

Editorial

Hormone Replacement Therapy and its Risks and Benefits for Women

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INTRODUCTION

The Decline of Hormones Due to Ageing

There is no doubt that as both women and men age, the decline in the hormones which in their earlier years kept them vigorous and youthful has impacted dramatically on their health. Hormonal balance plays an integral role in maintaining the physiological integrity of the body and mind functions of both sexes. For example, hormone balance regulates a wide array of physiological and cognitive functions such as the metabolism of proteins, carbohydrates, minerals, and body fats.¹ It is the efficacy of hormonal interactions that also govern the production of DNA and RNA, along with enzyme functionality. Research has shown that hormonal balance features prominently in the response to the body and mind to stress, blood sugar balance and the regulation of diabetes, kidney function, libido, menstruation and menopause, to name only a few facets of its capability.² Hormones also serve as catalysts which assist in the regulation of the synthesis of cellular proteins. Given that hormones influence a wide range of bodily processes, it is evident that the decline in hormonal levels impedes the efficiency of the communicative receptor exchanges within the endocrine system itself.³ This deficiency, in turn, compromises a number of integrated systems which interconnect with each other, thereby diminishing cardiovascular and immune functions, detoxification mechanisms, and gastrointestinal efficacy.⁴

Evidence-based clinical research has established that various hormones decline significantly in many individuals, both men and women, as young as 25 years old. For example, with regard to important factors requisite for good health, the diminution of growth hormone, dehydroepiandrosterone (DHEA), and testosterone are reported to exhibit a 50% decline between the ages of 25 and 50 years old.⁵

More significantly the diminution of these hormones drops another 50% between the ages of 50 and 75 years old.⁶ From 25 to 50 years old women lose 30% of their estrogen, followed by a slow but continual decline in estrogen for the rest of their lives.⁷ The most significant hormonal decline is progesterone with a 75% decline from age 35 to 50.⁸ Within the context of menopause, it is clear that the erosion of these essential hormones represents a serious threat to the well-being of women. This being so, the reliance on hormone replacement therapy (HRT) has burgeoned exponentially.

THE RISKS AND BENEFITS OF HORMONE REPLACEMENT THERAPY (HRT)

The etymology of the word 'hormone' leads us to the Greek word 'hormao' meaning to excite, to animate, or to enliven.⁹ Hormones are secreted predominantly from the endocrine glands and absorbed into the bloodstream. The hormones that have been most commonly utilised in HRT are progesterone, estrogen, testosterone, adrenal hormones, DHEA, thyroid hormones, pregnenolone, melatonin, and human growth hormone.¹⁰ The problem is that different combinations of the hormones which constitute HRT have in many cases displayed beneficial effects, while in other cases the health risks have outweighed the benefits. The controversy and debate about the virtues and liabilities of HRT have encouraged a much wider context of investigation and evidence-based assessment. After more than a decade of fear and uncertainty regarding HRT, the outcomes of recent studies have afforded a degree of helpful clarity regarding the balance of risks and benefits.¹¹ It is now accepted that factors such as the age of a woman and the years since menopause commenced and ended have greatly influenced the profile for HRT virtue and liability.¹² Research has now shown that the virtues of HRT outweigh the liabilities for menopausal women who are less than 60 years of age or within 10

years of having commenced menopause. For instance, when HRT has been utilised and initiated in the early stages of menopause, there is evidence that appears to confirm that the progression of atherosclerotic disease can be significantly slowed, thereby minimising the risk of cardiovascular disease and risk of mortality.¹³ During this 'window of opportunity' HRT has also been shown to provide protection against cognitive decline and senility.¹⁴ In older women and women more than 10 years past menopause, the risk-benefit balance of HRT is less favorable, "particularly with regard to cardiovascular risk and cognitive impairment".¹⁵ Despite the risk factors associated with the previous case study, the use of HRT in those cases where menopause has commenced prematurely (<40 years), HRT has succeeded in ameliorating the risk of cardiovascular disease, osteoporosis, and cognitive decline.¹⁶ There is strong evidence to demonstrate that the 'non-oral' administration of estrogen provides advantages. Similarly, the duration of combined HRT use is ideally limited to less than 5 years, in as much as the risk of breast cancer has been shown to ascend after 3-5 years of use.¹⁷

When all is said, it is evident that HRT represents a major breakthrough in the treatment of hormonal imbalance and hormone restoration. It is also clear that a more holistic approach is needed to ensure that the decision to introduce HTR in the context of menopause is holistically personalised to suit the individual involved, as the hormonal balance of every woman is unique and cognitively designated. Factors that cause an imbalance in women's hormones may also be an issue of lifestyle. The following simple considerations could make a huge difference to your own control of your hormonal balance:

- Be cautious of foods that have hormones added to them such as commercially produced meat, eggs, and dairy products;
- Be wary of herbs that have an estrogenic effect on their bodies such as licorice, black cohosh, and damiana;
- Be wary of oral contraceptive pills and hormone replacement therapies which have high estrogenic components;
- Be wary of exposure to radiation which increases the levels of estrogen in their blood;
- Be wary of chronic constipation which interferes with the body's ability to eliminate estrogen, leading to a buildup of estrogen in the colon and re-absorption by the body.

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