

Natural Hormone Replacement and Health in Men

By Larry Durrant, Pharmacist

ANDROPAUSE-The progression of degenerative diseases in men due to hormone imbalance and lifestyle choices.

In the United States, there is an increased awareness of the incidence of breast cancer, osteoporosis, heart problems, thyroid and adrenal deficiencies as well as obesity and insulin resistance in women. As we've addressed their problems, the overwhelming question is, 'What about my husband who has increasing health issues as well?'

Andropause is the general term that has been given to the gradual decline in men's health and a majority of men see their health decline as a consequence of age with many issues out of their hands. These health issues point to the importance of looking at the hormonal condition and lifestyle choices that men are making. As men age without aggressive attention to nutrition, exercise, and hormonal balance, they accumulate symptoms of different systems breaking down from being overtaxed for years. For example, those who stop on their way to work every morning for their 2 donuts and pint of chocolate milk and have a majority of high carbohydrates and low proteins with no thought of vitamins and minerals will eventually develop insulin resistance (decreased response to insulin) which stimulates the pancreas to step up its already elevated insulin production. Eventually the gland will burn out and require the man to administer insulin shots to himself. Also, along this road, he will have developed an obesity problem, atherosclerotic plaques in his blood vessels that could cause clots and strokes. Eyesight will decrease due to retina damage and all the inflammatory pathways connected to arthritis may flare up. The bacterial flora along the intestinal tract will be affected as well by growing fewer colonies of the beneficial bacteria and multiplying the toxic bacterial strains which in turn dramatically decrease immune system function leading to continually occurring illnesses, allergies and eventual cancer growth. The decrease in good bacteria also leads to lower serotonin production (which results in possible depression and mental fog) and other bowel problems such as Crohn's disease,

As we men get older, it is important to get regular vigorous exercise, at least 20 minutes 3 times a week. This is critical for maintaining muscle tone and eliminating inflammatory toxins which build up in the muscles that result in stiffness. Exercise also puts pressure on the bones which stimulate the osteoblasts in the bone to lay down new bone material and improve bone strength.

The next component of great importance to health is our diet. Almost every cell in our body recycles itself at least every 4 months. If we put low octane diesel in our high octane jet engines, so to speak, the enzyme systems cannot create sufficient energy to run all the processes that we require. Other systems such as the circulatory, respiratory, and muscular systems begin to exhibit an inability to function and leads to the overall unravelling of regular processes throughout the body. The body is constantly barraged by free radicals in the environment such as vehicle exhaust, toxic polymers and plasticizing agents in plastic and vinyl and cigarette smoke. Free radicals are also produced from sugary and processed foods. As a rule, if a food can exist on the shelf for long periods of time without mold or decay occurring, there is probably a high percentage of trans-fatty acids and hydrogenated vegetable oils in it. Preservatives like Monosodium Glutamate (MSG) have a long track record of creating health problems in people. These substances reap terrible side effects on each individual cell in the body. The effect on the cell lining alone turns the permeable and pliable cell walls into an almost plastic like surface which reduces the cells' ability to allow nutrients in and waste out. In the intestinal tract, the lining (which allows the intestines to remain pliable, yet tightly intact to keep the food waste material inside) becomes rigid and develops small cracks which allows the inside toxic substances to leak out into the surrounding tissue- a terrible condition called 'leaky gut syndrome'. In today's exposure to numerous toxins, it becomes very important to take adequate vitamins, minerals and other substances to detoxify the body and help the individual remain strong and able to cope with stresses without it having overwhelming destructive influences on their health. It is advised to

supplement even good nutrition with a good multivitamin/mineral and antioxidant supplement such as Vitamin E or Vitamin C. With the deterioration of the heart, CoEnzyme Q-10 production in the body drops off to negligible levels. The research on this important nutrient has proven that heart dysfunction and failure increases dramatically as CoEnzyme Q-10 concentration in the heart tissues drops. ALL HEART PATIENTS need to be on this supplement. Also, ALL HIGH CHOLESTEROL PATIENTS TAKING A 'STATIN CHOLESTEROL MEDICATION such as Zocor, Mevacor, Lipitor and others have serious risk of CoEnzyme Q-10 depletion. Another important supplement that should be taken by everyone is EPA/DHA - a source of Omega 3 and Omega 9 Fatty Acids. This can be in the form of 1000mg fish oil capsules or 1oz (2 tbsp) olive oil taken by mouth every day. This reverses the effects of the trans-fats and gets the cell linings back to normal. Nutritionally, staying away from sugary foods will greatly improve the body's ability to maintain healthy blood sugar levels and prevent diabetes and insulin gland problems down the road. Soda pop is a habit many people have that over time can create a host of problems. The non-diet sodas have roughly 10 teaspoonsful of sugar in 12oz which will stimulate the pancreas to release insulin. Diet colas contain aspartame which is controversial at this time. The FDA has deemed it safe, but several research groups claim otherwise. I need to review more studies, but moderation would be suggested and replacement with water preferred. Over time, intake of excessive soda and other high sugar containing food can result in insulin resistance and a diabetic lifestyle will become the final option. Also, the amount of phosphates in soda to keep the sugars from settling out can alter the body pH (acidity) and decrease stomach acid gland function. The hormonal environment in the bodies of older men in many cases leads to a catabolic state, namely, a condition where body function is decaying and worsening generally. We see this in the form of hypertension, congestive heart failure, obesity and arthritis. The hormones are a major participant in the vitality and general state of the man. Testosterone is responsible for fostering an anabolic state, namely, where the body is actively rebuilding older cells and tissue and there is no weakening of the body in general. Testosterone levels run from under 100mcg/ml in highly deficient men to over 1000mcg/ml in many professional athletes who seem almost superhuman. The average levels according to the medical community is between 200 to 600mcg/ml. This can be measured by blood or saliva tests. The saliva test is easier to do and cheaper in cost. The World Health Organization prefers saliva testing since it reflects only the free Testosterone which is unbound to other proteins and active in the tissues. Testosterone stimulates heart cell regeneration and function, promotes the healing of damaged tissue, cartilage and joints, stimulates muscle tone and growth, and lends to the aggressive nature in the man to complete tasks and compete effectively in the world around him. Of course its best known effect is on the genitals to effectively develop an erection and stimulate sperm production. It does this by its ability to increase nitrous oxide(NO) levels in the penis which results in the erection. A big concern I have for men who elect to take viagra or another similar medication for erectile dysfunction is that they are treating that, but the problems surrounding Testosterone deficiency are still around. The man on Viagra may be making the NO mechanism work, but could be at risk for heart failure or other similar Testosterone related issue. The two most concentrated areas of Testosterone receptors are the heart and the gonads. Testosterone also is a potent osteoblast stimulator to create new bone growth. Testosterone is also touted by many researchers as a preventer of tumor growth and prostate hyperplasia (tissue growth). This is still debated, but the research is showing that PSA levels decline as Testosterone levels raise. The safe use of testosterone depends on the environment the body is providing. This is the basis for all the concerns of giving Testosterone to a man with an active prostate growth. As men get older, they generally develop an overproduction of 2 enzymes (among other things), aromatase and 5-alpha reductase. Simply put, these actively convert Testosterone to an Estrogen (aromatase) and also converts Testosterone to Dihydrotestosterone (DHT) (5-alpha reductase) which has less Testosterone activity and more undesirable side effects such as baldness. Another thing working against the older men is a substantial increase of sex hormone binding globulin (SHBG) circulating around in the bloodstream. SHBG actively binds to free Testosterone rendering it inactive, totally unable to exert any influence on the Testosterone receptors. Also as aging progresses, the man's production of Testosterone decreases more and more as time goes on and the glands become less responsive to low Testosterone levels. This all but guarantees men the precarious position of having low Testosterone production and then having that becoming

inactive or going to Estrogen. It is very common, in fact, for an over 45 year old man to have higher Estrogen levels than his wife, which is very unhealthy. In medicine, the doctors will test for Testosterone levels and when they are low, they will supplement the Testosterone with a tablet or patch or gel. If these enzymes and conditions discussed above are in full effect, supplementing with Testosterone alone will give higher levels of Testosterone initially, but that will begin to decline and Estrogen levels will rise dramatically. It is a good idea to administer an aromatase inhibitor like Arimidex compounded down to a 0.1mg dose 3 to 5 times a week or apply a 5% Chrysin Cream scrotally when giving Testosterone. Diet and exercise will also improve the body's ability to keep Testosterone from converting to something else. The question men need to ask their doctors is if the normal range is 200 to 600, why can't they be kept at the higher values around 600? If Estrogen conversion can be controlled, the estrogenic tendency to stimulate tissue growth in the breasts and prostate will not become an issue. A higher Testosterone level will result in the man feeling much healthier and more inclined to remain in a state of high achievement and willing to cope with the regular stresses and challenges of the working world. For more information, there are many books and research articles I can direct you to. The one that has been the most helpful is a book by Dr Eugene Shippen (an internist specializing in this field) entitled, The Testosterone Syndrome. Becoming knowledgeable in this area and understanding these concepts can have a huge impact on your lifestyle down the road, namely, being able to lend your influence for good to fellow workers and being around to participate actively in the family circle and spending time doing productive things rather than dealing with heart attacks, prostate hypertrophies and other issues. If you have any questions on this material or would like additional CD's to listen to, please call. I wish you the best of health!