

AN OÖNA GLOSSARY

This is a glossary of terms of women's health. This glossary for informational and educational purposes only. It is not meant to prescribe treatment.

Black cohosh — *Cimicifuga Racemosa*, a medicinal plant that grows to about six feet tall found throughout the deciduous forests of eastern North America. A member of the buttercup family, extracts made from the powdered root of black cohosh, specifically of the racemosa family are the basis of Oöna. The plant has a long history of medicinal use, beginning with North American Indians before the arrival of Europeans. Its first reference in English dates to 1680. John Bartram, who was one of the earliest botanists in American history, planted black cohosh in his first botanical study garden in 1729. Western scientific medicine first referred to black cohosh in 1823, considered then an extremely effective remedy for consumption and rheumatism. Anecdotal evidence had long indicated black cohosh effective for symptoms associated with menopause, but it was not proven in animal studies until 1944. Though it is not entirely clear how black cohosh works, researchers have found it has estrogen-like effects and binds to estrogen receptors, yet without raising estrogen levels in the body.* There are also indications that it suppresses LH, a hormone produced by the hypothalamus, associated with hot flashes.*

Chaste tree berry — *Vitex agnus-castus*, a medicinal plant used since ancient times. Hippocrates cited it for its effects on female reproduction. It was once believed that its use would decrease the sexual appetite of men, thus the common name "chaste." It is now understood that it has no effect on male or female sex drive. The dried fruit of the tree is used to make the extract that is in Oöna. Chaste berry extract has been shown in clinical studies to decrease levels of prolactin which, in turn, leads to increased production of progesterone during the menstrual cycle, reducing symptoms of PMS.*

Cimicifuga racemosa — The Latin term for the black cohosh plant. The plant's name derives from the strong aversion bugs have to it, thus cimex (bug) and fuga (repel).

Climacteric — The months and sometimes years of gradual decrease of reproductive ability, leading to menopause, also known as perimenopause.

Corpus luteum — Of the millions of follicles in the ovaries, eight to ten mature each month, but usually only one reaches the point that it ruptures and releases an egg (ovulation). After ovulation, the ruptured follicle reconnects and continues to grow, becoming the corpus luteum. In preparation for fertilization, it produces estrogen and progesterone to create an extra lining in the uterus.

Commission E Studies — Extensive tests conducted in Germany under government supervision to determine the efficacy and safety of hundreds of botanicals, herbs and other "natural" medicinal products. Many botanicals studied by the commission have been rejected after it was shown that claims made about their use could not be substantiated. Several, however, including black cohosh and chaste tree berry have been found both safe and effective.

Cramp bark — *Viburnum Opulus* Also known as Guelder Rose, cramp bark comes from the Highbush Cranberry and can reach 13 feet in height. It is native to Europe and Africa but has been introduced to North America. It's known for its properties as an ant-spasmodic, anti-inflammatory, nervine, astringent and emmenagogue. Most of cramp bark's practical use is to relieve body muscle cramps as well as relax smooth muscle. Cramp bark relaxes the uterus (made up of smooth muscle) and in doing so relieves painful cramps. In a similar way, the herb may be used to protect against a miscarriage. Its astringent action gives it

role in the treatment of excessive blood loss in periods and may be helpful for heavy bleeding in menopause.

Endocrine organs — Source in a woman's body of the key hormones that regulate the menstrual cycle and menopause. Specifically, the primary organs are

Pituitary — producing follicle stimulating hormones (FSH) and luteinizing hormones(LH), ovaries, which create estrogen and progesterone, and hypothalamus, producing GnRH, a hormone that acts as a "go-between" for ovaries and pituitary.

Endometrial Cancer — The endometrium is the mucous lining membrane of the uterus, this is the term used for cancer of the uterus.

Estrogen — A group of hormones that pertain to female reproductive behavior as well as its development, maturation and function. There are three major types of estrogen — estradiol, estrone, and estriol. Estradiol is the strongest and the most active followed by estrone and estriol, the weakest. During the menstrual cycle, estrogen (along with progesterone) thickens the walls of the uterus (the endometrial lining), thus making it easier for a fertilized egg to attach itself during pregnancy. If the egg is not fertilized, it — along with the thickened lining — are discharged during menstruation. As the need for estrogen declines when a woman approaches menopause, the level of estrogen similarly declines. This shifting hormonal balance can cause a number of bothersome symptoms, including sleeplessness, irritability, hot flashes, and anxiety.

Flavonoid — A type of glycoside that give plants their pigments. Some are biologically active. A well known example is red grapes. The seeds and skin of the grapes are packed with biologically active flavonoids. These flavonoids are believed to make red wine healthy. The process of making red wine is to include the skin and seeds in the fermentation process (unlike white wine). Similarly, it is the flavonoids of the chaste tree berry that hold the beneficial properties.

Follicle-stimulating Hormone(FSH) — Released by the pituitary gland at the start of a woman's menstrual cycle, the follicle-stimulating hormone stimulates the growth of the follicles located in the ovaries. Of these follicles, one will release an egg.

Ginger — *Zingiber officinale* is a root that has been cultivated for so long that its exact origin is uncertain. In China, ginger is one of the earliest mentioned herbals and by the 13th and 14th centuries it was familiar to English as the second most popular spice next to pepper. Historically, in China and elsewhere the fresh and dried roots were considered to have different medicinal products. Fresh ginger was used for colds, nausea, asthma, heart palpitations, cough, colic and loss of appetite to name a few. Dried ginger was used for stomach aches, diarrhea and in India a paste was applied to the temples to relieve a headache. In modern day use, the extracts have been extensively studied for antibacterial, anticonvulsant, antiulcer, antitumor, antispasmodic, anti-allergenic and other activities. They have also been shown to be inhibitors of prostaglandins, which has been shown to reduce menstrual cramps. Source:
<http://www.herbphoto.com/education/monograph/ginger.html>

Glycosides — A plant compound containing one or more alcohols or sugars and a biologically active compound, which the plant metabolizes or excretes. The sugar is called a glycone and the active component is called an aglycone. It is believed that the glycosides in black cohosh, of which there are many and which work in concert together, are the active compounds that give it its medicinal qualities. If taken in moderation, glycosides are absorbed directly into the blood stream instead of remaining in the intestinal tract.

Luteinizing hormone (LH) — At about two weeks into the menstrual cycle, LH is released by the pituitary gland, causing one of the maturing follicles in the ovaries to burst and release its egg for possible fertilization. It is also the hormone associated with hot flashes.

Menopause — The time in a woman's life when a natural hormonal shift causes her body to cease production of eggs in preparation for fertilization. This, in turn, reduces the need for the body to each month to create thickened walls in the uterus in case of pregnancy, resulting in fewer and fewer incidences of monthly discharge, the period. Menopause is considered complete when a full year has passed without experiencing any periods.

Passionflower — Originally from the south of the United States, the passion flower has got its name back in the early seventeenth century from its association with the crucifixion. The pilgrims noticed the floral structure resembles the crucifixion. The Passion of Christ is the period between the Last Supper and the death of Christ - thus the name. Early Native American Indians used the plant as a sedative and sleep aid. In Europe today, Passionflower is used for different states of nervous tension and anxiety and research has shown that the herb also has antispasmodic effects. No toxicity has been observed in laboratory animals and the German Monograph on passionflower lists no known contraindications, side effects or drug interactions.

Perimenopause — The months or years leading up to full stages of menopause. In some women, indications of perimenopause can begin as early as a woman's mid-to late-thirties.

Phytoestrogen — Phytoestrogens, naturally occurring compounds found in foods, are defined as plant substances that are functionally similar to 17 β -estradiol in that they produce estrogenic effects. There are several classes, including isoflavones, lignins, coumestans and resorcylic acid lactones. Soy products have a high concentration of isoflavones.

Postmenopause — The months or years immediately following the end of menopause, which typically is considered complete when a woman has gone one year without experiencing a period.

Premarin — The most widely prescribed drug used for symptoms of menopause and one of the most widely prescribed drugs of any kind. Made from the urine of pregnant mares, the drug artificially raises the level of estrogen in a woman's body to "replace" naturally declining amounts of estrogen associated with menopause.

Progesterone — A hormone that is most concerned with the maintenance of pregnancy. Although some is probably formed in the ovarian follicle, the main site of production is in the corpus luteum — where it works with estrogen to prepare the uterus for a fertilized egg.

Prolactin — A hormone produced by the anterior pituitary gland by both women and men. In women, its principal physiological function is to initiate and sustain lactation.

Prostaglandins — Prostaglandins are physiologically active substances having diverse hormone like effects in animals. They are known to be of widespread occurrence in animal tissues, where they are formed from polyunsaturated fatty acids and are rapidly metabolized. Prostaglandins are very potent: some affect human blood pressure at concentrations as low as 0.1 microgram per kilogram of body weight. They also are diverse in their effects. Depending on their type, prostaglandins can stimulate smooth-muscle contraction; lower and, in some animals, raise blood pressure; decrease and increase the clotting ability of blood; enhance ion transport across some membranes; stimulate inflammation; and inhibit lipolysis (the breakdown of fat) in adipose tissue. A given prostaglandin may have different and even opposite effects in different tissues. Source: "Prostaglandin." Encyclopædia Britannica. 2004. Encyclopædia BritannicaPremium Service. 19 Jan. 2004.

Standardized Herbal Extract — Standardized extracts fall under two main categories. The first is an active constituent extract in which a known principal biochemical compound (such as caffeine) can be separated (such as from a soda). The second is a "marker" extract in which the principal biochemical compound is not known. In this type of extract, one compound serves as a marker to indicate the presence of other constituents that give the herb its therapeutic properties. In a marker extract, since no single active constituent is known, none of the plant's constituent components have been separated out and the entire extract is treated as active. Oöna uses marker compound standardized extracts. In black cohosh, the marker extract is 27 deoxyacteine.

Supercritical Fluid Extraction (SFE) — SFE uses high pressure gases as solvents and is increasingly being employed industrially for extracting oils, resins and other components, from botanical substrates. SFE makes use of CO₂ gas under high pressure. When CO₂ is at conditions of temperature and pressure above 31°C and 73 atm, respectively, it is in its supercritical state where it exhibits a pressure-dependent dissolving power for a wide variety of natural products, pharmaceuticals, and polymers. At high pressure the gas dissolves and extracts soluble components (i.e., oils, actives, etc.) from the botanical substrate, and when the pressure is lowered (in another part of the process plant) the dissolved components precipitate and are collected. The product is a completely pure extract, containing no liquid organic solvents.

*These statements have not been evaluated by the Food and Drug Administration. This product not intended to diagnose, treat, cure or prevent any disease.