with a history of hormone dependent cancers and a safe and appropriate treatment for hot flashes, night sweats, insomnia, mood swings and vaginal dryness.

**Chaste Berry (Vitex)** – Used more before menopause than after. Chaste berry is the most important herb to normalize and regulate the menstrual cycle. Its effect is on the hypothalamus – hypophysis axis one of the mechanisms is it increases secretion of LH and also has an effect that favors progesterone. It can benefit irregular bleeding.

**Dong Quai** – Widely used as a general women's herb – the coumarins in dong quai are found largely in the root. Its use in menopause symptoms did not prove to be effective.

**Ginkgo** – May be important for menopausal women because of changes in mental clarity, memory and concentration. Ginkgo benefits both men & women who are suffering from loss of libido caused by taking anti-depressant drugs. **Rosemary** is an excellent herb to use; it contains compounds that enhance acetylcholine enhancing memory functioning. Rosemary enhances the ability of the liver to detoxify numerous toxic compounds and xeno-estrogens caused by pesticides and plastics and out gassing of carpeting and particleboard.

**Ginseng** – Because of its adaptogenic activity and support for adrenal glands can be valuable for menopause.

**Licorice** – contains phytoestrogen components including beta-sitosterol, formononetin, coumarin and others. Beta sitosterol is 1/400 as active as estradiol. It may be that licorice has both pro and anti-estrogen effects balancing either need by the body. Licorice is very good for the adrenal glands. It helps increase the life of cortisol in the body.

**Red Clover** – contains many flavanoids but coumestrol stands out among the phytoestrogens because it is approximately 6X more estrogenic than isoflavones. Clinical studies have not proven it to be effective nor non-effective. The sprouts contain the highest amounts of phytoestrogens.

**St John's Wort** – Has 25 double blind studies – it can support depression during menopause and perimenopause.

#### **Other recommendations by practitioners.**

**Shatavari** – Aurvedic Herb – according to Kenneth Proefrock ND this botanical is wonderful for vaginal dryness and atrophy. Helps estrogen, progesterone, and testosterone receptor sites.

**Motherwort** – David Winston herbalists uses motherwort for heart palpitations and anxiety and for sleep disorders of menopause. Kenneth Proefrock states “motherwort has phytoestrogens is good for the heart and feels like a mom giving you a hug”

**Passion Flower** – Good for the type of insomnia where you can't turn the brain off.

For the 2 to 3a am wake up – **California Poppy and Skullcap** mix the tinctures together and take every night and when you wake up at night – it takes 2 or 3 weeks but after that you can sleep at night.

**Amanda Crawford – herbalist from California suggests:**

Hot Flash Tea – combine Motherwort, Yarrow, Linden flowers and Hawthorn.

Sage is a very good herb for hot flashes

Sleep – Chamomile, Linden, catnip, and hibiscus.

Vaginal Dryness – Red Clover, Alfalfa and Raspberry leaf tea.

Massage Evening Primrose Oil vaginally or combine vitamin E oil with clary sage 5 drops to the once.

Carlson Labs makes a vitamin E suppository that is very supportive for this.

### **Herbal Tinctures – you can combine on your own.**

**Tinctures for Hot Flashes** – Combine equal parts of Vitex, Sage, Black Cohosh & Licorice Root. Take by the dropperful 2-8X a day depending on the severity of the symptoms.

**Tincture for Menopausal Insomnia** – #1 Combine equal parts Ashwaganda and Black Cohosh – take 1 dropperful 3 to 6X a day to improve hormonal contribution and insomnia. Add valerian at bed if needed as well as magnesium/calcium Ultra Cal Night is a good formula from Source Naturals. #2 – 1oz. Valerian extract with \_ oz. Black Cohosh with \_ oz of Hops extract. Take a dropperful 1-hour before bedtime, again \_ hour before bed and 1 right before bed.

**Tincture for Menopausal Depression** – Combine equal amounts of Black Cohosh, Lemon Balm and St Johns Wort extracts – take 1 to 2 droppers 3 – 6X a day depending on the severity of the symptoms.

**Tincture for Menopausal Anxiety, Panic and Heart Palpitations** – Combine equal amounts of Black Cohosh, Kava and Motherwort. – Use 1 to 2 dropperfuls 3 to 6X a day depending on the severity of the symptoms

### **Tea Blend for menopause**

#### **Nighttime Hot Flash Formula**

Motherwort \_ oz., Linden Flowers 1oz., Chamomile 2oz., Skullcap 1oz. Sage 1oz. Hibiscus 2 oz. Use 1oz steeped in 1 pint of boiling water for 15 minutes – Drink \_ to 2 cups as needed. Add more Hibiscus if needed to mellow the flavor.

### **Homeopathic Remedies**

See the information sheets about homeopathy and menopause for suggested remedies. One of the major remedies is Sepia.

References :

Women's Encyclopedia of Natural Medicine – Tori Hudson, N.D.

Keats Publishing ISBN0-87983-788-8 1999

I got the majority of my information from this book – Thank you Dr Tori Hudson N.D. who wrote what I believe to be one of the best reference books on Natural Medicine for women's health ever.

The Wisdom of Menopause – Dr Christiane Northrup, M.D. 2001 ISBN0-553-38989-X Bantam Publishing.

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