NATURAL HORMONE REPLACEMENT IN WOMEN

By Larry Durrant, Pharmacist

The human body is truly one of the most amazing creations I have witnessed in this life. It has the ability to convert thousands of food sources into energy to run its many life preserving functions. If attacked by one or many hostile germs, it mounts an attack which usually prevails. If need arises to fight or flee from a dangerous place, it is able to literally shut down body systems it doesn't need and channel energy to muscles and other more important body parts. It is able to rationally think through complex problems and come up with both simple and also very complex solutions. If injury occurs, it begins significant rebuilding steps immediately while also compensating other body parts to increase their work load. The brain alone is more complex than any supercomputer in existence. From tiny glands such as the hypothalamus and pituitary the complex feedback system of the hormone messenger system is controlled. If for instance, the thyroid hormone concentration is lower than is needed, the hypothalamus releases TRF which stimulates the pituitary to release TSH which in turn stimulates the thyroid gland to release T4 which is then converted to T3, the active thyroid hormone. These steps are mediated by hundreds of factors ranging from environment and body temperature to the presence or absence of enzyme systems and other neurotransmitters designed to keep us alive and vital for a century. Only when the body is abused or rules of health are not followed, do the majority of health problems begin to demand attention from the person and deprive them of the ability to perform desired tasks unimpeded.

As women age, it is common to experience a decline in hormone levels. This can result from excessive stress, poor diet, injury, or the constant exposure to the thousands of toxins in the home and environment without care given to detoxify the body on a regular basis. It has become evident that it is extremely important to pay more than casual attention to diet and exercise, avoiding the harmful hydrogenated vegetable oils, trans-fatty acids, sugars and excessive carbohydrates which create numerous conditions and ailments from diabetes to cancer. The hormone imbalance that ensues usually begins with the decline of the adrenal glands whose function is to aid the body in dealing with stress by making many of the hormones and releasing cortisol. Eventually, the adrenals can burn out if not supported by specific nutritional entities and this will produce symptoms very similar to thyroid dysfunction.

In addition, a frequent complaint in women is yeast infections and indigestion symptoms ranging from constipation, gas and bloating to diverticulitis and chrones' disease. This can be greatly helped by taking probiotic formulas containing lactobacillus and bifidobacteria. This helps restore healthy levels of the beneficial bacteria in the intestinal tract. The intestines are involved in 3 main functions that even many physicians are unaware of. When the intestines are working properly, they are influenced by the good bacteria to release Immuneglobulin G (IgG) which is responsible for stimulating the immune system function. This prevents frequent colds and illnesses. If the IgG is not produced, the White Blood Cells become the front line defense of the immune system instead of the usual job of mopping up what's left over. This results in a severely compromised immune system that can't fight minor infections, let alone the more serious invaders such as streptococcus and cancer. The second function of the intestinal tract is the production of 95% of the body's' serotonin (the feel good, antidepressant neurotransmitter). As this declines, physicians prescribe Prozac and other SSRI's to keep what little serotonin is left over around longer to do more work, but depression is difficult to get on top of if serotonin is not brought up to normal values. The third function of the intestines is to effectively break down the foods ingested into smaller nutrient units that the body can easily convert into ATP, the cellular energy unit. If bad bacteria is the major inhabitant of the intestines, these 3 processes become sluggish if not shut down entirely.

If intestinal flora is OK and adrenal function is OK, the next thing responsible for a host of problems and symptoms is thyroid dysfunction. This is difficult to accurately diagnose, since many times the test results give normal values, but all the symptoms say otherwise. There are

many things which mask test results. I have written a detailed explanation on this coupled with a thyroid self assessment test. It is important to assess adrenal function before looking at the thyroid condition.

The next important area of multiple problems is the hormone imbalance issue. For years, the standard treatment has been the prescribing of Premarin (a combination of horse estrogens) and Provera (a synthetic progesterone-like drug) to relieve the menopausal symptoms of hot flashes, vaginal dryness and PMS. Now after years of clinical studies, we know that these treatments unraveled many of the important functions accomplished by the natural human versions of these toxic synthetic compounds. In fact, in 2001 the Womens' Health Initiative study looking at the use of Premarin and Provera were halted when it was demonstrated that these drugs were creating cancers and other terminal illnesses in women to a much larger extent when compared to those in the 'placebo' group taking nothing. The data actually has been around for 15 years, from earlier research, but was not widely publicized, mainly to preserve the \$8 billion in annual sales these companies have enjoyed since their development. When we look at hormone levels, if estrogen, progesterone, testosterone, DHEA, cortisol, insulin or any of the other hormones are out of balance, it makes much greater sense to restore these to the proper values with the same human natural version. In talking to physicians using the natural, or 'bioidentical' hormones, their experience has been very positive and cancer incidence is negligible. To give a similar, but different synthetic substance, the body will see it as foreign and not respond to it as well as its own hormones. The side effect profiles on these synthetic hormones are also very disturbing. For example, it has been clearly demonstrated that Premarin and Provera throw the body into an estrogen dominant condition which leads to the production of O-quinolones, the culprits which cause DNA alterations leading to cancer.

Natural Progesterone is responsible for several important processes. It stimulates the osteoblasts in the bone to lay down new bone material (after the osteoclasts remove the old bone material). This keeps the bones recycling about every 4 months and retains the strength, density and pliability. The pharmaceutical companies promote their version of solving the osteoporosis problem by encouraging physicians to prescribe drugs which shut down the osteoclasts, keeping the old bone material from being reabsorbed and the bone made ready for remineralization by the osteoblasts. If progesterone is not available to stimulate osteoblasts, bone density becomes a problem and the woman will begin to decrease in height as the spine slowly compacts down. Provera will not stimulate osteoblasts at all. Progesterone will also counter the effects of excessive estrogens. Estrogen is a common term that I refer to as meaning the 3 human estrogens, estradiol, estrone and estriol. If estrogens are dominant and progesterone is absent, several unhealthy scenarios develop, the biggest one being the stimulation of cell growth which does not shut off (cancer usually). Progesterone will turn this off naturally- a process called apoptosis. In fact, Progesterone has been shown to be a potent cancer fighter via at least 2 separate mechanisms that it exerts directly on the cancer cells. Progesterone also is involved in neurotransmitter function. This lessens the incidences of depression and mood swings that are prevalent in menopause. In delivery, the rapid drop in Progesterone with the shedding of the placenta without replacement could be the reason of the reported incidences where the mothers have experienced such advanced depression, they displayed extremely uncharacteristic behavior such as harming their children or loved ones. Progesterone also works in the brain to induce sleep. In fact one of the few side effects of Progesterone is drowsiness which is not a problem when taken an hour before bedtime. Progesterone deficiency is one of the reasons that pregnancy doesn't happen in several young women. Progesterone is known as the hormone of progestation (or pregnancy) and is the hormone responsible for the holding together of the uterine lining as it is laid down at the first of the cycle. Without it, the egg wouldn't be able to implant and develop. During pregnancy, progesterone levels rise to levels much higher than normal, thought by many to be a protector from abnormal developments in the baby. Progesterone is produced by the corpus luteum which detaches from the embryo after it is released from the ovaries. Unlike estrogen which is usually produced in adequate amounts from the brain and other organs, progesterone production is negligible after the periods stop. Then over time, the women develop

the classic symptoms of progesterone deficiency, i.e. insomnia, depression, shrinking height, osteoporosis, and a greater likelihood of cancer. Progesterone can be prescribed by physicians in suppositories, creams or capsules. It can be purchased without a prescription in the cream form. This is very safe and in light of the above discussion, it is a very good idea to prevent some serious health problems now and also later in life. The usual dose is a pea-sized amount rubbed into the wrist or other blushing area 1 hour prior to bedtime.

Testosterone may or may not be a problem in the woman. It is, like progesterone, an osteoblast stimulator and builds new bone. It also is helpful in improving libido in the woman. Usually the woman feels much better and more energetic on Testosterone, but it does have drawbacks such as acne and when given in higher doses can be converted to Estradiol which would worsen estrogen dominant symptoms described earlier. It is recommended to prescribe in doses of 0.5 to 1mg daily when warranted.

These womens' health issues and solutions have been debated and researched for years and it is my opinion that if we just look at the facts as I have presented, the lions share of disease and illness that we see can be avoided by actively learning the rules of good health and putting them into practice. The medical community as it is now in the United States cannot be our only source for medical knowledge. Physicians are in large part brilliant men who are compassionate about their patients and devote their lives to doing their best to solve their problems. There are limits to the time available to doctors to learn all about these other issues. After focusing on their demanding daily practice, there is little time to delve into a new field and they usually opt to go with the time efficient practice of getting their required Continuing Medical Education (CME) credits with the established courses provided by the pharmaceutical companies. It is too bad that although much of the information and research is remarkable and beneficial, there are many therapies and medicines that solve serious problems which are overlooked. With the internet and easy accessibility of the public to medical journal studies and databases such as www.google.com and others, a woman newly diagnosed with breast cancer or diabetes or depression, can often find cures for the problem just looking at the recent work done in that field. There is absolutely no good reason to suffer for years with an ailment without looking into available alternatives. Doctors should be asked for other remedies, internet searches should be looked at, and also pharmacists (especially compounding pharmacists) should be consulted for what they've seen used both locally and nationwide. Generally, improvements can be got from these sources. The goal of every woman should be to learn all she can of these issues in order to enjoy a healthy life and avoid all the problems discussed above so that life's' energies can be spent enjoying family, friends, and the world around her; not dealing with sickness and suffering except in helping others with their problems. If you have further questions on any of this material, please feel free to call or come in for a visit.