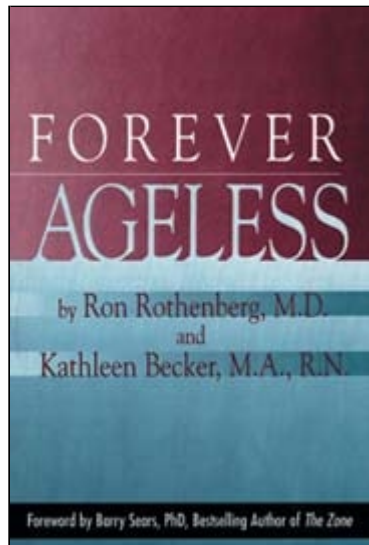


## REPORT

EXTENDING HEALTHSPAN: HORMONES, SUPPLEMENTS, DIET AND EXERCISE  
A review of Forever Ageless



Forever Ageless  
by Ron Rothenberg, M.D.  
and Kathleen Becker,  
M.A., R.N. California  
HealthSpan Institute,  
Encinitas, 2001  
Soft cover, 389 pages

“Our hormones do not decline because we age, we age because our hormones decline,” could be called the motto of Forever Ageless, a new book on anti-aging medicine by Ron Rothenberg, M.D., the founder of the California HealthSpan Institute, and Kathleen Becker, M.A., R.N., administrator and clinical coordinator. “Every hormone has a pause” could be regarded as a related motto, indicating that the so-called sex hormones are not the only hormones we need to be concerned about. Rothenberg and Becker point out that we also need to deal with each “pause” (e.g. somatopause in the case of growth hormone), as well as do something to control the two powerful and potentially pro-aging hormones that increase with age: insulin and cortisol. The book presents a comprehensive anti-aging regimen including hormone replacement, hormonally correct diet (aimed chiefly at controlling insulin), anti-aging supplements, exercise program and stress reduction.

Summarized in this review are some highlights of this new book, with special emphasis on bioidentical hormone replacement. Bioidentical means that the hormones used are chemically identical with the hormones naturally found in the human body—unlike Premarin, Provera or methyltestosterone.

#### Debunking the myths about testosterone

One of the greatest merits of this book is its thorough attempt to dispel the fear of testosterone replacement in andropausal men. Testosterone is a whole-body hormone, not just a “sex hormone,” the authors explain. Its strong connection to libido and assertiveness, however, has created a negative mystique about it. Rothenberg and Becker comment that many traditional doctors still believe, in spite of clinical and research evidence to the contrary, that testosterone replacement might increase prostate cancer risk. When asked why prostate cancer is found chiefly in older men with low testosterone levels and not in adolescents and 20-year-olds with sky-high levels of testosterone, the mainstream doctors can offer no explanation.

The old methods used for testosterone replacement also contributed to the myth that testosterone is unsafe. Injections of the ester forms of testosterone create a roller-coaster effect, with unpleasant peaks and lows. Oral testosterone is chiefly methyltestosterone, which has been banned in most countries as damaging to the liver. When natural (bioidentical) testosterone is used in the form of a gel or cream, such problems are eliminated.

Rothenberg and Becker set the record straight, breaking through the barrier of fear arising from ignorance and sheer misinformation. The newest finding about testosterone and heart disease is very exciting: it turns out that testosterone actually dilates the coronary arteries, improving blood flow to the heart. This alone could explain the earlier finding that testosterone diminishes or eliminates angina, commonly known as “chest pains.” Angina happens when the heart muscle is not getting enough oxygen from the blood. Rothenberg and Becker suggest that testosterone may in fact be an important treatment for heart disease. Testosterone also helps prevent diabetes, and may help treat diabetes.

Testosterone also inhibits the production of amyloid plaque. Thus, testosterone replacement is also very important for preventing Alzheimer's disease. Cognitive function tends to improve when older men are given testosterone replacement.

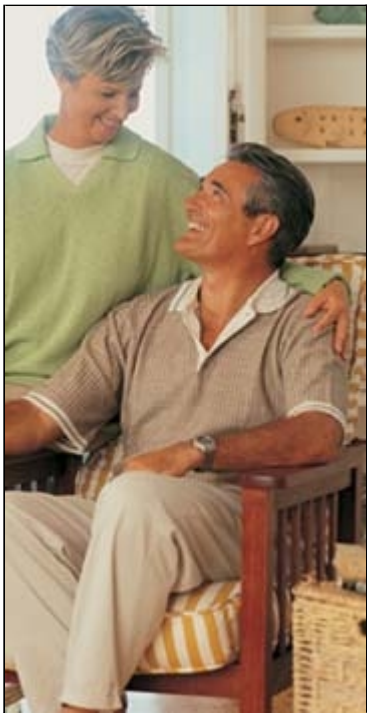
Finally, the authors note that testosterone is an excellent antidepressant. It restores good mood, self-confidence and sociability, often making antidepressants such as Prozac no longer necessary. "Grumpy old men" are those with testosterone deficiency, Rothenberg and Becker note. Once their testosterone is restored to youthful levels, these men tend to become cheerful and sociable. Color returns to their cheeks and lips, and renewed energy and zest lead them to get interested in activities other than complaining.

In spite of reassuring research findings, men continue to worry about increased risk of prostate cancer with testosterone replacement. To minimize this risk, the authors recommend supplementing with zinc, lycopene, saw palmetto, pygeum, nettle extract (urtica) and indole-3-carbinol (I3C). As an extra precaution, patients who use natural testosterone creams or patches are closely monitored with PSA tests every three months at the California HealthSpan Institute.

The book notes an interesting fact: while it is well known that an enlarged prostate is a risk factor for prostate cancer, when does the prostate begin to enlarge? When testosterone levels decline. "Natural testosterone replacement therapy has been shown to improve prostate health," the authors state. At the same time, they urge the use of prostate-protective supplements including I3C, with its anti-cancer properties.

Rothenberg and Becker warn that androstenedione does not increase testosterone levels in men. It can in fact raise estrogen levels.

Nor is testosterone replacement for men only. Small doses of testosterone have been found to benefit hypoandrogenic postmenopausal women, restoring their libido and sense of well-being. Rothenberg and Becker further point out the benefits of testosterone for women's bone density.



Indeed, one of the main merits of this book is that Rothenberg and Becker understand the hormonal needs of postmenopausal women. They state, "Almost all postmenopausal women need natural hormone replacement therapy which includes estrogen, progesterone, testosterone and thyroid" (note: These doctors only use natural desiccated thyroid). Furthermore, to make estrogen replacement safer, "we always prescribe natural progesterone to all of our female patients on estrogen replacement therapy." If only all physicians were as enlightened.

The form of testosterone prescribed by the California HealthSpan Institute is natural testosterone delivered through the skin (transdermal). Very simply, twice a day the patient applies a measured dose of cream prepared by a compounding pharmacy. The same is true for estrogen and progesterone replacement: female patients receive these hormones in the transdermal form, as creams.

Growth hormone: a potent rejuvenator

The controversies over estrogen and testosterone replacement pale next to the storm unleashed by the use of growth hormone. One school claims that growth hormone deficiency is the main cause of aging. It's that precise deficiency that allows the rate of tissue repair slip, with resulting atrophy (catabolism) and the downward aging cascade. Advocates of growth hormone replacement maintain that only restoring growth hormone to youthful levels can reverse tissue atrophy; everything else is a band-aid. According to the opposing school of thought, the aging-related decline in growth hormone is beneficial, being a defense against cancer. These more conservative physicians warn that far from being a fountain of youth, growth hormone

replacement is a dangerous practice.

Not surprisingly, Rothenberg and Becker are enthusiastic about growth hormone replacement and, yes, they do see growth hormone deficit as a major cause of aging. They suggest that a better name for growth hormone would be "tissue repair hormone" or "youth-preserving hormone." The authors point out that the growth hormone levels of an average 50- or 60-year-old are the same as pathological growth hormone deficiency due to pituitary disease. Since it's standard medical practice to provide growth hormone replacement for those suffering from pituitary disease (also called "adult growth hormone deficiency syndrome"), why should it be



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taboo to provide it for growth hormone-deficient sixty-year-olds whose problem is so-called "normal aging," a degenerative process known to lead to disastrous consequences?

### Essential anti-aging supplement

This book is to be commended also for its inclusion of new supplements rarely discussed in other health books. An example is carnosine, a major protector of our body proteins against damage by cross-linking with sugars. Besides its anti-glycation activity, carnosine protects against damage by aldehydes. It also chelates metals, buffering against an excess of zinc and copper. Carnosine has also been shown to inhibit the formation of amyloid plaque characteristic of Alzheimer's disease. Rothenberg and Becker regard carnosine as one of the most important supplements, and recommend 500 mg of carnosine three times a day. Along with carnosine, they consider CoQ10 and at least 1 gram of fish oil a day to be essential. For women in particular, they also recommend calcium, magnesium and boron.

The authors likewise recommend including n-acetyl-cysteine (NAC) in the daily supplement regimen. Besides being an antioxidant, NAC helps control excessive mucus and shows anti-viral properties. Also indispensable is another antioxidant, lipoic acid, since it increases the levels of glutathione and potentiates the action of other antioxidants.



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Though Rothenberg and Becker do not go as far as to say that "death begins in the colon," they do suggest that intestinal flora ("the friendly bugs") is very important to health, and suggest supplements of both acidophilus and bifidobacterium bifidum for prevention of fungal infections and assistance with various metabolic functions. "Even if you eat properly, there will still be many byproducts of the food you eat that need to be destroyed by friendly bacteria," the authors state.

In the chapter on brain health, the book discusses supplements such as acetyl-l-carnitine, phosphatidylserine, ginkgo, DMAE and vinpocetine as well as smart drugs such as deprenyl and hydergine.

At the end of each chapter, the information is summarized and presented in alphabetical order. Thus, the end of any chapter can serve as a useful quick reference guide.

Forever Ageless is a comprehensive guide to anti-aging medicine. It is especially valuable as an introduction to hormone replacement using natural, or bioidentical, hormones. The authors are to be commended for tirelessly explaining that there is no single magic bullet. Those who want significant rejuvenating results have to consider balanced, comprehensive hormone replacement, together with the right diet, supplements, exercise and stress reduction. It takes motivation, discipline and willingness to work with competent holistic physicians. The more the patient

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understands, the better. This book will guide readers toward the knowledge they need to formulate their own individualized anti-aging plan.

Find out more about *Forever Ageless*

—Ivy Greenwell

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