

DR.VEGAN[®]

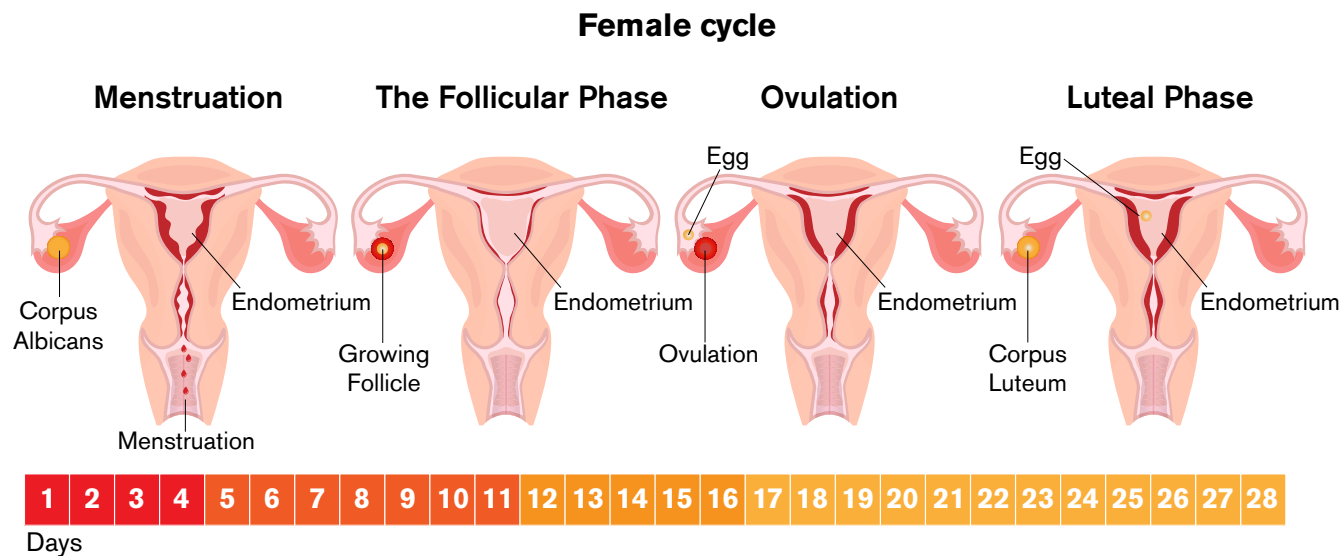
Balancing the cycle

PMS Support

Practitioner Toolkit • For practitioner use only

Approximately 20% of women of reproductive age experience significant premenstrual symptoms.¹ Women often lack essential nutrients like magnesium, Vitamin B6, and folate, which are needed for managing PMS symptoms and overall health.

Stress significantly contributes to the severity of PMS symptoms, necessitating effective management strategies.² PMS symptoms can lead to decreased productivity, social withdrawal, and emotional distress, highlighting the need for comprehensive support strategies.



Severity spectrum:

Mild PMS: Symptoms are noticeable but do not interfere significantly with daily life.

Moderate PMS: Symptoms impact daily activities and relationships but are manageable.

Premenstrual Dysphoric Disorder (PMDD): A severe form of PMS affecting about 3–8% of menstruating individuals². Symptoms include severe depression, anxiety, irritability, and functional impairment, often requiring medical intervention.

51% of women in the DR.VEGAN study reported that their symptoms disrupt their daily life, and 41% have had to take a day off work due to PMS.

DIFFERENCE BETWEEN PMS AND PMT

| Premenstrual syndrome (PMS) | Premenstrual tension (PMT) |
|--|---|
| A group of physical and emotional symptoms occurring in the luteal phase of the menstrual cycle. | A more specific term often used interchangeably with PMS but can refer specifically to emotional and psychological symptoms. |
| Physical symptoms: bloating, breast tenderness, headaches, fatigue, and digestive issues. Emotional symptoms: mood swings, irritability, anxiety, and depression. | Mostly emotional symptoms: irritability, anxiety, mood swings, depression, and tension. |
| Symptoms can vary in severity from mild to severe and can significantly impact daily life. | Symptoms tend to be less severe than PMS but can still affect mood and well-being. |
| Symptoms typically begin one to two weeks before menstruation and resolve with the onset of menstruation. | Symptoms usually appear in the luteal phase and may last until menstruation begins, but they are often shorter in duration than PMS symptoms. |
| Diagnosed based on symptom history and the exclusion of other conditions often requires symptom tracking over cycles. | Generally diagnosed when emotional symptoms are predominant and may not require as extensive tracking as PMS. |
| Can interfere significantly with daily activities, relationships and quality of life. | May cause some disruption in daily life but typically has less of an impact than PMS. |

DIET AND LIFESTYLE TIPS FOR CLIENTS

Focus on anti-inflammatory foods

Incorporate foods high in omega 3 fatty acids to reduce inflammation and improve mood swings and cramps associated with PMS.

Balance blood sugar

Balancing blood sugar helps stabilise energy levels and reduces cravings, irritability and fatigue.

Increase magnesium and calcium intake

Magnesium-rich foods can relieve cramps and improve mood. Calcium has been associated with reduced PMS symptoms, including mood changes and bloating.

Support liver health

The liver plays an essential role in hormone metabolism.

Limit caffeine and alcohol

Caffeine and alcohol can worsen anxiety, insomnia and mood swings.





Exercise regularly

Moderate aerobic exercise can help reduce PMS symptoms by releasing endorphins, which improve mood and reduce pain perception.

Practice good sleep hygiene

Poor sleep worsens PMS symptoms.

Manage stress

Chronic stress can worsen PMS symptoms by affecting hormonal balance.

Stay hydrated

Drinking plenty of water helps reduce bloating and maintains energy levels. Avoiding excess salt can also minimise water retention.

PMS Hero®

PMS Hero® is the advanced formula of scientifically studied botanicals, vitamins and minerals to support common signs of your period, including cramps, breast tenderness, bloating, mood swings and irritability. PMS Hero® balances your hormones for a better mood, body and mind every day through your cycle.



| | PER 2 CAPSULES | EC NRV % * |
|-------------------------------------|-------------------|---------------|
| Shatavari Root Extract | 300mg | ** |
| Dong Quai Root Extract | 300mg | ** |
| Dandelion Root | 200 mg | ** |
| Bromelain | 200 GDU | ** |
| Ashwagandha KSM-66® Root Extract | 150 mg | ** |
| Agnus Castus Extract (Chaste Berry) | 14 mg | ** |
| Folate | 200 µg | 100 |
| Vitamin B3 (Niacin) | 16 mg | 100 |
| Vitamin B6 | 10 mg | 714 |
| Vitamin B5 (Pantothenic Acid) | 12 mg | 200 |
| Magnesium | 56 mg | 15 |
| Chromium | 80µg | 200 |

* NRV= Nutrient Reference Value

** No NRV Established

Ingredients

Magnesium Citrate, Organic Dandelion Root Powder, Ashwagandha KSM-66® (*Withania somnifera*) Root Extract, Bromelain, Shatavari Root Extract (*Asparagus racemosus*), Dong Quai Root Extract, Niacin (*Nicotinamide*), Agnus Castus Extract, Vitamin B5 (*Pantothenic Acid, Calcium Salt*), Vitamin B6 (*Pyridoxine Hydrochloride*), Chromium Picolinate, Folate (*Calcium-L-Methylfolate*), Capsule Shell (*Hydroxypropyl Methylcellulose*).

Free from

Added Sugar, Starch, Sweeteners, Gluten, Wheat, Soya, Lactose, Dairy, Artificial Flavours, Colours and Preservatives.

Directions

- Take two capsules together or separately each day to help regulate hormones throughout the cycle. If customers find that they only need to take one capsule a day that's fine.
- PMS Hero® is best taken daily throughout the month.
- PMS Hero® can be taken a few days before the onset of PMS. However, if this doesn't address PMS signs, we recommend taking PMS Hero® each day to support energy, mood and the full benefits before and during your period.
- Avoid PMS Hero® if you are pregnant, suffer from a history of blood clotting, are at risk of clotting or are currently taking blood thinner medication or anticoagulants. Consult with your GP or healthcare provider if you're taking any prescribed medication before taking PMS Hero® or other food supplements.
- Customers may begin to feel a difference within a week or two, depending on when they begin taking PMS Hero®. The majority of customers feel the full benefits of PMS Hero® during their second cycle after starting to take it each day.

Pairs well with



Gut Works®



GlucoBalance®



pH Hero®

What customers can look forward to

1-7 days

Support for breast tenderness and energy levels.

1-2 weeks

Improvement in bloating and gas. Changes may be experienced in any menstrual cramps. They may also experience fewer food cravings.

2-4 weeks

Improvement in mental clarity, mood and focus. Supports the body's ability to cope with stress. Less feelings of constipation.

1-2 months

Improvement in weight management and appetite control. Support for PMS-related joint and back discomfort.

2-3 months

Supports hormone regulation. Periods may become more regular within 2-3 months; heavy periods may decrease. Improvement in hormonal breakouts and inner confidence.

KEY INGREDIENTS IN PMS HERO®



Shatavari Root Extract

Shatavari can be particularly beneficial for PMS, as its phytoestrogenic properties help regulate hormonal fluctuations that contribute to symptoms like mood swings, irritability, and bloating. Known for its adaptogenic effects, Shatavari may also reduce stress and support emotional balance, helping to alleviate PMS-related anxiety and fatigue.

Hormonal modulation: Shatavari contains phytoestrogenic saponins that help stabilise oestrogen levels during the menstrual cycle. The main biochemical pathway involves the modulation of oestrogen signalling through the oestrogen receptor (ER) pathway, thereby influencing gene expression related to menstrual health.³

Adaptogenic properties: The adaptogenic nature of Shatavari helps regulate the hypothalamic-pituitary-adrenal (HPA) axis, which controls the body's response to stress.⁴ In this way, Shatavari can help reduce stress-induced PMS symptoms and improve mood and emotional regulation. The molecular mechanism includes the upregulation of HSP70 (heat shock protein 70), which aids in cellular protection under stress.

Serotogenic properties: An increased concentration of monoamine oxidase (MAO) enzymes and pro-inflammatory cytokines (IL-6, CRP, TNF-a) shifted the tryptophan route from serotonin synthesis to neurotoxic quinolinic acid.¹⁷

Research shows that shatavari extract exhibits considerable antidepressant-like effects, which are mediated by the inhibition of monoamine oxidase enzymes (MAO-A and MAO-B), increasing serotonin availability in the body.¹⁸

A placebo-controlled clinical study found Shatavari to have a 100% PMS cure rate when taken consistently for 3 months! This was statistically significant against the placebo.¹⁹



Dong Quai Root Extract

Dong Quai Extract, often called 'female ginseng,' is valuable for managing PMS symptoms by supporting hormonal balance and reducing menstrual cramps. It acts as a natural anti-inflammatory, which may help ease muscle tension and bloating commonly experienced during PMS. Dong Quai's circulation-enhancing properties support improved blood flow,⁵ helping to reduce headaches and fatigue associated with the premenstrual phase.

Haemodynamic effects: Dong Quai enhances blood circulation by influencing nitric oxide (NO) pathways, which causes vasodilation and improves blood flow. Increased circulation can help reduce cramping associated with menstruation by alleviating ischemic pain.

Hormonal regulation: Dong Quai contains phytoestrogens, which help to balance oestrogen and progesterone levels. The extract modulates oestrogen metabolism, promoting a healthy ratio of oestrone and oestradiol while reducing excess oestrogen that can exacerbate PMS symptoms.

Anti-Inflammatory properties: The presence of compounds such as ferulic acid and ligustilide provides anti-inflammatory benefits by inhibiting cyclooxygenase (COX) enzymes and suppressing the production of pro-inflammatory cytokines (e.g., IL-6 and TNF- α), thereby reducing inflammation and associated pain during the menstrual cycle.⁶



Bromelain

Bromelain, an enzyme found in pineapple, may help alleviate PMS symptoms by reducing inflammation and easing menstrual cramps and muscle soreness. Its natural anti-edema effects can reduce bloating and fluid retention, which are common during the premenstrual phase. Bromelain also supports healthy circulation, which may help alleviate PMS-related headaches and discomfort.

Proteolytic enzyme action: Bromelain, a mixture of proteolytic enzymes derived from pineapple, helps to break down proteins in the body. This activity can reduce inflammation and pain associated with menstrual cramps by inhibiting pro-inflammatory mediators like bradykinin and histamine.

Anti-inflammatory mechanisms: Bromelain has been shown to modulate the immune response by decreasing the production of inflammatory cytokines (e.g., IL-1 β , IL-6) and promoting the activity of anti-inflammatory cytokines. This action is mediated through the inhibition of the NF- κ B (nuclear factor kappa-light-chain-enhancer of activated B cells) pathway, reducing the transcription of pro-inflammatory genes.¹⁰



Ashwagandha KSM-66® Root Extract

Ashwagandha KSM-66® extract is beneficial for PMS symptoms by supporting stress reduction and emotional balance, helping to manage mood swings and irritability. As a potent adaptogen, it promotes hormonal balance and may reduce fatigue and anxiety commonly associated with PMS. Its anti-inflammatory properties can aid in easing mild cramping and muscle tension during the premenstrual phase.

Cortisol regulation: Ashwagandha has adaptogenic properties that regulate cortisol levels, which can be elevated during PMS.¹¹ The extract modulates the HPA axis and helps to reduce the physiological response to stress. The mechanism involves the downregulation of corticotropin-releasing hormone (CRH) and adrenocorticotrophic hormone (ACTH), leading to decreased cortisol secretion from the adrenal glands.

Neurotransmitter modulation: Ashwagandha supports neurotransmitter balance, particularly serotonin and GABA (gamma-aminobutyric acid).¹² Increased serotonin levels can enhance mood and reduce anxiety, while GABA's calming effect can alleviate stress and irritability. The mechanisms involve the upregulation of tryptophan hydroxylase, the rate-limiting enzyme in serotonin synthesis.



Agnus Castus Extract

Agnus Castus, also known as Chaste Tree Berry, is widely used for managing PMS symptoms by promoting hormonal balance, particularly through its effects on prolactin levels.¹³ This can help alleviate common premenstrual symptoms like breast tenderness, mood swings, and irritability. Additionally, Agnus Castus may help regulate menstrual cycles, making it valuable for those with irregular periods associated with PMS.

Hormonal modulation: Agnus Castus primarily acts on the pituitary gland to regulate the secretion of prolactin, thus helping to alleviate symptoms such as breast tenderness and mood swings. The extract modulates the dopaminergic system, enhancing dopamine levels, which inhibit prolactin secretion.

Reduction of symptoms: Agnus Castus has been shown to decrease symptoms related to PMS through its ability to balance oestrogen and progesterone levels, which involves the modulation of the hypothalamic-pituitary-gonadal (HPG) axis.

Anti-inflammatory effects: The presence of flavonoids and other compounds in Agnus Castus exhibits anti-inflammatory properties, helping to alleviate the physical discomfort associated with PMS.



Dandelion Root

Dandelion Root can be helpful for managing PMS symptoms due to its diuretic properties, which help reduce bloating and water retention. It supports liver health, aiding in the detoxification of excess hormones that may contribute to PMS-related mood swings and discomfort. Dandelion Root's anti-inflammatory effects may reduce cramping and support overall digestive health during the premenstrual phase.

Diuretic action: Dandelion Root contains potassium and taraxasterol, which have diuretic properties that promote fluid elimination. This action can help alleviate water retention and bloating, common symptoms of PMS. The mechanism involves inhibition of renal tubular reabsorption of sodium, thereby enhancing urinary output.⁷

Liver support: Dandelion supports liver detoxification by increasing bile production, mediated by compounds like sesquiterpene lactones, which stimulate hepatic function. Improved liver function can enhance hormonal clearance, helping to balance oestrogen levels and improve PMS symptoms.⁸

Antioxidant activity: Rich in antioxidants such as flavonoids, Dandelion Root helps to neutralise reactive oxygen species (ROS), thus reducing oxidative stress that may worsen PMS symptoms. This involves the upregulation of antioxidant enzymes like superoxide dismutase (SOD) and glutathione peroxidase.⁹

Folate, Vitamin B3, B5 and B6

Folate, Vitamin B3 (niacin), Vitamin B5 (pantothenic acid), and Vitamin B6 play significant roles in managing premenstrual syndrome (PMS) symptoms through their contributions to hormonal balance and neurotransmitter synthesis. These B Vitamins support mood regulation, reduce fatigue and improve common symptoms such as irritability, bloating and cramping.



Folate

Folate acts as a coenzyme in the conversion of homocysteine to methionine via the MTHFR (methylene tetrahydrofolate reductase) pathway. This promotes a reduction in homocysteine and its associated inflammation. Folate plays a vital role in the synthesis of neurotransmitters, including serotonin and dopamine, which can influence mood and emotional wellbeing. Low levels of folate are linked to an increased risk of depression and anxiety, making it essential during PMS.



Vitamin B3

Niacin is essential for the synthesis of NAD⁺ and NADH, coenzymes involved in cellular respiration and energy production. This energy boost can be particularly beneficial during the fatigue often experienced with PMS. Niacin promotes vasodilation, improving blood flow and oxygen delivery to tissues. This can help alleviate cramping and discomfort associated with menstruation by enhancing tissue perfusion.

Niacin is linked to improved mood and cognitive function, improving psychological symptoms of PMS. It is needed for serotonin production through the conversion of tryptophan.



Vitamin B6

Vitamin B6 is essential for managing PMS symptoms, as it is needed for the production of the neurotransmitters serotonin and dopamine, which improve mood swings and irritability. Its role in hormone regulation supports the balance of oestrogen and progesterone, reducing symptoms like breast tenderness and bloating. Vitamin B6 is a cofactor in the synthesis of neurotransmitters such as serotonin, dopamine, and noradrenaline. This is particularly important for mood and a reduction in irritability and depression commonly experienced in PMS. B6 plays a role in regulating hormonal levels by influencing the conversion of tryptophan to serotonin and facilitating the metabolism of steroid hormones, including oestrogen and progesterone. Evidence suggests that B6 can significantly reduce the severity of PMS symptoms, likely due to its role in neurotransmitter balance and hormonal regulation.



Vitamin B5

Vitamin B5 is needed for the synthesis of coenzyme A, which is involved in the metabolic pathways of carbohydrates, fats and proteins. This is vital for maintaining energy levels during the menstrual cycle when fatigue often occurs. B5 supports adrenal function, aiding in the synthesis of steroid hormones such as cortisol. This is particularly important for managing stress levels and hormonal fluctuations during PMS.



Magnesium

Magnesium is an essential mineral in managing premenstrual syndrome due to its role in regulating neurotransmitter function and hormone balance. It can help alleviate symptoms such as mood swings, irritability, and cramps by promoting muscle relaxation and reducing inflammation. Adequate magnesium intake may enhance overall well-being during the premenstrual phase and support effective treatment strategies for patients suffering from PMS.

Muscle relaxation: Magnesium is a natural calcium channel blocker, promoting muscle relaxation and helping to alleviate menstrual cramps. It interferes with the release of calcium, reducing muscle tension and contraction.

Mood stabilisation: Magnesium has been shown to influence the production of serotonin and may help regulate mood swings associated with PMS. It also modulates the HPA axis, supporting the body's stress response.¹⁴

Hormonal balance: Magnesium supports the metabolism of hormones and helps reduce oestrogen dominance by facilitating the conversion of oestradiol to oestrone, which is needed for hormonal balance.¹⁵



Chromium

Chromium is an essential trace mineral that can play a beneficial role in managing premenstrual syndrome by improving insulin sensitivity and stabilising blood sugar levels. This can help reduce cravings, mood swings, and irritability often associated with PMS. Chromium's effects on mood regulation may contribute to a more balanced emotional state during the premenstrual phase, making it a valuable nutrient for holistic PMS management.

Glucose metabolism: Chromium enhances insulin sensitivity and plays a role in carbohydrate metabolism, which can help manage blood sugar levels and reduce cravings during PMS. It improves the action of insulin in cells, promoting glucose uptake.

Mood regulation: There is evidence suggesting chromium may have a positive effect on mood and reduce symptoms of depression and anxiety by modulating serotonin levels.¹⁶

Reduction of cravings: Chromium supplementation may reduce food cravings and mood swings by stabilising blood sugar levels.¹⁶

DRUG INTERACTIONS

| | | | |
|----------------------|----------|------------------------------------|---|
| Interaction Severity | Major | Warfarin | Dong Quai may increase the risk of bleeding when taken with this drug. |
| | Moderate | Lithium | Dong Quai and Dandelion may increase the secretion of this drug. |
| | | Antiplatelet / Anticoagulant Drugs | Dong Quai, Dandelion and Bromelain may increase the risk of bleeding when taken with these drugs. |
| | | Oestrogens | Dong Quai and Agnus Castus may reduce the effects of these drugs. |
| | | Glucuronidated Drugs | Dandelion may interfere with the way these drugs are metabolised. |
| | | Antihypertensive Drugs | Ashwagandha and Vitamin B6 may increase the risk of hypotension when taken with these drugs. |
| | | Benzodiazepines | Ashwagandha may increase the effects of these drugs. |
| | | CNS Depressants | Ashwagandha may increase the effects of these drugs. |
| | | Hepatotoxic Drugs | Ashwagandha may increase the risk of hepatotoxicity when taken with these drugs. |
| | | Immunosuppressants | Ashwagandha may decrease the effects of these drugs. |
| | | Thyroid Hormones | Ashwagandha may increase the effects of these drugs. |
| | | Antipsychotic Drugs | Agnus Castus may interfere with the effects of these drugs. |
| | | Hormonal Contraceptive Drugs | Agnus Castus may decrease the effects of these drugs. |
| | | Dopamine Antagonists | Agnus Castus may increase the effects of these drugs. |

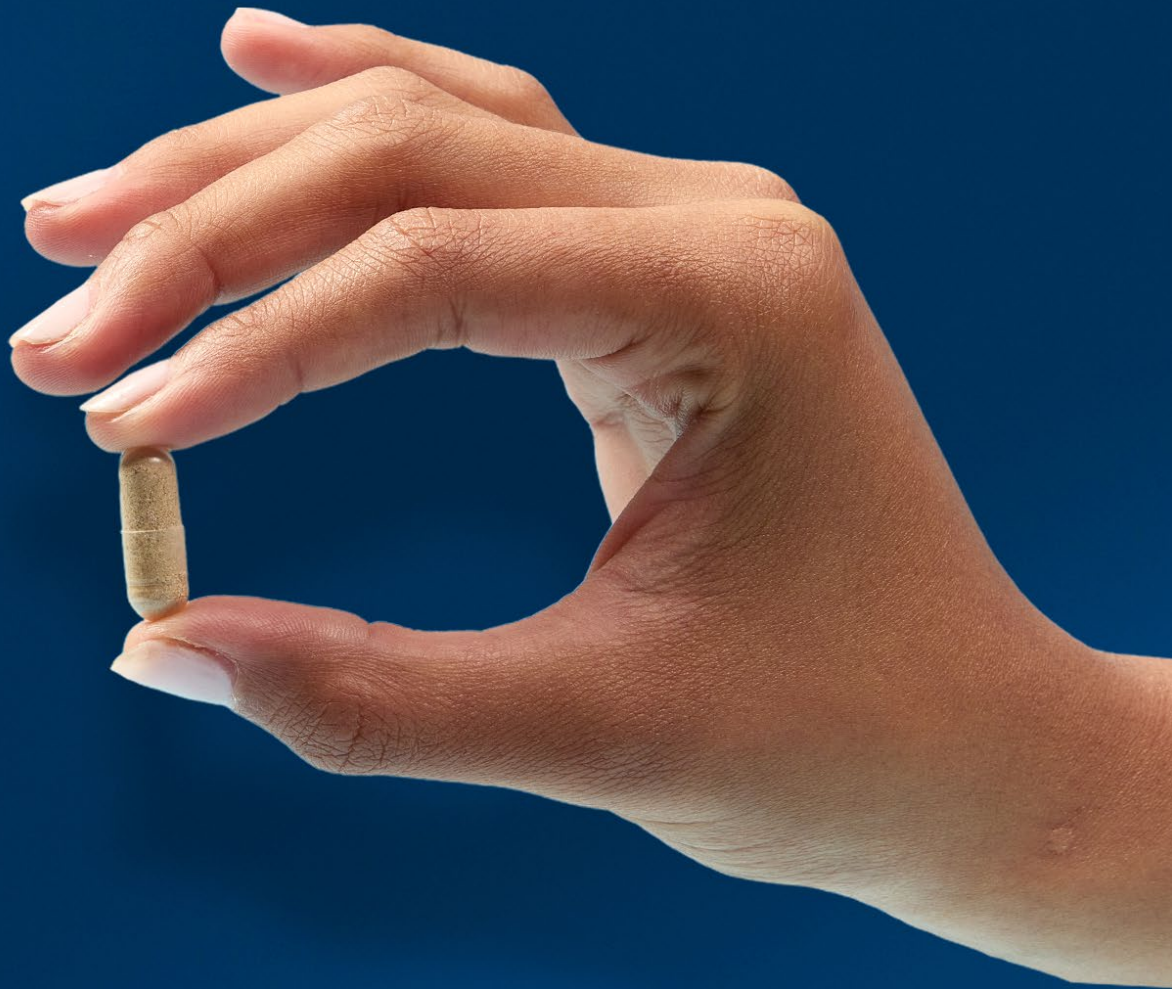
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|--|--|----------------|---|
| | | Metoclopramide | Agnus Castus may interfere with the effects of these drugs. |
| | | Phenobarbital | Folate may reduce the effects of this drug. |

| | | | |
|----------------------|----------|------------------------------|---|
| Interaction Severity | Moderate | Primidone | Folate may reduce the effects of this drug. |
| | | Amiodarone | Vitamin B6 may increase the adverse effects from this drug. |
| | | Bisphosphonates | Magnesium may decrease the absorption of these drugs. Separate the doses by at least 2 hours. |
| | | Quinolone Antibiotics | Magnesium may decrease the absorption of these drugs. Separate the doses by at least 2 hours. |
| | | Tetracycline Antibiotics | Magnesium may decrease the absorption of these drugs. Separate the doses by at least 2 hours. |
| | | Insulin | Chromium may increase the action of this drug. |
| Minor | | Cytochrome CYP1A2 substrates | Ashwagandha may increase the rate of clearance of these drugs. |
| | | Cytochrome CYP3A4 Substrates | Ashwagandha may increase the rate of clearance of these drugs. |

Drug-nutrient interactions have been taken from the Natural Medicines Database, October 2024. Please do your own due diligence before recommending this product to individuals taking medicines.

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