

## **What Would Happen if Men Lost their Testosterone for a Few Days Each Month? (What Every Woman Needs to Know About PMS)**

*It's not the hormones...it is the departure of hormones as our cycle "resets."*

Last night I asked my 15 year old son if he knew what PMS is; he said, "Of course: something with your period."

He then struggled a bit with the acronym. I looked at him in his 15-year-old frame that has developed seemingly overnight. I couldn't help but wonder how he would handle it if once a month his beloved testosterone plummeted for a few days. Just thinking about the hormonal chemistry of a man and applying a very cyclic nature to it would really open some eyes to the priorities of Mother Nature.

It is always of interest to me that my patients blame their hormones for so many changes when usually it is the *decline* in the hormones that's behind the complaint. Yes, we women are somewhat manipulated by our fabulously intricate hormonal chemistry. I say somewhat, as scientific enlightenment has allowed us to take more of a proactive role in understanding the post pubertal ups and downs, but still so much remains a mystery.

Wikipedia does a pretty good job at examining PMS. I have to admit that the quoted theory that mood changes occurring after unfertilized ovulation may be an adaptation to move on to a more fertile man-- is amusing, but inaccurate. The female body *does* assume for almost two weeks out of every cycle that a woman is indeed pregnant. It is only after 12-14 days post egg release that the ovary gives up hope, and lets the hormones fall in order to signal another cycle to begin again. This doesn't leave much time for forming a new relationship.

Why is the cyclic withdrawal of hormonal support often problematic? Even more confusing is that before puberty there are very few sex hormones circulating and yet the brain doesn't miss them. In fact, many young girls are more confident and independent before the power of estrogen arises from our ovaries; so why the negativity? The answer is in the chemistry of the brain. The hormones prop up social behavior. Mother Nature doesn't leave our inclination to "hook up" to random chance...it is encouraged by tiny amounts of very powerful molecules that set up rewards, a.k.a. Dr. Pavlov's theory. When the hormones fall, as they do usually 21 to 25 days after the start of a period (if she is not pregnant), the reward chemicals are withdrawn suddenly, as if to say, "Try harder next time." Yes, estrogen, testosterone and progesterone elevate feel good chemicals in the brain such as dopamine, serotonin, and endorphins. When these magic molecules depart, they are **solely** missed by the brain...a mini withdrawal can ensue that feels like we're being cheated. This shift affects everything from verbal ability, to memory, mood, libido, metabolism, complexion, energy level, blood sugar regulation, pain tolerance, and so on.

**How to balance the withdrawal and pump up the feel good neurotransmitters:  
(For more information see: <http://venusweek.com/home.asp>)**

- Eat phytoestrogens (plant estrogens): Edamame, hummus, nuts, nut butters, tofu, flax seeds and practically any source of plant protein
- Exercise: combine cardio and resistance types
- Meditate, or practice yoga, Pilates, or any discipline that inspires focus and mindfulness
- Take your supplements: A multivitamin, calcium (at least 1000 mg a day in divided doses), vitamin D (1000 IU a day), Omega 3 fatty acids (EPA dominant), up to 3000 mg a day during low hormone days
- Chocolate can help; the polyphenols in dark chocolate (at least 70% cocoa solids) have estrogen-like activity, but no more than 1 ounce a day.
- Sprinkle on the cinnamon; a half-teaspoon a day can help offset the negative metabolic effects of dropping hormones

Some of my patients take serotonin-enhancing medications (like some antidepressants), just “that time of the month.” Often hormonal contraception can help, such as the pill, the ring, or even the progestin containing IUD. There are many tools, but success starts with a woman realizing what’s going on, and speaking to her doctor.

My 14-year-old daughter takes great pride in her cycle related moods. Perhaps it is her knowledge based on her mother’s years of explaining them over and over, or perhaps she enjoys the power of being a little “different” from day to day. Either way, she handles it and she wouldn’t trade her XX gonads for the world. She also knows exactly what to do if she’s feeling a bit deserted by her hormones: she exercises...more. Yes, there is always a way. Exercise elevates all of the magic brain reward chemicals that descend with PMS. No, it doesn’t keep her from noticing the changes, but it helps...a lot. And when she can’t exercise she takes in a few deep breaths, trying to mimic the positive mindfulness that she hears me go on and on about. When *that* doesn’t work she goes for the ice cream, which always manages to get serotonin up.

It is clear that even within the menstrual cycle, Mother Nature giveth, and she taketh away. Interestingly, our brain becomes accustomed to the aesthetic of reproductive facilitation, and some of us want to keep it around not only all month, but until death if possible. For others, the absence of hormonal manipulation of the mind may be a relief, allowing a metamorphosis to a less distracted state. Whatever the case for the individual understanding the hormonal cycle is imperative for maximizing our physical and mental health, and the younger the woman is when she is enlightened, the better off she will be.