

## *It Takes Two!*

### Balanced Estrogen and Progesterone Actions Needed for Optimal Women's Health

Study by the University of British Columbia's (UBC) Centre for Menstrual Cycle and Ovulation Research (CeMCOR, [www.cemcor.ubc.ca](http://www.cemcor.ubc.ca)) and Endocrinology Professor Jerilynn C. Prior asserts that "[progesterone is just as important as estrogen](#)" for women's optimal health.

This important "[paradigm shift](#)" is published in *Drug Discovery Today—Disease Models*. Prior declares that balanced ovarian hormones — estrogen and progesterone (*not progestin*)— are necessary, not just for young women's fertility, and ovulatory menstruation, but also to prevent osteoporosis, heart disease, breast and endometrial cancers in older women.

Balanced progesterone and estrogen are needed, she says, since each has a different "job." Estrogen is a powerful cell growth stimulator, while progesterone prevents over-growth and promotes cell maturation and "differentiation". In bone, Dr. Vanadin Seifert-Klauss, professor of gynecological endocrinology, Technical University of Munich says, "estrogen prevents bone loss, that could produce osteoporosis, while progesterone stimulates new bone formation".

Another example of this partnership is the heart's electrical impulses. "Estrogen lengthens the QT interval that may lead to fainting or an abnormal heart rhythm, while progesterone shortens it", according to Drs. Andrew Krahn and Tara Sedlak, UBC cardiologists. They are working with CeMCOR on the large, important Vancouver, Canada [Menstruation Ovulation Study \(MOS2\)](#) to confirm this.

Prior was invited to edit this Women's Health special issue of *Disease Models* by editor-in-chief, Michelle Epstein MD, PhD, a Canadian MD, former USA's NIH researcher now doing basic science research at the U. Vienna, Austria. This international-authored issue also includes articles advancing our understanding of hot flashes, PCOS treatment, cycle variability and bone health.

Prior further asserts that today we, as a society, tend to focus on "*estrogen* as what makes a girl, a girl." She points to inaccurate menstrual cycle diagrams *with no units of measure* showing estrogen's midcycle peak as large and progesterone's later peak as smaller. Research data however, document that estrogen peaks at 240% above its baseline during flow while progesterone rises 1400%! A menstrual cycle diagram that *omitted progesterone* was published by reproductive expert authors as well as approved by both reviewers and editors in a 2015 article in the prestigious *Nature Reviews—Disease Primer* journal.

CeMCOR's new concept transforms optimal women's health—e.g. "how we understand and treat far-apart cycles in teen women" says Prior. "We must see these cycles as immature and lacking progesterone not just as 'estrogen deficient'. [Cyclic progesterone therapy](#) facilitates cycle recovery and builds bone. On the other hand, "treatment" with the commonly used Pill [threatens bone health](#) and delays cycle recovery (Falsetti, 2002, *J. Clinical Endocrinology and Metabolism*).

Dr. Anne Gompel, Parisian gynecology professor emerita said, "I am fully convinced that Progesterone is a major partner of Estrogen," adding that we urgently need to research pre-menopausal estradiol-progesterone balance related to the risks for breast cancer risk.

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