INTRODUCTION

While the term estrogen refers to a class of compounds in the body (estradiol, estrone and estriol), progesterone refers to a single compound produced by the ovary. Every month when an egg is released by the ovary (ovulation), the spot where the egg came from turns into a yellow spot called the corpus luteum. The function of the corpus luteum is to produce progesterone. This production starts just after ovulation and generally lasts for around 2 weeks. At that point in time the production of progesterone ceases and it is the dropping levels of progesterone that are the main signal to start the menses. Both estrogen and progesterone support and maintain the lining of the uterus (endometrium) and when these hormone levels drop very low it removes the support to the endometrium and thus it is shed from the body. When a new egg starts to develop (and produce estrogen) then the lining starts to grow all over again. So, the developing egg (in the first two weeks after the menses) produces estrogen and when it is released the corpus luteum produces progesterone (in the two weeks prior to the menses).

Progesterone has many effects on the body’s tissues. The main role of progesterone is to prepare the lining of the uterus to receive and grow a fertilized egg. Thus the name “pro”, meaning in favor of, and “gesterone” referring to gestation which is pregnancy. If a pregnancy occurs the corpus luteum continues to produce progesterone (at much higher levels) beyond its normal 2 weeks. In fact it is the job of the corpus luteum to support and maintain the pregnancy for the first 3 months at which time the placenta is able to produce its own progesterone. Pregnancy loss can occur if a corpus luteum does not produce sufficient progesterone thus triggering a menses even though a conception has occurred. This is called a “corpus luteal defect” and is treated with supplemental natural progesterone.

Estrogen and progesterone always function to balance each other. If that balance is altered than irregular menses and other symptoms can occur. This does not mean that the hormone levels are out of the normal range on a blood or saliva test. It means that the delicate balance may be shifted in the direction of “estrogen dominance” and this can result in symptoms. This commonly occurs at the time around menopause (perimenopause).

REASONS FOR USING NATURAL PROGESTERONE CREAM

Common reasons for the prescription of natural progesterone cream include PMS, perimenopausal and other menstrual irregularity, treatment of menopausal symptoms (like hot flashes and night sweats), endometriosis, simple benign ovarian cyst and hormone replacement therapy. There is some evidence to suggest that it may also be beneficial for other menopausal problems such as decreased bone density (leading to osteoporosis) though more research is needed in this area. Natural progesterone is made in the laboratory starting with a compound found in wild yam and soybeans called diosgenin. It is exactly like what your body makes.

There are several advantages to using a cream as opposed to a tablet. Many medications are given through the skin (e.g. estrogen patches, nicotine patches, scopolamine patches for motion sickness, and nitroglycerin heart medication to name a few). Progesterone is also absorbed through the skin into the bloodstream. When anything is taken by mouth (food or drug) it is absorbed into a blood stream that first goes directly to the liver before it is delivered to the rest of the body. Much of the progesterone is inactivated by the liver and thus we must use much larger doses when using oral tablets as opposed to skin creams. Absorbing it through the skin into the general circulation (as opposed to first going to the liver) is much more like the way the ovary naturally secretes progesterone.
THE DIFFERENCE BETWEEN NATURAL PROGESTERONE AND SYNTHETIC PROGESTINS

Natural progesterone means that it is exactly like the progesterone produced by the ovary (i.e. bioidentical). Synthetic progestins are compounds that are made to be similar to the bodies progesterone with many actions similar as well. In my experience women have MANY more side effects on the synthetic progestins, such as weight gain, edema (water retention), headaches, skin changes (acne) and mood swings. There is some preliminary research evidence that synthetic progestins may not be friendly to the hearts blood supply (the coronary arteries) and may have a more adverse impact on cholesterol balance. While synthetic progestins have many disadvantages they also have a few advantages over natural progesterone. They are readily available in any pharmacy, they are very inexpensive, they only need to be taken once a day and they are more effective at stopping heavy dangerous bleeding. The most common synthetic progestins prescribed are medroxyprogesterone acetate (brand name Provera) and norethindrone (brand name Aygestin).

To me, the most compelling reason to use natural progesterone is that it is what the body makes. I firmly believe that the hundreds of thousands of years of natural evolution of this substance makes it the substance of choice when using over a long period of time. I feel it is safe with less side effects and more beneficial in its actions.

WHICH CREAM AND WHAT DOSE

Regardless of the product the progesterone is exactly the same. The difference between different creams is the dose (how much) of progesterone and the makeup of the cream which is the vehicle to carry the progesterone to the skin. Most of the over the counter products contain 400 - 800 mg per ounce which translates to around 14 to 28 mg per gram (which is usually equivalent to ¼ teaspoon of cream). Using this amount twice a day is usually a good starting dose for most women. Prescription creams can be made in any concentration and I often will prescribe creams stronger than the over the counter products.

The normal daily ovarian production of progesterone is in the range of 20 - 30 mg (coincidentally the approximate dose in over the counter products). During pregnancy the production can increase to the range of 500mg daily.

Three good over the counter products are Progest, Restored Balance and Angel Care. I am sure there are others as well. Find the one you like because you will be more likely to use it. Some worry about settling of the progesterone in a jar (as opposed to a tube) so simple give it a good stir every now and then. I have found the best prescription cream products to be from Women’s International Pharmacy in Wisconsin (phone # 1-800-279-5708). Women’s uses a natural safflower oil base that is very acceptable to my patients. All the local pharmacies I have investigated use a cream base that is less pleasant to use.

“Wild Yam Creams” may or may not have progesterone in the product. There may be benefit from using wild yam as an herbal supplement but this is completely different from using progesterone creams. Just because a product lists progesterone as an ingredient does not mean it has a satisfactory amount in the cream. In fact none of the over the counter products lists the amount of progesterone present within the cream!

HOW LONG DOES IT TAKE TO WORK?

We are all used to quick action of medicines. The pain pill works in one hour and the antibiotic the next day. Hormones are very different in how they act in the body. They actually change the tissues and cells of the body and that takes time. Persistence and patience are key virtues in working with these products. While the progesterone is absorbed very rapidly into the body the full beneficial effect of the cream may take several months to manifest. Most women feel an
immediate benefit when using the cream but for maximal benefit I recommend a 3 month trial of therapy. That should be long enough to evaluate benefit, or lack thereof, from use of the cream.

ARE THERE ANY DANGERS TO USING THE CREAM?

The over the counter natural progesterone creams are very safe and effective products. Very few medical studies have been done on their long term use. There are several areas of caution in their use: If you are having frequent periods (less than every 3 weeks) or prolonged periods (lasting longer than one week) you should have a physician evaluation to determine if progesterone therapy is the appropriate approach to your problem. This is especially true in the years leading up to menopause. ANY POSTMENOPAUSAL BLEEDING REQUIRES PHYSICIAN EVALUATION. I see many women who are using the cream wrong and thus have made their menses irregular. Using the cream in the first two weeks after the menses can cause this (even though sometimes I do prescribe it to be used in that way for specific reasons). I see many women in the office with severe complaints from stopping established hormone replacement therapy without adequate guidance. This must be done very slowly with good physician support. Monitor the problem you are treating to determine if you are successful. If symptoms are relieved you know things are better! If you are using the cream for your bones, than follow their status with DEXA bone density scans and believe the results. If better, great! If worse than accept that and add additional therapy. If you have thyroid problems or are on thyroid medication this should be monitored while instituting the cream. Using the cream for problem that requires medical evaluation is dangerous and a mistake. Side effects can occur from using progesterone cream. They are rarely encountered with the over the counter strength creams, though sometimes they do occur. They may include bloating, weight gain, breast tenderness, irregular bleeding, acne, mood disturbances or headaches. Nothing works for everyone. Honor your distinct and individual body and personality.

HOW TO APPLY IT (Dr. Clofine’s recommendations)

Use your cream consistently without missing any doses. Use a measuring spoon to accurately dispense your dose of cream. The amount you use is a specific prescription. One of the advantages of creams over tablets is the ease of adjusting dose. Apply the cream over as wide an area of skin as possible. Spread it around. Apply the cream to thin areas of skin not over lying fatty tissue. This way it tends to be absorbed into the bloodstream as opposed to hanging out in the fat (though there is no evidence to believe it is dangerous to apply it over fatty tissues). Apply it to the feet, front of the lower legs, back of the knees, to the hands and inner arms, to the neck and upper chest. Some women like to apply it to wrinkle lines on the face. Avoid the breasts, abdomen, buttocks and thighs. If you get a rash or irritation it is probably a component of the cream and not the progesterone. Try a different product.

WHEN TO APPLY IT

Women having regular menstrual cycles (i.e. treatment of PMS)

When discussing use of the cream we speak about YOUR CYCLE as opposed to the calendar days. Day one is the first day of your menses and you start counting from that day. First day of every menses you start counting at day one again. Most cycles last 28 days with ovulation around day 12.

Apply ¼ to ½ teaspoon twice a day from days 12 - 26. In some cases we continue the cream till onset of the menses though this may create some problems as continued use of the cream may delay the onset of menses. During the use of cream from days 12 - 26: If spotting occurs, continue cream use on schedule. If an early menses occurs, stop the cream
and make that day one of next cycle. If you do not get a period, use a hypothetical day one when you expected your menses, and stay on schedule.

Post menopausal women

Cream may be used twice daily on a regular basis. Some have suggested taking a break week each month to allow the body to go to baseline and thus respond better to the cream. This is fine to do. Some women feel worse on their week off. For them I generally recommend continuous daily use without a break.

Other situations are best addressed with professional consultation.

The following statements and/or supplements have not been evaluated by the FDA. The FDA suggests that you consult with a health care professional before using any dietary supplement. This product is not intended to diagnose, treat, cure or prevent any disease.