

Progesterone

What is progesterone?

Progesterone is a hormone that's crucial for regulating various functions in the body, particularly in the reproductive system. Here's an overview:

1. **Role in the Reproductive System:** Progesterone plays a key role in the menstrual cycle and in maintaining pregnancy. During the menstrual cycle, it helps prepare the uterine lining for a potential implantation of a fertilized egg. If pregnancy does not occur, progesterone levels drop, leading to menstruation. During pregnancy, progesterone helps sustain the uterine lining and supports the embryo's development.
2. **Production:** In females, progesterone is primarily produced by the ovaries after ovulation (the release of an egg from the ovary). It is also produced by the placenta during pregnancy. In males, progesterone is produced in smaller amounts by the adrenal glands and testes.

Functions of progesterone:

In Females:

- **Regulation of the Menstrual Cycle:**
 - **Luteal Phase:** Progesterone is produced by the corpus luteum in the ovaries after ovulation (the release of an egg). It helps prepare the endometrium (the lining of the uterus) for a potential implantation of a fertilized egg.
 - **Menstrual Cycle:** If pregnancy does not occur, progesterone levels drop, leading to the shedding of the endometrial lining, which results in menstruation.
- **Support of Pregnancy:**
 - **Endometrial Maintenance:** Progesterone helps maintain the uterine lining, creating a suitable environment for a fertilized egg to implant and grow.
 - **Immune System Modulation:** It helps prevent the mother's immune system from rejecting the developing embryo.
 - **Muscle Relaxation:** Progesterone helps relax uterine muscles to prevent premature contractions.
 - **Placental Support:** During pregnancy, the placenta takes over the production of progesterone, which is crucial for sustaining the pregnancy and supporting fetal development.
- **Breast Development:**
 - **Lactation Preparation:** Progesterone, along with estrogen, stimulates the development of mammary glands and prepares the breasts for milk production.
- **Mood Regulation:**
 - **Neurotransmitter Influence:** Progesterone can affect mood and emotional well-being, often influencing premenstrual symptoms and mood swings.
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In males, the role of progesterone is not well known. It is currently believed that it is inflammatory to men.

Progesterone

Progesterone medication:

Progesterone can be administered in various forms for different purposes. Here at Axis Health, we prioritize using *oral micronized progesterone*. Micronized progesterone is a form of progesterone that has been processed to increase its absorption and effectiveness when taken orally. The term "micronized" refers to the process of reducing the size of progesterone particles to improve their dissolution and absorption in the gastrointestinal tract. The advantages of micronized progesterone vs other forms of progesterone are:

- **Enhanced Bioavailability:** Micronized progesterone has better absorption, meaning a higher percentage of the hormone reaches the bloodstream and is available for the body to use.
- **Effective Dosage:** Due to better absorption, lower doses of micronized progesterone may be required to achieve the desired effect.
- **Reduced Side Effects:** Better absorption can lead to fewer gastrointestinal side effects and may result in more stable hormone levels.

How to take oral micronized progesterone:

1. Timing:

- Take the medication at the same time each day to maintain consistent hormone levels. It's often recommended to take it in the evening or before bedtime, as progesterone can have a sedative effect that may help with sleep.

2. Administration

- **Swallowing the Capsules:** Take the oral micronized progesterone capsules with a full glass of water. Swallow them whole; do not crush or chew the capsules unless specifically instructed by your healthcare provider.
- **With or Without Food:** Micronized progesterone can generally be taken with or without food. However, if you experience gastrointestinal discomfort, you might find it helpful to take it with food.

3. Consistency

- **Daily Routine:** Take the medication every day as prescribed, without skipping doses. Consistent use is crucial for maintaining stable hormone levels and achieving the desired therapeutic effects.

4. Side Effects and Monitoring

- **Be Aware of Side Effects:** Common side effects of oral micronized progesterone can include dizziness, drowsiness, mood changes, and gastrointestinal issues. Report any severe or persistent side effects to your healthcare provider.
 - **Groggy.** If you are too groggy the next morning, decrease the dose.
 - **Not sleeping well.** If you are not getting a restful night's sleep as you would like, we may need to consider increasing the dose.
- **As your body adjusts to the progesterone, you may experience:** bleeding/spotting and breast/nipple tenderness. This should even out with time, if not we may need to adjust the dose of progesterone.

5. Storage

- **Proper Storage:** Store the capsules at room temperature, away from moisture and heat. Keep them in their original container and out of reach of children.

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Benefits:

1. Menopause Symptom Relief

- Reduces Symptoms: It can alleviate menopausal symptoms such as hot flashes, night sweats, mood swings, and insomnia.

2. Regulation of Menstrual Cycles

- Improves Cycle Regularity: For individuals with irregular or absent menstrual cycles, oral micronized progesterone can help regulate the menstrual cycle and promote more predictable bleeding patterns.

3. Support for Fertility Treatments

- Luteal Phase Support: In fertility treatments, oral micronized progesterone supports the luteal phase of the menstrual cycle, which is important for the implantation and maintenance of a pregnancy.

4. Prevention of Endometrial Hyperplasia

- Protects the Uterus: Oral micronized progesterone can help prevent endometrial hyperplasia, a condition where the uterine lining becomes too thick, which can be a risk factor for uterine cancer.

5. Improved Sleep Quality

- Helps with Sleep: Due to its natural sedative effect, oral micronized progesterone can aid in improving sleep quality and helping with insomnia, especially in menopausal women.

6. Mood Stabilization

- Mood Regulation: It can have a positive effect on mood and emotional well-being, helping to reduce symptoms of premenstrual syndrome (PMS), peri-menopausal mood swings, and post-partum depression.

7. Cancer Protection

- Adequate levels of progesterone have protective effects against endometrial cancer, breast cancer, and ovarian cancer.

Typical Timeframe for Noticing Improvements:

1. Menopause Symptoms

- Initial Relief: Some individuals may begin to notice improvements in symptoms such as hot flashes, night sweats, and mood swings within a few weeks of starting oral micronized progesterone.
- Full Effect: It may take up to 1-3 months to experience the full benefits and achieve significant symptom relief, as the body adjusts to the new hormone levels.

2. Menstrual Irregularities

- Cycle Regulation: For those using oral micronized progesterone to regulate menstrual cycles, changes might be observed within 1-2 cycles. This means you might notice more regular periods after a few months of consistent use.

3. Fertility Treatments

- Luteal Phase Support: When used for supporting the luteal phase in fertility treatments, improvements in conditions such as luteal phase defect can be noticed within the same cycle or treatment period. If pregnancy is achieved, the benefits of maintaining a stable hormone level may be observed throughout the early stages of pregnancy.

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Typical Timeframe for Noticing Improvements continued:

4. Sleep and Mood

- Sleep Quality: Improvement in sleep quality and reduction in insomnia may be noticed within a few weeks of starting the medication, though it could take longer for some individuals.
- Mood Stabilization: Effects on mood, including reductions in symptoms of premenstrual syndrome (PMS) or mood swings, might take several weeks to become noticeable.

5. Prevention of Endometrial Hyperplasia

- Protective Effect: The protective effect of oral micronized progesterone against endometrial hyperplasia is more about long-term prevention. Benefits are often evaluated over several months of use in conjunction with estrogen therapy.

General Factors Affecting Improvement Timeframe:

1. Dosage and Formulation: The specific dosage and formulation prescribed can impact how quickly improvements are noticed.
2. Individual Response: Each person's response to medication can differ based on their unique health conditions and hormonal balance.
3. Consistency: Regular and consistent use of the medication as prescribed is crucial for experiencing the benefits and for the medication to have the desired effect.
4. Quality: the quality of medication can vary greatly from a compounding pharmacy and a retail pharmacy.

