

DHEA and Progesterone

Recently there has been growing interest in the steroid hormone dyhydroepiandrosterone (DHEA) as more people become aware of its importance in general health and the slowing of the aging process. See this recent article:

<http://www.dailymail.co.uk/femail/article-3626560/Can-pill-really-make-feel-20-years-younger-women-swear-DHEA-anti-ageing-pill-worrying-effects.html>

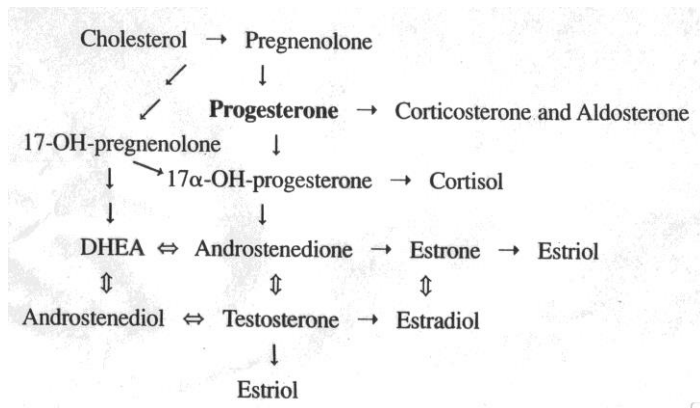
It has been recognised for many years as a reliable biomarker for the aging process. It is produced in abundance when we are young and is at its highest levels in our 20s, after which it slowly declines as we grow older diminishing to very low levels by the time we are in our 40s and older. Onset of degenerative diseases such as lower immune function, poor cardiovascular health and declining brain function become more prevalent in old age and correlate with the gradual fall in DHEA levels. It has also been shown that elderly people with higher levels of DHEA in their blood live longer, have healthier lives, look younger, have stronger muscles and bones, less fat and do not suffer the same fragility as others of the same age.

DHEA is a steroid hormone similar to oestrogen, testosterone and progesterone. It is made in the adrenal glands which make over 150 different hormones. Its position in the steroid hormone pathways is quite high up meaning it is the precursor to many other steroid hormones, mainly the male androgens. This shows how important it is to our general health and why it can have quite profound effects when levels start to decline.

With all these positive effects and more awareness of how supplementing with certain hormones can be of great benefit to health and wellbeing, it is little wonder that more women are becoming very interested in DHEA and trying it for themselves such as the fashion commentator Caryn Franklin as reported in the article link above. However, as we read further in to the article, supplementing directly with DHEA is not as simple as it seems at first. There are side-effects that can basically masculinise women which are due to the fact that it is an androgen precursor which is mainly a male hormone. Even though women naturally produce DHEA to a lesser extent, men's bodies can tolerate supplementing with it much better and so can gain all the benefits without any or very few problems.

However, this is not to say that women should give up on DHEA and throw the baby out with the bath water as is the case implied in the article. There is another route to increasing DHEA which would be more natural to the female body. It is via the female hormone progesterone which can make DHEA at the levels which would be more natural than supplementing with it directly.

Progesterone can exert all the health benefits that have been shown with DHEA which may be due to the fact that it has a direct route to producing it via androstenedione, another hormone which has a link to both – see diagram of the main steroid hormones below.



This means that the body will only produce the right amount of DHEA needed as the hormones are synthesised along the pathways. This is more likely if the hormones are well balanced and there are adequate amounts of progesterone in the system. This is because progesterone is also high up in the hormone pathway and makes nearly all the other steroid hormones including all our oestrogens and corticosteroids (stress hormones).

Most women supplementing with natural progesterone feel the same health benefits as those associated with DHEA, but without the masculinising side-effects. It is just such a pity that many other women are only hearing about DHEA supplementation and not the link to progesterone which may provide the same outcomes but without the side-effects.

References:

John R. Lee, MD, 2003, What Your Doctor May Not Tell You About Menopause.

John R. Le, MD, 1996, What Your Doctor May Not Tell you About Pre-menopause.

Cherniske, Stephen, M.S., 1998, The DHEA Breakthrough, Look Younger, live longer, feel better.

<http://www.life-enthusiast.com/dhea-health-and-youth-hormone-a-96.html>

PubMed, [Horm Metab Res.](#) 2004 Jun;36(6):381-6.

The role of progesterone metabolism and androgen synthesis in renal blood pressure regulation.