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Mark H. Street, DC 108 Wikiup Drive Santa Rosa, CA 95403

Dear Mark,

Thank you for sending me Dr. Gorski's statement concerning "Wild Yam Cream" and its threat to women's health. I had heard these comments before but had never seen it in writing. The following are my comments.

Dr. Gorski chose "Natural efx" to criticize. I also would criticize that cream. It is not a cream I could recommend. It contains slightly less than 10 mg of progesterone per ounce, as you will see in the listing in the new printing of my book, What Your Doctor May Not Tell You About Menopause. This small dose is ridiculously inadequate if one wishes to obtain 10-15 mg of progesterone per day. The cream also contains several phytoestrogens and even advertises that it will make your breasts grow. Anyone reading my book would know that I regard extra estrogen with great caution. Extra estrogen should only be given to women who are (1) truly estrogen deficient and (2) are well supplied with physiologic levels of progesterone to counter the side effects of unopposed estrogen.

Dr. Gorski admits "that hormones play a part in the conditions mentioned. He doubts, however, that real progesterone can help alleviate them. That merely means he has not tried it yet.

He goes on to say that "progesterone, in any form, may cause side effects" but he does not bother to tell us what they are. The statement is also confusing since we do not know what he means by "any form." Let us hope that he knows there is only one progesterone. It is not a class name such as the word *estrogen* is. It is the name of a very specific molecule. Perhaps he means "in any manner of delivery system" or, possibly, "in any dosage." There he might have a point. Oral progesterone is not recommended since it is less effective and is therefore often prescribed in unphysiologically high doses. Also, in its passage through liver, it is metabolized into three different pregnene- compounds which are not progesterone and have different effects than progesterone itself. Some of these effects will be interpreted as side effects but they are not side effects of progesterone but are effects of the progesterone metabolites when given in such large doses. The creams I recommend provide 12-20 mg of progesterone per day and this will not cause side effects.

Yes, Dr. Gorski is correct when he states that progesterone, like cholesterol, is not in the Mexican Wild Yam (or any plant). And, yes, the plant fats are used in the commercial synthesis of real progesterone. As I explain in my book, humans synthesize progesterone from cholesterol. The intermediate step is the conversion of cholesterol into pregnenolone which is a function of intracellular mitochondria. Pharmaceutical companies synthesize

the same molecule from the fats of plants, a process discovered by Dr. Russell E. Marker in the mid-1930's. Mexican Wild Yam is used for commercial synthesis of progesterone since it contains such an abundant concentration of the fats, especially diosgenin. Soy beans are also being used; it contains the same fats. Scientists, not having mitochondria to work with, are unable to synthesize progesterone from cholesterol. Fortunately, they can use Professor Marker's degradation technique to produce it from plant fats and oils.

Lack of cholesterol is rarely the cause of progesterone deficiency: progesterone deficiency it is most often due to dysfunctional ovarian follicles that are unable to synthesize it in adequate quantity.

Dr. Gorski raises the specter of uncontrolled production of the many steroids for which progesterone is the precursor. He apparently is unaware that production of these other steroids is controlled by the body's feedback system via the hypothalamus and pituitary. There simply is no evidence that restoring normal physiologic levels of progesterone will adversely effect the production of other steroids. He then admits that synthetic progestins can not be used in normal biosynthetic pathways in the body. This is important because it is the basis of what is wrong with the synthetic progestins. They are foreign compounds that can not fulfill the normal roles of progesterone and, unlike progesterone, they convey a wide array of adverse side effects. Likewise, he fails to mention that these foreign progestins occupy progesterone receptors and, being poorly metabolized, are more tenacious in their bonding with progesterone receptors, thus preventing real progesterone from working. That is why birth control pills are so effective in preventing pregnancy.

Yes, I agree with Dr. Gorski that "Natural efx" should not be used. But that has nothing to do with the any discussion of transdermal progesterone. One can only hope that Dr. Gorski will someday read my book and have the intelligence to try it on patients who in need of the benefits of real progesterone. The good creams are listed in Group 2 on page 271 of my book.

Best wishes,

John R. Lee, MD