



Chasteberry (*Vitex agnus-castus*) Chaste tree, Chaste tree berry, Vitex (*Vitex agnus-castus*) fruit, Monk's Pepper, Gattilier, Hemp Tree, Keusch-Lamm-Fruechte, Wild Pepper

Common Indications:

- Hyperprolactinemia.
- Breast discomfort (Mastalgia)
- Premenstrual Syndrome
- Irregularities in Menstrual Cycle
- Fertility disorders
- Insufficient lactation
- Acne
- Osteo-protection
- Parkinson's Disease
- Cytotoxicity

General Comments:

It is the fruit of this shrub that is harvested and dried for medicinal purposes. It has a long history of use to address women's health issues such as PMS, menopause and endometriosis.^{1,2}

Benefits & Mechanism of Action:

Hyperprolactinemia

Studies report that chasteberry has a significant effect on the anterior pituitary. It interacts with dopamine receptors in the anterior pituitary, specifically the D₂ receptors, which decreases prolactin levels.^{3,4,5,6,7,8,9,10} The major dopaminergic compounds appear to be clerodadienols, which inhibit prolactin release, and dopaminergic bicyclic diterpenes, which inhibit cAMP formation and prolactin release.¹¹

One study, looking at the effects of chasteberry in healthy males, reported that the effect on prolactin is dose dependent. Lower doses were associated with the release of prolactin while higher levels decreased the release of prolactin.¹²

Breast discomfort (Mastalgia)

Reduced prolactin levels are associated with less breast pain. Studies have shown that

supplementation with chasteberry can reduce breast pain as early as the first month, with increasing results in the second and third.^{4,10}

Premenstrual Syndrome

Symptoms of premenstrual syndrome (PMS) include cyclical mastalgia, luteal-phase dysfunction (corpus luteum insufficiency), irritability, headache, and constipation. Chasteberry has been shown in multiple studies to help with symptoms of PMS.^{13,14,15,16,17,18} A multicentric non-interventional trial (open study without control) was conducted to study the efficacy and tolerance of chasteberry extract in 1634 patients suffering PMS.³ Four major symptoms of PMS were monitored, including depression, anxiety, craving and hyperhydration. After a treatment period of three menstrual cycles, 93% of patients reported a decrease in the number of symptoms or even cessation of PMS complaints. Symptoms were still present after 3 months of therapy but were generally less severe than before treatment. A combination of chasteberry and St. John's wort (*Hypericum perforatum*) was found in a double-blind, randomized, placebo-controlled parallel trial to be superior to placebo for total PMS-like scores including anxiety.¹⁹

Premenstrual Mood Dysphoric Disorder is commonly treated with a selective serotonin reuptake inhibitor (SSRI). When compared to SSRIs, chasteberry showed no difference in efficacy regarding physical symptoms of PMS and PMDD.²⁰ An additional study found that physical symptoms were relieved more often in the chasteberry group but depression and irritability was not affected.²¹

Vitamin B₆, pyridoxine, is also a popular treatment for PMS. When compared to Vitamin B₆, chasteberry provided more symptom relief.²²

Irregularities in Menstrual Cycle

Chasteberry has been used to impact menstrual irregularities including dysmenorrhea, secondary amenorrhea, metrorrhagia, oligomenorrhea, and polymenorrhea.^{23,24} Chronic stress can affect the hypothalamus-pituitary axis, which affects prolactin levels.^{25,26} By lowering the prolactin levels, chasteberry may help normalize luteal-phase length and progesterone levels.⁸

Fertility disorders

Chasteberry offers support in treating female infertility by promoting more consistent progesterone production. Several clinical studies have reported beneficial results with using chasteberry in treating women with infertility associated with corpus luteum deficiency.²⁷

Insufficient lactation

Chasteberry has been used traditionally to promote lactation in the first ten days after

birth. When looked at it studies, chasteberry has been shown to be effective in 80% of women when used in lower dosages.^{12,28}

Acne

Looking at patients with different forms of acne, topical application of at 0.2% dried extract of chasteberry with a topical disinfectant resulted in a complete clearance in 70% of patients.²⁹ The highest resolution was seen in patients with acne vulgaris, follicularis, and excoriated acne.

Osteoprotection

An animal study, in vivo, found osteoprotective effects in male rats.³⁰

Parkinson's Disease

A positive impact on dopaminergic activity lends chasteberry a consideration for conditions such as Parkinson's disease but research currently exist to support this use.

Cytotoxicity

In multiple studies, chasteberry extract increased intracellular stress and mitochondrial damage leading to apoptosis in human cancer cell lines.^{31,32,33,34}

Dose:

General

- 200-400mg every morning, preferably on an empty stomach, either 1 hour before or 2 hours after breakfast, standardized to contain at least 0.5% agnuside and 0.6% aucubin
- 4mg daily standardized to 6% agnuside
- Liquid extract (1:2): 1-2.5 ml in the morning
- Dried fruit: 1.5-3g in the morning

Hyperprolactinemia

- Higher doses, 204-480mg, were found to decrease secretion of prolactin¹²
- Doses lower than 200mg were found to increase secretion of prolactin¹²

Breast discomfort (Mastalgia)

- Mastodynon* 60 drops daily or one tablet daily⁴

Premenstrual Syndrome (from studies)

- Ze440 extract** (Premular) 20mg daily¹⁹
- Femicur*** 40mg daily¹⁶

Irregularities in Menstrual Cycle

- 20mg daily

Infertility Disorders

- Mastodynon* 30 drops twice daily

Insufficient Lactation

- 120mg per day¹²

*Mastodynon is a homeopathic preparation that is chasteberry 53% v/v ethanol.

**Ze440 is a Vitex agnus castus extract that comes as a 20mg tablet standardized for casticin and agnuside.

***Femicur contains 1.6-3.0mg of dried chasteberry extract per capsule.

Standardization:

There are various products with different dosages and standardizations to choose from. When choosing a dietary supplement, select those from reputable manufacturers.

Cautions & Side Effects:

Chasteberry has been reported to be safe in recommended doses.

Do not use in pregnancy. Laboratory studies report emmenagogue and uterine stimulant activity.

Symptoms that may indicate acute toxicity include:

- Gastrointestinal upset
- Headache
- Diarrhea
- Nausea
- Itching and urticaria
- Rash
- Acne
- Insomnia
- Weight gain
- Irregular menstrual bleeding

Medication Interactions

Medications with decreased effects while taking chasteberry include:

- Antipsychotic drugs
- Contraceptive drugs
- Dopamine agonists

- Estrogens
- Metoclopramide

Patients with the following disease states or conditions should not use chasteberry:

- Hormone sensitive cancers/conditions
- In-vitro fertilization³⁵
- Pregnancy
- Schizophrenia/psychotic disorders

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Hyperprolactinemia

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Breast discomfort (Mastalgia)

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Premenstrual Syndrome

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Fertility disorders

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Acne

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Dosage

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