

Hormone Replacement Therapy and Natural Alternatives

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INTRODUCTION

Sexual hormones have a pervasive effect on our mental, emotional and physical function.

They regulate sexual maturity and function as well as physical development, and they also act as neurotransmitters and can affect mood, mental and emotional processes.

Such common symptoms as depression, insomnia, and anxiety can be associated with sexual hormone levels.

- Stress, diet, pesticides and herbicides, electromagnetic radiation, and other factors can affect hormone levels substantially
- Scary article in latest Earth Island Journal (Fall 1996): In late July, SF newspapers reported that the Bay Area had the highest incidence of female breast cancer: On June 9, (SF Examiner) reported that over the last 10 years, "the city has dumped at least 10,000 pounds and 775 gallons of powerful pesticides on parks and golf courses." Including chlordane and toxaphene, which are known to act as exogenous estrogens, and interfere with the function of human estrogen. In the June issue of Science, researchers report that some pesticides when mixed together are up to 1,000 x more potent!" Some pesticide product labels say "Wait until it's dry, then your children can play on the lawn."
- Accumulative effect over time is important. For instance, it is known that soy products contain certain isoflavones that can act as a regulator of estrogen.
- The health of the liver is important for detoxifying estrogen-like substances.

USE OF ESTROGEN in MEDICINE

- Estrogen can effectively reduce undesirable symptoms that can come up during menopause and those associated with

the menstrual cycle (PMS), including psychological symptoms.

- Estrogen is considered effective in the prevention of such diseases as osteoporosis, atherosclerotic cardiovascular disease, urogenital atrophy.
- In some cases, helps with depression and anxiety
- Often effective for reversing vaginal dryness and endothelial atrophy
- Women are even asking for it to reverse the ageing process, and to help keep a youthful appearance.

Disease prevention and in the treatment of

- Osteoporosis
- Atherosclerotic cardiovascular disease
- Urogenital atrophy
- Vaginal atrophy, dryness

THE LIVER'S ROLE IN HORMONE BALANCE

- The liver breaks down ESTRADIOL (most potent form of estrogen--12x more potent) to ESTRONE
- The liver manufactures estrogen and creates bile salts that act as precursors to estrogen
- ESTRONE is found naturally in Salix, Pinus, Dactylifera and Punica.
- The over-use of alcohol, fat, or sugar can impair the liver's function and its ability to metabolize hormones and aid in their deactivation and clearance from the body.

ENVIRONMENTAL CONSIDERATIONS:

Living in a Sea of Estrogen. Common Xenoestrogens; Factor in increased incidence of breast cancer?:

- Pesticides, herbicides
- Electromagnetic radiation
- Alcohol
- PCBs from Plastics

DIETARY INFLUENCE ON ESTROGEN

- Lack of B vitamins adversely affects estrogen metabolism
- Estrogen metabolites travel in the bile to the intestines and are broken down by microflora
- Diet high in SOLUBLE FIBER is protective--fibers can bind with estrogen metabolites

- Diet high in FAT can increase estrogen stimulation of estrogen-sensitive tissue
- Obesity can be a factor in hormone imbalances, because fat cells are known to be repositories of both endogenous and exogenous estrogen.
- Phytoestrogens are present in whole grains, seeds, and beans

PHARMACEUTICAL SOURCES of HRT

- Premarin is the most frequently prescribed estrogen replacement drug. It is not natural to the human body but is a combination of substances having estrogenic activity, with most of the compounds being foreign to the human female and not made by a human ovary.
- The 3 main estrogens are estradiol, estrone, and estriol.
- Products that contain them include Estrace, Ogen, Estraderm patch, or Estradiol Pellets.
- Benefit of patches and creams over oral application is the avoidance of first pass metabolism in the liver and thus partial or complete deactivation
- Safety concerns and long-term side effects are well documented by hundreds of clinical studies and trials by pharmaceutical companies. Most recent studies have shown about a 10%/year increase of risk of breast cancer with estrogen supplementation.
- Commonly reported side effects: nausea, breast tenderness, and retention of sodium and water which may irritate cardiac and kidney function. More extreme, though less common, ones include impairment of ovaries, formation of cysts, related emotional changes and depression, weight gain, cancer, and various sexual disorders (Bends, 1972)
- Years of continuous treatment may permanently damage the hypothalamus and pituitary glands, desensitizing the receptors crucial for hormone regulation (Probst, 1954).
- Many synthetic estrogens are more potent and have a greater binding affinity for estrogen and progesterone receptors.
- In addition, some of the drugs may target tissues and organs that are not normally acted upon by the natural hormones. The liver, the organ responsible for breaking down and recycling the body's hormones, may have difficulty recognizing and processing synthetic hormones. Other possible side effects of long term hormone replacement therapy include liver disease and cancer. Unopposed

estrogen replacement is a known risk factor for endometrial cancer.

So, What are the Alternatives?

LIFESTYLE ISSUES

- Yoga, breathing, abdominal massage
- Diet low in fat and sugar
- Organic foods

**** MANY SYMPTOMS THAT ARISE DURING MENSTRUAL CYCLE OR MENOPAUSE ACTUALLY RELATE TO CONSTITUTIONAL ISSUES: DEFICIENCY, LIVER EXCESS, ETC.**

- **Deficiency/Excess/Stagnation:** Determine basic type
- **Tonification: rules of tonics:** (Don't use during acute phase, contra for digestive stagnation)

NATURAL HORMONE REGULATION HERBS:

VITEX

BLACK COHOSH

*Note: Dang Gui is not estrogenic

Summary of Herbal Treatment for Conditions Related to Hormone Imbalance

Herbs with clinical, scientific, and historical use for hormone-regulation.

SEXUAL HORMONE-REGULATING HERBS

Useful for assisting the body to maintain proper hormone levels and function.

Cimicifuga:

- Contains isoflavones, tetracyclic triperpenes (weak estrogen-regulating properties); hypotensive, vasodilator, spasmolytic (also used for arthritis)
- 110 menopausal women, treated with ethanolic extract, 8 ml/day or placebo; after 8 weeks, LH, but not FSH levels were significantly reduced, thus showing a significant estrogenic effect.
- Animal studies: LH-suppressive effects [and competes with 17-beta estradiol for estrogen receptor binding sites]
- Cimicifuga, caused by 3 different synergistically acting compounds (tetracyclic triterpenes)

Vitex:

Table: The Benefits of the Use Of Vitex In Comparison to HRT

1. Vitex acts to increase the supply of progesterone at the problem source (pituitary gland), naturally increasing the release of LH from the anterior pituitary.
2. The action of Vitex is indirect because the herb is not an actual hormone. Therefore, effects of Vitex therapy are mild and can occur over an extended period.
3. Vitex therapy has few side effects, with as low as 1-2% of cases reporting problems. Alternately, synthetic hormone therapy may produce effects with serious complications.
4. Vitex is taken orally, while some synthetic hormones require rectal/vaginal suppositories, topical administration [patches can cause skin irritation and are often inconvenient], or intravenous injection for delivery.
5. Vitex aids in the production of breast milk. In contrast, progesterone and estrogen therapy must be discontinued during breast-feeding (AMA, 199?).
6. Vitex therapy for mild disorders can often be terminated several months after symptoms disappear. On the contrary, synthetic hormones sometimes require long-term treatment.
7. Vitex carries the experiences and wisdom of many generations and cultures. Additionally, vitex is supported by modern clinical trials. On the other hand, synthetic hormones are void of any history beyond sixty years of clinical application.

ACTION TYPES FOR HERBAL THERAPY

TONICS:

- **Hormonal tonic herbs (adaptogens): strengthens the body's ability to produce hormones, both sexual, adrenal, and neurotransmitters**

[Kidney tonics in TCM: or KI yin tonics]

For stress-related issues; fatigue, anxiety, depression.

Eleuthero

Rehmannia

Panax quinquefolius

Panax ginseng

- **Herbs rich in estrone (when estrogen is deficient)**

These herbs are known to contain estrone, but their use is not clinically-proven.

Date seeds
Pomaganate seeds
Willow buds (female catkins)
*ESTRONE is found naturally in Salix, Pinus, Dactylifera and Punica.

- **Blood tonic herbs**

Add when blood deficiency or anemia is possible (symptoms: pale face, tongue and fatigue).

Dang gui
Nettles
yellow dock

REGULATING HERBS

- **Liver-regulating herbs**

Useful additions to hormone-regulating formulas, especially when accompanied with digestive imbalances or skin-related disorders (such as acne). **Regulates emotions, blood.**

Fringe-tree bark
Bupleurum [Xiao Yao Wan]
Taraxacum
Arctium

- **Hormone-Regulating Herbs**

Vitex, black cohosh

- **Calmatives; calming herbs**

[Heart yin tonics in Chinese Medicine]

Valerian, California poppy, Linden, Catnip, Chamomile, Reishi

- **Antispasmodics**

To relax menstrual spasms: Valerian, Cramp Bark, California Poppy, Wild Yam

- **Analgesics**

To relieve pain: *Corydalis, Roman Chamomile, Jamaican Dogwood. Small dose of 1:10 tincture of belladonna or *Gelsemium* (**CAUTION!**).

- **Mood-Regulating Herbs**

For balancing neurotransmitter function: Hypericum, Ginkgo, Theobroma, Spirulina (tryptophan)
Add: Liver-regulating herbs to stabilize mood.

Table 1. Overview of Commonly-Recommended Hormonal Herbs

HERB

FUNCTION

No published scientific proof of hormonal activity, and history of use does not suggest this effect

Wild Yam	helps reduce cramps (antispasmodic) (biliary colic, spasmodic asthma, hiccup; dysmenorrhea to relieve cramps; although advertised by some manufacturers for its progesterone-like properties, this effect has not been proven; "natural progesterone" creams can contain up to 0.5% synthetic progesterone, which need not be mentioned on the label
Dang Gui	nourishes the blood, tonifies female organs (is not hormonal)
Cramp Bark	helps relieve uterine and intestinal cramps
Sarsaparilla	Considered a blood purifier by western herbalists; studies show that its use can increase excretion of nitrogenous waste products from the urine. Contains diosgenin, which has no proven hormonal effects in humans

No published scientific proof of hormonal activity, but history of use suggests this effect

Blue Cohosh rz.	a nourishing, mildly stimulant uterine tonic; relieves pain
Dandelion rt.	promotes milk flow, clears the liver
Partridge Berry hb.	traditionally used to stimulate uterine contractions and help induce labor
False Unicorn rt.	contains phytosterols and is used as a uterine and menstrual-regulating herb
Beth rt.	contains phytosterols and is used as a uterine-regulating and parturition herb
Red Raspberry lf.	taken during pregnancy to gently increase tone of uterus and facilitate birthing
Fennel sd.	traditionally used to stimulate mother's milk (galactagogue), some evidence of estrogenic effect

Published Scientific proof of hormonal activity in humans, and history of use suggests this effect

Saw Palmetto fr.	nourishes the female organs, relieves inflammation
Black Cohosh rz.	warms and stimulates the uterus, relieves pain; relieves hot flashes, regulates estrogen
Vitex fr.	regulates synthesis of sex hormones; helps relieve hormone-related symptoms
Ginseng rt.	red Chinese and Korean ginseng are used traditionally to support sexual hormone production in men and women over 40 or 50;

hormone-like effect noted in animal studies, questionable in humans

Hibiscus fl. traditional use as a birth-control herb suggests hormone-like activity; estrogenic effect in animal studies

Hormonal activity in animals, history of use does not suggest hormonal effect

Hops estrogenic effect in animals; possible hormonal effects noted in humans

PROGRAMS

- **PMS**

Liver regulators, Hormone regulators, Antispasmodics, Pain-relieving herbs, Mood Regulators

- **Menopause**

Blood tonics, Liver regulators, Hormone tonics

- **Anemia**

Blood tonics, digestive bitters and digestive tonics to enhance assimilation
