

# Understanding estrogen dominance



**LAWLEY**

Hormone Solutions

## Contents

What is estrogen dominance?	3
Why does estrogen dominance develop?	4
Who develops estrogen dominance?	5
What are the signs and symptoms of estrogen dominance?	6
How is estrogen dominance treated?	7
How can I decrease my symptoms via lifestyle changes?	9
What are the pros and cons of natural progesterone treatment versus synthetic progestins?	10
What is the role of progesterone in humans?	11
What are the side-effects of progesterone replacement therapy?	12
What about homeopathic and herbal treatments?	12
How do I use PRO-FEME® progesterone cream?	13
Why is PRO-FEME® the best?	15
About Lawley Pharmaceuticals	16
Our Mission Statement	19
Completed Clinical Studies	19
Internet Education Reference Sites	20
References for Medical Professionals	22
Glossary	23

## What is estrogen dominance?

Natural estrogen is an essential hormone to humans, especially females. It is responsible for physical development of the female reproductive system, works in tandem with the hormone progesterone for fertility, is a protector of blood vessels and bones. Estrogen is a very stimulatory hormone and cells grow and divide under its influence – this is the normal function of estrogen.

In women, nature's counter-balance to the stimulatory effects of estrogen is the hormone progesterone. In men it is the hormone testosterone. When estrogen levels become too high **or** progesterone/testosterone levels are too low (**or** both) then the result is **estrogen dominance**.

Estrogen dominance is more common in women than men, and this booklet concentrates on estrogen dominance in the female.

In women the overall symptoms of estrogen dominance are often nondescript:

- a general malaise,
- a feeling that something is just not right,
- of not being on top of life and
- a general loss of confidence in one's self and abilities.

Physically, mentally and emotionally the most common symptoms include:

- mood changes
- forgetfulness/memory blanks
- tiredness/fatigue
- irritability/anxiety/anger
- sleep disturbances
- decreased concentration
- breast tenderness/soreness
- aches and pains
- fluid retention/bloating
- sugar cravings
- menstrual changes
- increased body fat/weight gain
- lowered sexual desire

Some women may experience only one or two of these symptoms whereas others may experience many. Estrogen dominance is at its most severe during the perimenopausal and early menopausal years

Estrogen dominance is commonly the result of exposure to environmental estrogens that disrupt normal hormonal action – such exposure may be accidental or due to lifestyle choices. In many women estrogen dominance is common from the long-term use of birth control pills and hormone replacement therapy (HRT). Estrogen dominance is linked to fertility problems in both sexes, premature breast development in young girls, [man-boobs](#) or [gynecomastia](#) in men, feminization of boys, precancerous overgrowth of the uterine lining ([endometrial hyperplasia](#)),

---

**MAN-BOOBS** <http://www.understandinggynecomastia.com/>

**GYNECOMASTIA** <http://www.understandinggynecomastia.com/>

**ENDOMETRIAL HYPERPLASIA** <http://www.understandingendometrialhyperplasia.com>

autoimmune diseases, [premenstrual syndrome \(PMS\)](#), breast cancer, [dysfunctional uterine bleeding](#), [uterine fibroids](#), [endometriosis](#), [benign breast disease](#), uterine cancer, [postpartum depression](#), [polycystic ovary syndrome \(PCOS\)](#), [headaches and migraines](#), obesity and insulin resistance.

In 1984 environmentalists confirmed that there is a build-up of dangerous chemicals in our water supply. Initially, the run-off from fertilizers, pesticides and herbicides was blamed for causing species of frogs and fish to switch gender. Later, scientists confirmed these plus many other man-made, estrogen-like chemical toxins (xenoestrogens) in the water supply were causing malformation of the reproductive systems of many animal species. Additional scientific studies have demonstrated that in human populations where environmental xenoestrogen contamination is high that the incidence of birth defects, reproductive organ malformation and infertility in both sexes significantly increases.

Estrogen dominance as a medical condition applied to humans was first suggested in 1993 by American physician John Lee M.D. Dr. Lee was a Harvard graduate who became a general practitioner in northern California. He charted the progress of many female patients over the course of his 30-year practice. Dr. Lee's clinical experience led him to believe many disorders arise when progesterone levels fall in relation to normal or high estrogen levels. He gave natural progesterone in a cream base to his patients and saw a dramatic improvement in their menopausal symptoms. Other conditions caused by the effects of estrogen dominating over progesterone, such as [uterine fibroids](#), heavy periods ([menorrhagia](#)), and [premenstrual syndrome \(PMS\)](#) also dramatically improved.

Dr. Lee died on October 17, 2003.

In the years since, researchers at the U.S. National Institute of Environmental Health Sciences have advanced their investigations into xenoestrogens. We now know that xenoestrogens which settle in body fat can disrupt *all* of the endocrine glands and not just the ovaries. (The endocrine glands are the ovaries, testes, thyroid, parathyroid, thymus, adrenals, pituitary, pineal, and pancreas. The kidneys are considered endocrines because they produce the hormone renin. The lungs, liver, and digestive tract are endocrine because they produce prostaglandin hormones.) Hormone receptors in our cells have difficulty distinguishing between helpful natural estrogen and toxic xenoestrogens as well as the synthetic more powerful pharmaceutical estrogens.

Xenoestrogens and pills of pharmaceutical estrogens cause an overload of estrogen, even when the progesterone level is normal. Estrogen dominance damages in particular the thyroid and adrenal glands, the reproductive organs, liver, nervous system, causes an imbalance of copper and magnesium levels, and is implicated as a cause of some cancers. It affects people of all ages and both genders.

While xenoestrogens have a powerful stimulating effect on estrogen receptors in their own right, they also have a detrimental effect on the ovaries and are a major cause of ovulatory disturbances. [Anovulation](#) is a failure of the ovary to release a mature egg which results in little or no progesterone production. High levels of estrogen cause anovulation. This is how the Pill works as a contraceptive. Disrupted ovulation has a dramatic impact on the production of progesterone which is **only produced** if ovulation is successful. The double impact of normal – high estrogens plus low progesterone creates a hormone imbalance, hence the resulting symptoms of estrogen dominance.

## Why does estrogen dominance develop?

Xenoestrogens are everywhere. They leach or outgas from:

- Car exhaust
- Carpet backings
- Commercially-produced dairy products containing bovine growth hormone or from pregnant cows

- Commercially-raised meat
- Cosmetics and toiletries
- Detergents and fabric softeners
- FD&C Red Dye 3 (erythrosine) and phenosulfthiazine (also a red dye)
- Food preserved with BHA in the packaging
- Herbicides and pesticides
- Incinerator plumes
- Industrial effluent
- Perfumes and air fresheners containing phthalates
- Plants containing phytoestrogens
- Plastic containing bisphenol A, or DEHP, or phthalates
- Plastic wrap and non-stick cookware
- Pressboard
- Soap and cleaners containing foaming agents
- Solvents
- Spermicides in condoms
- Upholstered furniture

If you are concerned that a particular environmental toxin may be adversely affecting your health, then look it up at the [U.S. National Library of Medicine's Tox Town site](#). To find out more about ongoing research into xenoestrogens and genetically vulnerable people, visit the [U.S. National Institute of Environmental Health Sciences](#).

Birth control pills and hormone replacement therapy (HRT), taken to relieve menopausal symptoms, are common causes of estrogen dominance. Birth control pills contain synthetic estrogens that are much more powerful than natural estrogen. Natural estrogen if taken by mouth is broken down by the liver and ineffective, whereas the synthetic estrogen in oral contraceptives and HRT transit through the liver and have a greater impact on the body than natural estrogen. If the dose used is too high (and it often is) then the symptoms of estrogen dominance will occur. Even with today's "low-dose" birth control pills the doses used can still result in estrogen dominance due to little or no progesterone production.

## Who develops estrogen dominance?

Overweight people are particularly prone to estrogen dominance. Fat cells (adipose tissues) produce a weak form of estrogen (estrone). People in developed countries have more estrogen dominance issues than their Third World counterparts, because they eat more food contaminated with traces of

---

**PREMENSTRUAL SYNDROME (PMS)** <http://www.understandingpremenstrualsyndrome.com/>

**DYSFUNCTIONAL UTERINE BLEEDING** <http://www.dysfunctionaluterinebleeding.net/>

**UTERINE FIBROIDS** <http://www.understandinguterinefibroids.com/>

**ENDOMETRIOSIS** <http://www.understandingendometriosis.com/>

**BENIGN BREAST DISEASE** <http://www.understandingbenignbreastdisease.com/>

**POST-PARTUM DEPRESSION** <http://www.understandingpostpartumdepression.com/>

**POLYCYSTIC OVARY SYNDROME (PCOS)** <http://www.understandingpcos.com/>

**HEADACHES AND MIGRAINES** <http://www.understandinghormonemigraine.com/>

**UTERINE FIBROIDS** <http://www.understandinguterinefibroids.com/>

**MENORRHAGIA** <http://www.understandingmenorrhagia.com/>

**ANOVULATION** <http://www.understandinganovulation.com/>

**U.S. NATIONAL LIBRARY OF MEDICINE'S TOX TOWN SITE** <http://toxtown.nlm.nih.gov/index.php>

**U.S. NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES** <http://www.niehs.nih.gov/>

xenoestrogens. Cattle and poultry in many developed countries are fed hormone supplements to promote rapid growth. Food standards allow 'acceptable levels' of many xenoestrogens. Estrogen dominance is often considered a disease of wealth.

Many [perimenopausal](#) women are deficient in progesterone because they ovulate less frequently and even if ovulating each month have a significantly reduced progesterone output. They may have lower levels of estrogen than young women, but are still estrogen dominant because of an even greater progesterone deficiency. Their hormones are unbalanced as they head towards [menopause](#). Menopause itself adds a complication to the overall hormonal picture because estrogen levels also decline. A very common misunderstanding with estrogen and menopause is that estrogen levels fall to zero once the monthly periods stop. In fact, estrogen falls to a level which is not sufficient to stimulate cells of the uterine lining to divide and shed on a monthly basis; however estrogen production remains on-going at a lesser rate. As is often the case when menopausal women are given HRT (estrogens) their periods re-commence because supplemented estrogen re-stimulates the cells of the uterus to grow, divide and shed. Not only is this inconvenient to the woman, but it widens the gap between the estrogen-progesterone balance and the HRT can increase the estrogen dominance. At menopause when all ovulation ceases (and progesterone levels fall to zero) estrogen-dominant perimenopausal women often find their symptoms get worse. **Note:** Some women do need low doses of estrogen to manage hot flashes and night sweats during the menopause because these symptoms can be more debilitating than those of estrogen dominance. It is often a fine balancing act that needs to be undertaken.

Long-term stress in women may leave them prone to estrogen dominance because progesterone is preferentially converted by the body to cortisol, the stress hormone. Often, women who experience great physical trauma or the tragic/sudden loss of a child or spouse will experience an immediate and irreversible cessation of ovulation and periods – [early menopause](#). This immediate reduction in progesterone production usually results in the symptoms of estrogen dominance.

Progesterone is the base hormone (precursor) from which all other hormones/steroids are made. Hence, progesterone deficiency or estrogen dominance affects the entire endocrine system. Other factors that may lower progesterone levels include:

- Acute critical illness, burns, major trauma or surgery (stress)
- Drug use (e.g., opiates, glucocorticoids, anabolic steroids, some anticonvulsants)
- Chronic disease and its treatment
- Alcohol abuse
- Smoking
- Ageing

## What are the signs and symptoms of estrogen dominance?

Young girls may experience estrogen dominance as premature puberty. Boys may experience estrogen dominance as delayed puberty. Estrogen opposes the action of testosterone. Estrogen-dominant boys will experience a delayed or reduced level of masculine development. In hypogonadal boys, where testosterone production is reduced, estrogen dominance can result in breast development in boys called [gynecomastia](#) (often referred to as man-boobs). Estrogen stimulates breast growth and maturation of the reproductive organs in girls. Girls are now entering puberty much faster than they did in past generations. Two generations ago, girls had their

first period around age 14. Presently, many girls experience their first menstruation around age 9 - 12. Precocious puberty is associated with a malfunction of the pineal gland in the brain, one of the endocrine glands disrupted by too much estrogen. The longer the girl's exposure to high levels of estrogen throughout her lifetime, the greater her chance of developing hormonal-related disorders in later life. Initially, adult women may experience estrogen dominance as [cyclical migraine headaches](#), [irregular menstrual periods](#), weight gain from water retention, [anxiety and irritability](#), and [sore, swollen breasts](#).

Both genders can experience anxiety, depression, poor thought processing, memory problems, insomnia, fatigue, [irritability](#), [headaches](#), [disinterest in sex](#), asthma, blood sugar swings, and fatigue due to a preponderance of estrogen. Allergies and nasal congestion are worsened by estrogen dominance. Some doctors attribute autoimmune diseases, like lupus and Sjögren's syndrome, to hormonal imbalance. [Migraines](#), seizures, heart disease, blood clots and strokes due to estrogen dominance tend to concentrate in adult women.

If estrogen dominance continues untreated in women, they can develop [abnormal uterine bleeding](#) because the lining of the uterus (endometrium) is too thick ([endometrial hyperplasia](#)). The first indicator is heavy menstruation ([menorrhagia](#)). Eventually, estrogen-dominant women may develop [endometriosis](#), [fibroids](#), or even uterine cancer. In 30% of women who have an untreated thickened uterine lining ([endometrial hyperplasia](#)), uterine cancer develops over time because of prolonged exposure to estrogen that is unopposed by progesterone.

## How is estrogen dominance treated?

The first step is finding out if you actually do have a hormonal imbalance, or if you suffer from another condition with similar symptoms. An excellent starting point is to evaluate the severity of your symptoms. Taking a simple 15-item self-assessment questionnaire, [Progesterone Deficiency Assessment Questionnaire](#), gives you an instant evaluation of the severity of your symptoms and also a baseline measurement by which to gauge your responsiveness to treatment. See <http://www.hormonesolutions.com.au/content/natural-progesterone-cream/menopause-self-assessment.php>

---

**PERIMENOPAUSAL** <http://www.understandingperimenopause.com/>

**MENOPAUSE** <http://www.understandingmenopause.biz/>

**EARLY MENOPAUSE** <http://www.understandingearlymenopause.com/>

**GYNECOMASTIA** <http://www.understandinggynecomastia.com/>

**CYCLICAL MIGRAINE HEADACHES** [www.understandinghormonemigraine.com](http://www.understandinghormonemigraine.com)

**IRREGULAR MENSTRUAL PERIODS** <http://www.understandingperimenopause.com/>

**ANXIETY AND IRRITABILITY** <http://www.understandingpremenstrualsyndrome.com/>

**SORE, SWOLLEN BREASTS** <http://www.understandingbreastdisorders.com/>

**IRRITABILITY** <http://www.understandingpremenstrualsyndrome.com/>

**HEADACHES** <http://www.understandinghormonemigraine.com/>

**DISINTEREST IN SEX** <http://www.understandinglowlibido.com>

**MIGRAINES** <http://www.understandinghormonemigraine.com>

**ABNORMAL UTERINE BLEEDING** <http://www.understandingdysfunctionaluterinebleeding.com/>

**ENDOMETRIAL HYPERPLASIA** <http://www.understandingendometrialhyperplasia.com/>

**MENORRHAGIA** <http://www.understandingmenorrhagia.com>

**ENDOMETRIOSIS** <http://www.understandingendometriosis.com/>

**FIBROIDS** <http://www.understandinguterinefibroids.com/>

**ENDOMETRIAL HYPERPLASIA** <http://www.understandingendometrialhyperplasia.com>

**PROGESTERONE DEFICIENCY ASSESSMENT QUESTIONNAIRE** <http://www.hormonesolutions.com.au/content/natural-progesterone-cream/menopause-self-assessment.php>



Symptoms	None	Mild	Moderate	Severe
Water Retention/bloating/weight gain	○	○	●	●
Increased facial hair	○	○	●	●
Breast tenderness/swelling	○	○	●	●
Pain: Headache/migraine/low back/muscle ache/joint ache	○	○	●	●
Vaginal dryness/pain/itching	○	○	●	●
Fatigue/lack of energy	○	○	●	●
Decreased concentration/alertness/memory loss	○	○	●	●
Urinary Incontinence	○	○	●	●

An assessment score of 20 or greater generally indicates there is a progesterone deficiency with the higher the score the greater the deficiency.

An estrogen-dominant woman will usually experience a worsening of symptoms if given estrogen. Often, doctors will prescribe estrogen to women and ignore progesterone and testosterone.

In a reproductive woman, blood testing of hormones is the most reliable of methods for hormone evaluation. There is a big push by some pathology labs and health practitioners to use salivary hormone assays claiming the results to be more reliable than blood testing. The problem is that

salivary hormones fluctuate wildly from hour to hour, particularly during perimenopause, as the female reproductive system winds down. To get a true picture of what is happening with hormones when using salivary tests a great many tests need to be done over many weeks which becomes extremely expensive. Blood testing **at the correct time** of the menstrual cycle and a full and thorough assessment of symptoms will tell more about progesterone deficiency than dozens of salivary hormone assessments. Timing is critical when testing hormones, because hormone production is cyclical. **When testing progesterone levels in a cycling woman the ONLY time to test is between days 20-23 of the cycle** (assuming the cycle is 28 days). Ovulation takes place around day 13 of the cycle. Progesterone levels increase steadily and peak around day 21-22. This is the time to test. Testing for progesterone during a period (days 1-5), or just before ovulation (days 9-12) or just before menstruation (days 25-27) is a waste of time and money. Unfortunately many doctors fail to tell patients that day 20-23 is the critical time to get their blood test done. If they did, then more doctors would see low progesterone blood results when they should be high and realize that their patients were failing to ovulate (anovulatory) and hence were progesterone-deficient. Similarly, in both sexes, testosterone should be highest in the morning. The time of testing is critical if a series of related hormone tests is to fit a medically-recognized pattern of illness.

If you have symptoms of estrogen dominance (have normal or high estrogen and too little progesterone) you will benefit from PROFEME® progesterone cream. If you have normal progesterone (tested at day 22), but a high level of estrogen and/or low level of testosterone, lifestyle changes to lower the estrogen plus progesterone and/or testosterone supplementation may be necessary. If you suffer from a genetic disorder that reduces your production of sex hormones, such as Klinefelter (male) or Turner (female) syndromes, then you will benefit from regular use of the natural hormone creams containing progesterone (female) or testosterone (male). All people can benefit from reducing their toxic body burden by restricting exposure to dangerous products and situations.





Here is the usual blood panel ordered by physicians for estrogen dominance and the normal values:

TEST		UNIT OF MEASURE	NORMAL ADULT NON-PREGNANT FEMALE	NORMAL ADULT MALE
Iron Studies	Serum Iron	µg/dl	60 to 190	60 to 190
	Ferritin	ng/mL	56	123
	TIBC	µg/dl	250 to 420	250 to 420
Thyroid Profile	T3	ng/dL	110 to 230	110 to 230
	T4	µg/dL	5 to 10	5 to 10
	TSH	µU/mL	1 to 4	1 to 4
Liver Profile	AST	IU/L	5 to 40	5 to 40
	ALT	IU/L	5 to 35	5 to 35
	ALP	ImU/mL	30 to 85	30 to 85
	Bilirubin	mg/dL	0.1 to 1.0	0.1 to 1.0
	Cholesterol	mg/dL	150 to 250	150 to 250
Kidney Profile	Creatinine	mg/dL	0.7 to 1.5	0.57 to 1.00
	BUN	mg/dL	7 to 20	7 to 20
Adrenal Profile	Cortisol	µg/dL	2 to 28 depending on time of day	4.3 to 22.4
	ACTH	pg/mL	15 to 100	6 to 48
Sex Hormones	GH	ng/mL	0 to 8	0 to 8
	FSH	mIU/mL	3 to 20	1.4 to 18.1
	LH	mIU/mL	<7	1.5 to 9.3
	HCG	mIU/mL	Negative unless pregnant	0
	Progesterone	ng/mL	<2 before ovulation	<1
			>5 after ovulation	
	Estradiol	pg/mL	<2 before ovulation >5 after ovulation	<54
	Prolactin	ng/mL	Varies from 25 on Day 3 to 200 at ovulation	<20
	Testosterone	ng/dL	6 to 86	375 to 1,200
			nmol/L	10 to 35
Free Testosterone	pg/mL	1.3 to 6.8	50 to 175	
		pmol/L	260 to 740	
SHBG	nmol/L	80 to 114	6 to 50	

## How can I decrease my symptoms via lifestyle changes?

Try to avoid exposure to xenoestrogens:

- Change your method of birth control if you currently use chemical spermicides or estrogen based contraceptives

- If you are a farmer or gardener, find a natural alternative to these insecticides and herbicides: Atrazine; dieldrin; DDT; endosulfan; heptachlor; lindane; and methoxychlor
- Use glass or ceramics, rather than plastic containers and wrap in the microwave
- Cook in cast iron or steel pots, rather than aluminium or non-stick surfaces.
- Use a natural detergent, such as Nature Clean<sup>®</sup>, which does not require use of a fabric softener or dryer sheet
- Switch to organic produce and hormone-free milk and meat
- Use extra virgin olive oil only; eliminate other oils
- Avoid caffeine (cola, coffee, maté, tea, chocolate)

Some dieticians recommend eating phytoestrogenic plants, because they bind to estrogen receptors on human cells and prevent them from accepting more toxic xenoestrogens. Some doctors argue that eating any form of estrogen can aggravate symptoms, particularly plants laden with herbicides and pesticides, such as commercially-raised corn. Organically grown food is best.

Plants that contain phytoestrogens include : Alfalfa; beer; bloodroot; calamus root; canola oil; wild carrot; chamomile; clover; cloves; coffee; corn; cottonseed oil; cumin; damiana; dates; fennel; goldenseal; hops; lavender oil; licorice; mandrake; mistletoe; motherwort; nutmeg; ocotillo; oregano; pennyroyal; pomegranates; rosemary; sage; soy; sunflower seeds; tea tree oil; thyme; turmeric; verbena; wild yam; and yucca.

## **What are the pros and cons of natural progesterone treatment versus synthetic progestins?**

Naturally occurring hormones (progesterone, testosterone and estradiol) when incorporated into a cream are absorbed through the skin (transdermally), so they avoid first-pass metabolism by the liver. First-pass metabolism is a phenomenon where ingested drugs are absorbed through the stomach and intestine, travel to the liver, and are broken down to the extent that only a small fraction of the active drug circulates to the rest of the body. This first-pass through the liver greatly reduces the availability of the hormones to cells by breaking them down into less active forms. Synthetic forms of progesterone are called progestins. Progestins (such as medroxyprogesterone acetate (MPA), norethisterone, levonorgestrel, drospirinone and desogestrel) are rapidly metabolized by the liver due to the first-pass effect, so the amount of hormone received is significantly reduced. All progestins have side-effects not usually associated with natural progesterone. For example medroxyprogesterone acetate has a very narrow spectrum of action on the uterus and unlike progesterone has significant side-effects. It is sold as Provera<sup>®</sup> as well as under many generic brandnames and is commonly used to treat heavy menstrual bleeding and in hormone replacement therapy. Medroxyprogesterone acetate (MPA) may cause birth defects if taken during pregnancy. Natural progesterone is the essential hormone of pregnancy. MPA passes into breast milk and damages the infant, so it is not suitable as a treatment for postnatal depression. MPA increases the risk of blood clots, especially in smokers, can cause depression, suicidal feelings, and dementia. It predisposes women to breast, ovarian, and uterine cancer. If medroxyprogesterone acetate is used long-term, it increases the risk of stroke and heart attack. Published side effects of synthetic medroxyprogesterone acetate include weight gain, itchy skin rash, acne, hair loss, insomnia, bloating, menstrual irregularities, vaginal discharge and tender breasts.

Progesterone receptors in the body are extremely fussy as to what "key" switches them on. Progestins such as MPA do not interact with the progesterone receptor in the same way that bio-identical progesterone does and therefore the estrogen-dominant symptoms do not respond to

a progestin in the same way it does to natural progesterone. In Summary: Progestins and natural progesterone are worlds apart in their effect and can never be compared for overall effect in treating [estrogen dominance](#).

## What is the role of progesterone in humans?

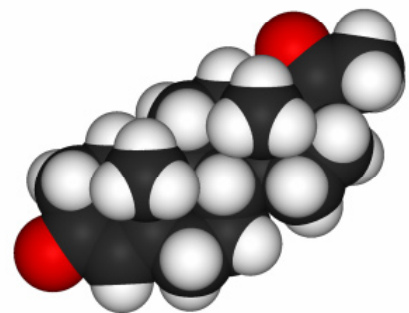
Progesterone is the hormone that regulates menstruation, supports pregnancy, tempers the highly stimulatory effects of estrogen and helps an embryo develop by providing a source of corticosteroids. Natural progesterone is a steroid hormone derived from cholesterol and is vital as a precursor hormone in the body's production of corticosteroids and glucocorticoids – steroids that help us deal with stress and physical cellular/tissue repair. Progesterone is normally produced by the corpus luteum in the ovaries and in the brains of humans and animals. At about 8 to 10 weeks of pregnancy, the placenta in pregnant females takes over progesterone production from the ovaries. Progesterone is the pivotal hormone of [pregnancy](#). Women in their childbearing years experience cyclical progesterone surges. In the beginning (follicular phase) of a menstrual cycle, women have low progesterone levels equivalent to that in men, children, and postmenopausal women (less than 2 ng/ml of blood). The small amount of progesterone present in males does not have a feminizing effect on them. Progesterone calms mood in both sexes.

When a woman releases an egg for fertilization (ovulation), her progesterone level spikes (greater than 5 ng/ml of blood). If the egg (ovum) is fertilized, the corpus luteum (yellow body) in the ovary secretes progesterone to maintain the pregnancy until the placenta is large enough to take over production. Progesterone levels increase to 400 ng/ml of blood, and taper off during the last month of pregnancy to 200 ng/ml. After birth occurs and milk production (lactation) begins, women experience "baby blues" because the progesterone levels decrease abruptly.

Progesterone is a neurosteroid in the brain that affects functioning of the nerve synapses and the protective myelin sheath of nerves. Researchers are investigating the effects of progesterone on memory, cognition, and multiple sclerosis. Animal studies suggest progesterone may protect females from brain injury.

Progesterone reduces spasms in smooth muscles. It is an anti-inflammatory and decreases immune response. Progesterone adjusts the body's use of zinc, copper, fat, estrogen, collagen, and blood clotting factors. It is a hormone that influences the function of the uterus, gall bladder, thyroid, bones, teeth, skin, ligaments, tendons, and joints.

Women use progesterone to prevent [excessive menstrual bleeding](#) and to assist with in-vitro fertilization. A woman who is prone to [miscarriage](#) (**especially repeat first-term miscarriages**) can use progesterone to help maintain her pregnancies, because it reduces pre-term births and the time babies spend in neonatal intensive care units.



*Progesterone molecule*

---

**ESTROGEN DOMINANCE** <http://www.understandingestrogendominance.com/>

**PREGNANCY** <http://www.understandingpregnancy.biz/>

**EXCESSIVE MENSTRUAL BLEEDING** <http://www.understandingheavyperiods.com/>

**MISCARRIAGE** <http://www.understandingmiscarriage.biz/>

[Mood changes](#), [anxiety](#), [depression](#), [weight gain](#), [irregular periods](#), [headache](#), [migraine](#), [infertility](#), [miscarriage](#), [premenstrual syndrome \(PMS\)](#), [post partum depression](#), [endometriosis](#), [pregnancy problems](#), [breast disorders](#) and [polycystic ovarian syndrome \(PCOS\)](#) are some of the medical conditions associated with reduced progesterone production.

## Are there side-effects associated with using natural progesterone?

PROFEME® natural progesterone cream has very low toxicity. The most common problems associated with progesterone treatments are that they can cause symptoms similar to the feeling of pregnancy:

- Tender breasts
- Fatigue
- Mood swings
- Constipation or diarrhoea
- Headache
- Muscle or joint pain
- Occasionally breakthrough bleeding (spotting)
- Fluid retention
- Dizziness

If these occur, a simple adjustment of dose usually resolves the problem. Side-effects, if they occur, are usually experienced at the onset of treatment and are considered a positive sign. Side-effects usually resolve themselves fully within 10 days of a dose reduction and often sooner.

## What about homeopathic and herbal treatments?

Homeopathy is a complementary therapy. Homeopaths claim that like cures like. Essentially, homeopaths believe that if a substance causes a disease, then you can cure it by taking a very minute, diluted amount of the same substance.

Homeopathic treatments contain NO progesterone or testosterone, nor have they been demonstrated to cause any change in testosterone or progesterone levels.

The herb Chaste berry (*Vitex agnus castus*) does not contain progesterone, but it may indirectly help you produce progesterone over the course of several months by stimulating your pituitary gland to produce luteinizing hormone. Chaste berry has unpleasant side effects, such as an itchy skin rash, nausea, dry mouth, digestive upset, hair loss, headaches, rapid heartbeat, and bleeding between periods. *Vitex* is called chaste berry and monk's pepper because it was used for centuries to reduce libido. Do not use chaste berry if you are pregnant, breastfeeding, or have endometriosis, fibroids, cancer of the ovaries or breast, schizophrenia, or Parkinson's disease. It is unsafe to take chaste berry in conjunction with these prescription drugs: Bromocriptine; cabergoline; carbidopa-levodopa; chlorpromazine; Clozaril®; Haldol®; Mirapex®; oral contraceptives; Reglan®; Requip®; Risperdal®; Seroquel®; thioridazine; trifluoperazine; and Zyprexa®. Inform your doctor and pharmacist that you are taking chaste berry before starting any new medication to avoid adverse drug interactions.

The herbs tribulus, horny goat weed, Tongkat Ali Extract (*Eurycoma longifolia*) and Mucuna Pruriens Extract have not been shown in scientific testing to increase blood testosterone levels de-

spite extravagant marketing claims. To avoid adverse drug interactions inform your doctor and pharmacist before taking any of these or other pharmaceutical or herbal preparations.

Wild yam treatments sold in health food stores contain a steroid substrate called diosgenin, which is chemically similar to progesterone, but does not act like progesterone within the body. Humans cannot convert diosgenin into progesterone – a point often misrepresented by marketers of wild yam products. Wild yam treatments are *totally ineffective* as a progesterone supplement or for treating [estrogen dominance](#) symptoms.

## How do I use PROFEME® progesterone cream?

The aim of treatment with PROFEME® progesterone cream is to mimic the body's normal natural hormone production as much as possible. PROFEME® dose applicators are marked in 0.5ml doses. You must tailor the strength, amount and the number of days you apply the cream to your individual requirements. Your doctor or health care professional may alter the dose recommended in this booklet.

Women's hormonal cycles are more complex than the hormone profile of men.

PROFEME® 3.2% progesterone cream is used to control the symptoms of [benign breast disorders](#) during [premenstrual syndrome \(PMS\)](#), [menopause](#), and [peri-menopausal symptoms](#). PROFEME® treats other progesterone-deficiency conditions, such as surgical menopause from [hysterectomy](#), [ovarian cysts](#), [uterine fibroids](#) and [fibrocystic breasts](#). If you have had a hysterectomy, the doctor may prescribe estrogen-only for menopausal symptoms to manage [hot flashes](#) and

---

**MOOD CHANGES** <http://www.understandingmoodchanges.com/>  
**ANXIETY** <http://www.understandingestrogendominance.com/>  
**DEPRESSION** <http://www.understandingestrogendominance.com/>  
**WEIGHT GAIN** <http://www.understandingestrogendominance.com/>  
**IRREGULAR PERIODS** <http://www.understandingperimenopause.com/>  
**HEADACHE** <http://www.understandinghormonemigraine.com/>  
**MIGRAINE** <http://www.understandinghormonemigraine.com/>  
**INFERTILITY** <http://www.understandinginfertility.biz/>  
**PREMENSTRUAL SYNDROME (PMS)** <http://www.understandingpremenstrualsyndrome.com/>  
**POST PARTUM DEPRESSION** <http://www.understandingpostpartumdepression.com/>  
**ENDOMETRIOSIS** <http://www.understandingendometriosis.com/>  
**PREGNANCY PROBLEMS** <http://www.understandingpregnancy.biz/>  
**BREAST DISORDERS** <http://www.understandingbreastdisorders.com/>  
**POLYCYSTIC OVARIAN SYNDROME (PCOS)** <http://www.understandingpcos.com/>  
**ESTROGEN DOMINANCE** <http://www.understandingestrogendominance.com/>  
**BENIGN BREAST DISORDERS** <http://www.understandingbreastdisorders.com/>  
**PREMENSTRUAL SYNDROME (PMS)** <http://www.understandingpremenstrualsyndrome.com/>  
**MENOPAUSE** <http://www.understandingmenopause.biz/>  
**PERIMENOPAUSAL SYMPTOMS** <http://www.understandingperimenopause.com/>  
**HYSTERECTOMY** <http://www.understandinghysterectomy.com/>  
**OVARIAN CYSTS** <http://www.understandingovariancysts.com/>  
**UTERINE FIBROIDS** <https://www.understandinguterinefibroids.com/>  
**FIBROCYSTIC BREASTS** <https://www.understandingfibrocysticbreastdisease.com/>  
**HOT FLASHES** <http://www.understandinghotflashes.com/>

[night sweats](#). In hysterectomized women it is very important that unopposed estrogen must be supported with natural progesterone to prevent symptoms of [estrogen dominance](#).

PROFEME® progesterone cream is supplied in two strengths – 3.2% and 10% w/v containing 32mg progesterone per ml and 100mg progesterone per ml. Each tube is supplied with a graduated dose measuring applicator.



Recommended starting doses for using PROFEME® natural progesterone cream are as follows:

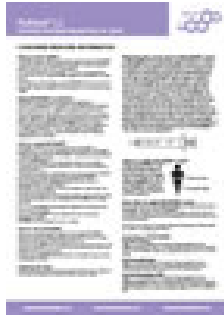
- **Peri-menopausal women.** Apply 1ml of PROFEME® 3.2% cream via measured applicator (32mg progesterone) daily or in divided doses from day 12-26 of each menstrual cycle. If a menstrual period starts prior to day 26 cease using PROFEME® and consider the first day of bleeding as Day 1 of the new cycle. This is a common occurrence when initiating treatment in peri-menopausal women and should be considered a sign that the treatment is having a positive effect. Symptoms abate in 2nd or 3rd month of use.
- **Premenstrual syndrome (PMS).** Apply 1ml of PROFEME® 3.2% cream via measured applicator (32mg progesterone) daily or in divided doses from day 12-26 of each menstrual cycle. Significant alterations to this dosage may be made to achieve a crescendo effect 4-5 days prior to menses. Symptoms abate in 2nd or 3rd month of use.
- **Premenstrual dysphoric disorder (PMDD).** Apply 0.5 - 1ml of PROFEME® 10% cream via measured applicator (50-100mg progesterone) daily or in divided doses from day 12-26 of each menstrual cycle. Significant alterations to this dosage may be made to achieve a crescendo effect 4-5 days prior to menses. Symptoms abate in 2nd or 3rd month of use.
- **Endometriosis and Postpartum depression.** Apply 1.0 - 2.0ml of PROFEME® 10% cream via measured applicator (100-200mg progesterone) daily or in divided doses depending upon the severity of the condition. In reproductive cyclical women initiate treatment on a day 12-26 basis, but this may need to be increased to three weeks use in every four if symptoms/pain emerge upon withdrawal.
- **Infertility/Repeated First-term.** Miscarriage Luteal phase and first trimester corpus luteal support. Apply 1ml of PROFEME® 10% cream (100mg progesterone) daily or in divided doses via measured applicator from day 12-26 of each cycle until pregnancy is confirmed and then 1-2ml daily on a continuous basis until at least week 13 or until full term.



Before conceiving, a woman prone to miscarriage should use PROFEME® 3.2% cream from days 12 to 26 of the cycle until the pregnancy is confirmed. If spotting occurs at week 6 or 7 of pregnancy, a high dose of 100 to 200 mg progesterone cream (PROFEME® 10%) twice or three times daily. Often, women use PROFEME® natural progesterone cream until the baby is full term (40 weeks of gestation).

Note: Amount and duration of application for all conditions must be tailored to individual requirements

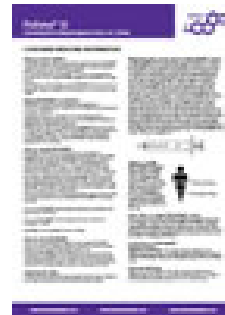
PROFEME® 3.2 and PROFEME 10 Prescribing Information and Consumer Medicine Information can be downloaded from <http://www.profeme.com> or clicking on these images below.



PROFEME® 3.2% CMI



PROFEME® 3.2% PI



PROFEME® 10% CMI



PROFEME® 10% PI

## Why is PROFEME® progesterone cream the best?

If one Googles “natural hormone cream” , “progesterone cream” or “testosterone cream” there are dozens of products claiming to be the “best” and “authentic” natural progesterone/testosterone creams or gels. Just how does one determine which product is most suited to his/her requirements? The following is an outline of basic manufacturing processes to help you decide. The three quality standards of natural progesterone cream are:

- 1. Pharmaceutical Grade:** The manufacturer operates to international standards of Good Manufacturing Practice (GMP). GMP means all production processes are standardized and controlled from the time the raw material is procured through to the expiry date printing on the finished product. The Australian government, like the U.S. and European regulators, enforces rigid government controls on the manufacturing facility, its equipment, processes, and packaging. PROFEME® natural progesterone creams are guaranteed stable, effective, and potent and the world’s only pharmaceutical grade progesterone cream. The final product has detailed documentation and is backed by clinical trials that substantiate its therapeutic claims.

---

**NIGHT SWEATS** <http://www.understandingnightsweats.com/>

**ESTROGEN DOMINANCE** <http://www.understandingestrogendominance.com/>

- 2. Cosmetic Grade:** This is the quality sold over-the-counter in drug, department and grocery stores. Cosmetic grade products do not undergo the rigorous checking processes as is required of pharmaceuticals. Often, brand-names have exactly the same ingredients as generics, just with a different label. Cosmetic grade products are allowed a high bacterial content, so their shelf-life is very limited (usually 3 to 6 months). Cosmetic manufacturers are not required to register their products with the government regulators because cosmetic products do not require clinical trials to prove their worth. Cosmetic grade production is a self-regulating industry.
- 3. Compounded Product:** Natural health products from pharmacists, herbalists, homeopaths, naturopaths, and practitioners of traditional Indian and Chinese medicines are compounded. This means the product is tailored to the patient's individual needs in the delivery system most desired. Pharmacists compound drugs that are not commercially available, or in a different strength than that readily available. A compounded product may be needed to make a drug palatable. A compounded product may be needed if the patient reacts to dyes, preservatives, and allergens found in commercial products. Compounded products do not undergo any form of production control, concentration, impurity, stability or efficacy testing. Safe shelf-life is usually extremely short, if at all known. Compounded items are time-consuming to make, so generally they are more expensive.

## About Lawley Pharmaceuticals

Lawley Pharmaceuticals ([www.lawleypharm.com.au](http://www.lawleypharm.com.au)) is a privately owned pharmaceutical company which focuses on the transdermal administration of the naturally occurring hormones progesterone, testosterone and estradiol. Founded in 1995 by pharmacist Michael Buckley, Lawley Pharmaceuticals has grown to become a world leader in research and development of transdermal hormone preparations.

The only pharmaceutical grade natural hormone creams available worldwide are those made by Lawley Pharmaceuticals, Australia.

Lawley Pharmaceuticals ([www.lawleypharm.com.au](http://www.lawleypharm.com.au)) makes [PROFEME](#)<sup>®</sup> 3.2% and 10% progesterone cream for females, [ANDROFORTE](#)<sup>®</sup> 2 and [ANDROFORTE](#)<sup>®</sup> 5 testosterone cream for males, [ANDROFEME](#)<sup>®</sup> 1% testosterone cream for women and [NATRAGEN](#)<sup>®</sup> estradiol cream for women.

[PROFEME](#)<sup>®</sup> progesterone creams are specifically targeted for use in women with declined or lowered serum progesterone levels due to genetic disorders, surgical or chemical interventions, under-production by the ovaries or ageing. Applied topically to the skin, [PROFEME](#)<sup>®</sup> Progesterone creams for women are the world's only clinically trialled and tested pharmaceutical grade progesterone creams using natural bio-identical progesterone. [PROFEME](#)<sup>®</sup> progesterone creams are listed with the Australian government (AUST L 95334 / L 70886).

[ANDROFORTE](#)<sup>®</sup> 2, [ANDROFORTE](#)<sup>®</sup> 5 and [ANDROFEME](#)<sup>®</sup> are testosterone creams specifically targeted for use in men and women with declined or lowered serum testosterone levels due to genetic disorders, neurological disorders, surgical or chemical interventions or under-production by the testes or ovaries and/or adrenal glands. Applied topically to the skin, [ANDROFORTE](#)<sup>®</sup> 2, [ANDROFORTE](#)<sup>®</sup> 5 and [ANDROFEME](#)<sup>®</sup> are the world's only clinically trialled and tested pharmaceutical grade testosterone creams using natural bio-identical testosterone.

ANDROFORTE® 2, ANDROFORTE® 5 and ANDROFEME® testosterone creams are listed with the Australian government (AUST L 166239 / AUST L 166238 and AUST L 169317 respectively).

NATRAGEN® estradiol cream for women is specifically for conditions of estrogen deficiency conditions including short-term use for menopausal symptoms not responsive to PROFEME® such as hot flashes, night sweats, vaginal dryness and atrophy. (AUST L 169397)

**The Lawley Pharmaceuticals portfolio of products include:**

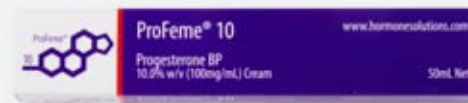
AndroFeme® 1% testosterone cream for women



AndroForte® 2% and AndroForte® 5% testosterone creams for men



ProFeme® 3.2% and 10% progesterone creams for women



Natragen® 0.2% estradiol cream for women



**PROFEME** <http://www.profeme.com/>

**ANDROFORTE** <http://www.androforte.com/>

**ANDROFEME** <http://www.androfeme.com/>

**NATRAGEN** <http://www.natragen.com/>

## Natural Progesterone for Women – Quick Q & A

- Q.** Is the progesterone in PROFEME® “natural” progesterone?
- A.** Yes. PROFEME® progesterone cream is guaranteed 100% to contain “natural” progesterone. Natural progesterone was the term coined by US doctor John Lee MD to differentiate between the chemical structure of progesterone produced by the ovaries (“natural”) and the chemical structures of the synthetically produced progestins which are often confused or misrepresented as being progesterone. Their chemical fingerprint is totally different and natural progesterone has a far greater diversity of action than progestins.
- Q.** Does the wild yam contain natural progesterone?
- A.** No - definitely not. The wild yam contains a steroid substrate called diosgenin that is similar in its chemical structure to progesterone. Diosgenin however does not act like progesterone within the body. The human body is unable to convert diosgenin into progesterone - a point often misrepresented by marketers of wild yam products.
- Q.** Where does “natural” progesterone come from?
- A.** Wild yam and soya are the two crops which contain steroid substrate (diosgenin and stigmasterol - plant hormones) similar in their chemical structure to progesterone. Because these two crops are grown in commercial quantities, large amounts of raw substrate material can be extracted. Diosgenin and stigmasterol are converted in a laboratory to make “natural” progesterone. This is the same chemical structure as produced by the ovaries and is identical in every way.
- Q.** Is the progesterone in PROFEME® progesterone cream made from genetically modified soya?
- A.** No - Lawley Pharmaceuticals in Australia, the manufacturers of PROFEME®, has documentation from the raw material manufacturers that the progesterone is not produced from genetically engineered soya crops.
- Q.** Why is PROFEME® progesterone cream superior to other progesterone cream brands?
- A.** PROFEME® progesterone cream is manufactured to pharmaceutical grade standards whereas in the USA and elsewhere, over-the-counter progesterone creams are made to cosmetic grade standards. The requirement for labeling disclosure of the amount of progesterone in the finished product is optional. Many products available in the USA for example may claim to have progesterone in the finished product, but in fact can have little or no progesterone. Because PROFEME® has much stricter standards of manufacture the amount stated on the label is guaranteed to be what is in the finished product. Additionally, PROFEME® progesterone cream has undergone comprehensive raw material purity testing, clinical trials and stability testing. The quality difference between PROFEME® Progesterone Cream and other cosmetic brands is significant.
- Q.** How long before PROFEME® progesterone cream helps my PMS or menopausal symptoms?
- A.** Usually it takes between 4 and 8 weeks for PROFEME® to significantly improve symptoms. Many people want an overnight cure to their menopausal problems or PMS symptoms. It must be remembered that the underlying hormone imbalance that leads to the point where symptoms warranted treatment usually developed over many months, if not years. They cannot be reversed overnight. Most people find that symptoms improve steadily with each month of use. After about 12 months use, maximum effect is achieved.

## Our Mission Statement

Lawley Pharmaceuticals ([www.lawleypharm.com.au](http://www.lawleypharm.com.au)) strives to provide the optimal delivery systems for the administration of naturally occurring hormones to counter endocrine deficiency states.

Our philosophy is based on the principle to use a bio-identical hormone in preference to a synthetic hormone analogue (when a viable clinical option) and to advance areas of clinical research using natural hormones.

Our goal is to establish, through evidence-based medical research, naturally occurring hormones as cornerstone treatments for diseases such as breast cancer, infertility, first-term miscarriage, male hypogonadism, post partum depression and endometriosis.

Lawley Pharmaceuticals has established strong links with centres of medical research excellence around the world and continues to push the boundaries of medical research.

## Completed Clinical Studies

1. Effect of sequential transdermal progesterone cream on endometrium, bleeding pattern, and plasma progesterone and salivary progesterone levels in postmenopausal women. *Wren BG et al. Climacteric 2000 3:155–160.*
2. Distribution and metabolism of topically applied progesterone in a rat model. *Waddell B and O’Leary PJ. J Ster Biochem & Mol Biol. 80 (2002) 449–455.*
3. Plasma and saliva concentrations of progesterone in pre- and post-menopausal women after topical application of progesterone cream. *O’Leary PJ et al. Presented at the Annual Congress of the Australian Menopause Society held in Perth, Australia in October 1997*
4. Long-term pharmacokinetics and clinical efficacy of ANDROMEN®FORTE 5% cream for androgen replacement in hypogonadal men. *Handelsman DJ et al. ANZAC Research Institute, Department of Andrology, Concord Hospital, Sydney, 2004.*
5. Transdermal testosterone therapy improves well-being, mood, and sexual function in premenopausal women. *Goldstat R et al. Menopause 2003; 10 (5): 390-398.*
6. The pharmacokinetics pilot study of ANDROFEME®1% testosterone cream following two week, once daily application in testosterone deficient women. *Eden JA et al. Presented at the 4th Annual Congress of the Australasian Menopause Society held in Adelaide 5-7th November 2000.*
7. A double-blind, randomized, placebo-controlled trial of the effect of testosterone cream on the sexual motivation of menopausal hysterectomized women with hypoactive sexual desire disorder. *El-Hage et al Climacteric 2007; 10: 335–343.*
8. Pharmacokinetics Of Andromen Forte 5% Cream: A Dose Finding Study. *Kelleher S et al. ANZAC Research Institute, Department of Andrology, Concord Hospital, Sydney, 2002.*

## Internet Education Reference Sites

**ANDROFORTE** [www.androforte.com](http://www.androforte.com)

**ANDROFEME** [www.androfeme.com](http://www.androfeme.com)

**PROFEME** [www.profeme.com](http://www.profeme.com)

**NATRAGEN** [www.natragen.com](http://www.natragen.com)

**HORMONE SOLUTIONS** [www.hormonesolutions.com.au](http://www.hormonesolutions.com.au)

**HORMONESOLUTIONS** [www.hormonesolutions.com](http://www.hormonesolutions.com)

**ANDROPAUSE** [www.understandingandropause.com](http://www.understandingandropause.com)

**ANOVULATION** [www.understandinganovulation.com](http://www.understandinganovulation.com)

**BREAST DISEASE** [www.understandingbenignbreastdisease.com](http://www.understandingbenignbreastdisease.com)

**BREAST DISEASE** [www.understandingbreastdisease.com](http://www.understandingbreastdisease.com)

**BREAST DISEASE** [www.understandingbreastdisorders.com](http://www.understandingbreastdisorders.com)

**CASTRATION** [www.understandingcastration.com](http://www.understandingcastration.com)

**DUB** [www.understandingdub.com](http://www.understandingdub.com)

**DYSFUNCTIONAL UTERINE BLEEDING** [www.understandingdysfunctionaluterinebleeding.com](http://www.understandingdysfunctionaluterinebleeding.com)

**DYSMENORRHEA** [www.understandingdysmenorrhea.com](http://www.understandingdysmenorrhea.com)

**DYSPAREUNIA** [www.understandingdyspareunia.com](http://www.understandingdyspareunia.com)

**EARLY MENOPAUSE** [www.understandingearlymenopause.com](http://www.understandingearlymenopause.com)

**ENDOMETRIAL HYPERPLASIA** [www.understandingendometrialhyperplasia.com](http://www.understandingendometrialhyperplasia.com)

**ENDOMETRIOSIS** [www.understandingendometriosis.com](http://www.understandingendometriosis.com)

**ESTROGEN DOMINANCE** [www.understandingestrogendominance.com](http://www.understandingestrogendominance.com)

**FEMALE SEXUAL DYSFUNCTION** [www.understandingfemalesexualdysfunction.com](http://www.understandingfemalesexualdysfunction.com)

**FIBROCYSTIC BREAST DISEASE** [www.understandingfibrocysticbreastdisease.com](http://www.understandingfibrocysticbreastdisease.com)

**FSD** [www.understandingfsd.com](http://www.understandingfsd.com)

**GYNECOMASTIA** [www.understandinggynecomastia.com](http://www.understandinggynecomastia.com)

**HEAVY PERIODS** [www.understandingheavyperiods.com](http://www.understandingheavyperiods.com)

**HORMONE MIGRAINE** [www.understandinghormonemigraine.com](http://www.understandinghormonemigraine.com)

**HOT FLASHES** [www.understandinghotflashes.com](http://www.understandinghotflashes.com)

**HYPOGONADISM** [www.understandinghypogonadism.com](http://www.understandinghypogonadism.com)

**HYSTERECTOMY** [www.understandinghysterectomy.com](http://www.understandinghysterectomy.com)

**INFERTILITY** [www.understandinginfertility.biz](http://www.understandinginfertility.biz)

**IRREGULAR PERIODS** [www.understandingirregularperiods.com](http://www.understandingirregularperiods.com)

**KLINEFELTER SYNDROME** [www.understandingklinefeltersyndrome.com](http://www.understandingklinefeltersyndrome.com)

**LIBIDO** [www.understandinglibido.com](http://www.understandinglibido.com)

**LOW LIBIDO** [www.understandinglowlibido.com](http://www.understandinglowlibido.com)

**LOW TESTOSTERONE** [www.understandinglowtestosterone.com](http://www.understandinglowtestosterone.com)

**MENOPAUSE** [www.understandingmenopause.biz](http://www.understandingmenopause.biz)

**MENOPAUSE** [www.understandingmenopause.info](http://www.understandingmenopause.info)



**MENORRHAGIA** [www.understandingmenorrhagia.com](http://www.understandingmenorrhagia.com)  
**MISCARRIAGE** [www.understandingmiscarriage.biz](http://www.understandingmiscarriage.biz)  
**MOOD CHANGES** [www.understandingmoodchanges.com](http://www.understandingmoodchanges.com)  
**NIGHT SWEATS** [www.understandingnightsweats.com](http://www.understandingnightsweats.com)  
**OOPHORECTOMY** [www.understandingoophorectomy.com](http://www.understandingoophorectomy.com)  
**OVARIAN CYSTS** [www.understandingovariancysts.com](http://www.understandingovariancysts.com)  
**PCOS** [www.understandingpcos.com](http://www.understandingpcos.com)  
**PERIMENOPAUSE** [www.understandingperimenopause.com](http://www.understandingperimenopause.com)  
**PMDD** [www.understandingpmdd.biz](http://www.understandingpmdd.biz)  
**POLYCYSTIC OVARIAN SYNDROME** [www.understandingpolycysticovariansyndrome.com](http://www.understandingpolycysticovariansyndrome.com)  
**POSTNATAL DEPRESSION** [www.understandingpostnataldepression.com](http://www.understandingpostnataldepression.com)  
**POSTPARTUM DEPRESSION** [www.understandingpostpartumdepression.com](http://www.understandingpostpartumdepression.com)  
**PREGNANCY** [www.understandingpregnancy.biz](http://www.understandingpregnancy.biz)  
**PREMENSTRUAL SYNDROME** [www.understandingpremenstrualsyndrome.com](http://www.understandingpremenstrualsyndrome.com)  
**UTERINE FIBROIDS** [www.understandinguterinefibroids.com](http://www.understandinguterinefibroids.com)  
**NATURAL-PROGESTERONE-ADVISORY-NETWORK** [www.Natural-Progesterone-Advisory-Network.com](http://www.Natural-Progesterone-Advisory-Network.com)

## References for Medical Professionals

1. [www.hormonesolutions.com](http://www.hormonesolutions.com), Australians call 1-800 627 506 or 08 9228 9033 to speak with a pharmacist, USA and Canadians call Toll free phone: 1-800-961-7813 International caller call +61 93880096 or e-mail [info@lawleypharm.com.au](mailto:info@lawleypharm.com.au).
2. A. Pines, D. W. Sturdee, M. H. Birkhäuser, T. de Villiers, F. Naftolin, A. Gompel, R. Farmer, D. Barlow, D. Tan, P. Maki, R. Lobo and H. Hodis, et al. March 29–30, 2008 *Summary of the First IMS Global Summit on menopause-related issues* [http://www.imsociety.org/pdf\\_files/comments\\_and\\_press\\_statements/ims\\_press\\_statement\\_13\\_05\\_08.pdf](http://www.imsociety.org/pdf_files/comments_and_press_statements/ims_press_statement_13_05_08.pdf)
3. Helen Roberts, *Managing the menopause*. BMJ Apr 2007; 334: 736 - 741; doi:10.1136/bmj.39153.522535.BE
4. W Stuart A. Smellie, *Cases in primary care laboratory medicine: testing pitfalls and summary of guidance on sex hormone testing*. BMJ Jan 2007; 334: 91 - 94; DOI: 10.1136/bmj.39038.614317.AE
5. Anderson, T. Yoshizawa, S. Gollschewski, F. Atogami, M. Courtney. *Menopause in Australia and Japan: effects of country of residence on menopausal status and menopausal symptoms*. *Climacteric*, Volume 7, Issue 2, June 2004 , pages 165 – 174 DOI: 0.1080/13697130410001713760
6. Andra H. James, Margaret V. Ragni, and Vincent J. Picozzi. *Bleeding Disorders in Premenopausal Women: (Another) Public Health Crisis for Hematology?* *Hematology* 2006: 474-485.
7. Mishra, G., Lee, C., Brown, W. and Dobson, A., (2002) *Menopausal transitions, symptoms and country of birth: the Australian Longitudinal Study on Women's Health*. *Australian and New Zealand Journal of Public Health*, 26 6: 563-570.
8. Berger, Gabriella, Forster, Elizabeth. (2001) *An Australian study on the sociocultural context of menopause: directions for contemporary nursing practice*. *Contemporary Nurse*, Vol. 11(2-3), pp. 271-282
9. Million Women Study Collaborators. *Lancet* 2003 362: 419 – 427.
10. Scarabin PY, Oger E et al *Lancet* 2003 362: 428 -432.
11. Rodolfo Paoletti, and Nanette K. Wenger, (2003) *Review of the International Position Paper on Women's Health and Menopause: A Comprehensive Approach*, *Circulation* 107: 1336-1339, DOI: 10.1161/01.CIR.0000054674.89019.1AD.
12. L. Slavin, C. Lee. *A Cross-sectional Survey of Menopausal Status, Symptoms and Psychological Distress in a Community Sample of Australian Women*. *Journal of Health Psychology*, Vol. 3, No. 1, 117-123 (1998) DOI: 10.1177/135910539800300109
13. The Writing Group for the PEPI Trial, *Effects of Hormone Replacement Therapy on Endometrial Histology In Postmenopausal Women*. *JAMA* 275; 5:371-5, 1996.
14. K-J Chang, *Influence of percutaneous administration of oestradiol and estrogen on human breast epithelial cell cycle in vivo*. *Fertil Steril* 63; 4:785- 91, 1995.

## Glossary

You may hear these terms discussed in reference to yourself, your spouse, or your daughter:

**Amenorrhea:** The monthly menstrual cycle ceases due to one of these causes:

- Menopause
- Pregnancy
- Not eating enough (anorexia nervosa)
- Exercising too much
- Extreme stress

A serious underlying medical condition, such as uremia from end-stage renal disease (ESRD or kidney failure)

**Anemia:** Lack of blood. Women who bleed very heavily during menstruation develop iron deficiency anemia, and in extreme cases, low blood volume. Anemic women feel tired, and are withdrawn and pale. Dark skinned women have pale mucous membranes. Your family doctor orders a Complete Blood Count and ferritin levels to confirm that you have anemia, and will likely prescribe iron supplements until you can be seen by a gynecologist (doctor specializing in female organs).

**βhCG:** A pregnancy hormone excreted 10 days after conception, used to measure the age of the embryo. High levels can also mean cancer or multiple pregnancy. Low levels can mean death of the fetus, tubal (ectopic) pregnancy, or miscarriage.

**D&C:** Dilatation & Curettage, when the doctor scrapes the uterine lining to examine the cells for endometrial cancer, and to relieve the heavy buildup of the uterine lining (hyperplasia). D&C is also used for abortions early in pregnancy.

**Dysmenorrhea:** Painful menstruation. If it is caused by excessive prostaglandins, dysmenorrhea can usually be relieved with ibuprofen (Motrin), massage, heat packs, adequate rest, and mild aerobic exercise, like walking. If it is caused by hyperplasia, submucosal fibroids, or another uterine abnormality, the doctor must investigate further. Progesterone often relieves the pain associated with heavy menstruation from hyperplasia or fibroids.

**Endometrial hyperplasia:** Overgrowth of the womb's lining because of: Overstimulation by estrogen during perimenopause; estrogen-mimicking chemical toxins in the environment, such as pesticides on produce and phthalates in cosmetics and plastics; antibiotics and growth hormones in meat and milk; and obesity.

**Fibroid tumors:** Benign (non-cancerous) uterine tumors that can cause pain and heavy bleeding

**FSH (follicular stimulating hormone):** A hormone produced by the pituitary gland and the placenta, which stimulates the ovaries and controls reproduction.

**Gonadotropin levels:** The pituitary gland secretes a group of hormones called gonadotropins, which stimulate the testicles and ovaries.

**Hypermenorrhea:** Prolonged bleeding more than 7 days

**Hypomenorrhea:** Scanty menstruation

**LH (luteinizing hormone):** A gonadotropic hormone released by the pituitary gland in the brain, which stimulates females to ovulate

**Menorrhagia:** Heavy bleeding more than 80 ml per cycle, or 16 soaked sanitary pads per cycle, leading to iron deficiency anemia

**Polymenorrhea:** One menstrual period every 2—3 weeks; this is too frequent.

**Prostaglandin:** Chemicals that control the contractions of the uterus. Prostaglandin level is highest when your menstrual period begins. Too much prostaglandin contracts the uterine muscle so hard that the blood supply is cut off, the uterus is starved for oxygen, and pain results. Prostaglandins from the uterus can leak into the bloodstream and cause nausea, vomiting, diarrhea, and headache.

**T3, T4, and TSH:** A panel of blood tests used to evaluate the thyroid gland in the neck. Women with thyroid imbalance do not ovulate (release eggs for fertilization). A thyroid panel is standard for confirming that you are in menopause.

.

## Copyright Information

© Lawley Pharmaceuticals 2010

This publication is copyright. Other than for the purposes of and subject to the Copyright Act, no part of it may in any form or by any means (electronic, mechanical, microcopying, photocopying, recording or otherwise) be reproduced, stored in a retrieval system or transmitted without prior written permission.

Enquiries should be addressed to:

Lawley Pharmaceuticals, 2/15 Harrogate St, West Leederville 6007, WA Australia

This brochure is presented by

Lawley Pharmaceuticals

2/15 Harrogate St, West Leederville 6007, WA Australia

**T.** +61 (0)8 9388 0096 or 1800 627 506

**F.** +61 (0)8 9388 0098

**E.** [info@lawleypharm.com.au](mailto:info@lawleypharm.com.au)

**W.** [www.lawleypharm.com.au](http://www.lawleypharm.com.au)

USA and Canada Toll free phone: 1-800-961-7813 Toll free fax: 1-800-961-7650

**LAWLEY**

Hormone Solutions