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DHEA Improves Sense of Well-Being

DHEA A Better Antidepressant?

By Will Block

For More Information on Natural Alternatives for Helping to Alleviate Depression, See [New and Better Mood Function - July 1999](#) and [Catecholamines Kick Out the Demons of Depression - July 1999](#).



*When I wrote my first major article about DHEA back in 1993, I was depressed. True depression is rarely about anything specific, but if I could name the cause of my despondency, it would be the feeling that the total of my efforts did not add up to anything. A sense of gloom prevailed. In preparation for my article, I read the lengthy, 24-chapter monograph *The Biologic Role of Dehydroepiandrosterone (DHEA)*, edited by*

Mohammed Kalimi and William Regelson, pored through several hundred scientific articles, and cataloged the abstracts of many hundreds more. At first, the project was overwhelming, the subject too great to understand, the conclusions unclear. I was a blind man trying to understand an elephant. My normally high levels of energy and high sense of well-being were low. I was in need of DHEA but didn't know it.

Because I was determined to learn everything I could about DHEA, things changed for the better. I started taking DHEA and (coincidentally, I thought) got over the blues. As I have continued to study - and use - DHEA over the intervening years, the fulfillment of DHEA's promise keeps getting better. Now, DHEA has been found, in a newly reported, double-blind, placebo-controlled trial, to provide significant antidepressant benefits for some patients suffering from major depression. Nearly 50% of patients given up to 90 mg/day of DHEA experienced at least 50% improvement in depressive symptoms over the course of the study, with specific improvements in energy, stamina, libido, and sense of well-being. I am gratified: my original effort to understand continues to be rewarded.

Psychological depression is a common "side effect" of war, especially an ill-defined war such as the Balkan fiasco in which the U.S. government is now engaged. The uncertainty about life fostered by politically limited ("hamstrung") battle, combined with the low morale created by an ambiguous war, does not contribute to building self-esteem. To the contrary, veterans are good candidates for depression, but most don't know it. Soldiers don't complain. After all, they are "men."

War depression is not characterized by a sufficient awareness of what's really wrong - witness the Gulf War syndrome, the spectrum of complaints that have grown out of that debacle. Thus a veteran is not very likely to have a high sense of well-being, defined by psychiatrists as the ability to tell whether one is in good health.

Mechanisms by which DHEA is thought to elevate mood or yield antidepressant effects include:¹⁹

1. Greater production of testosterone and estrogen (each of these hormones has been associated with elevation in mood).
2. Increased bioavailability of testosterone by alteration of albumin's affinity for testosterone. (DHEA is thought to increase the ability of albumin, a blood protein, to carry testosterone to where it is needed in the body, and this is associated with mood elevation, as explained in the prior item.)
3. Antagonism of the negative effects of cortisol (an adrenal hormone that, in excessive amounts or if imbalanced with DHEA, is associated with age-related

- pathology).
4. Modulation of GABA receptors (GABA is a buffering neurotransmitter associated with sedation).
 5. Alteration of NMDA neurotransmission (NMDA is a neurotransmitter that can produce neurotoxic effects under certain circumstances).
 6. Binding to sigma receptors (sigma receptors are associated in the brain with excessive stimulation, which may cause neurotoxic effects under certain circumstances).
 7. Increased serotonin levels in specific areas of the brain, thereby increasing natural sedation.

ANTIDEPRESSANT LIFESTYLE

Many veterans, permanently "armored" by war and too late for sensitivity training, are prime candidates for antidepressants. Like many others, they may join the crowd, who always appear ready for the latest sedative out of the pharmacological gate. And with war once again bringing death and destruction to our TV screens every night, is it any wonder that the idea of Prozac® as a *daily drug* has installed itself in the cultural psyche? Antidepressants have become "general issue," so much so that people are increasingly using Prozac and similar drugs for other reasons, including chronic headaches, sleep disturbances, obesity, lifestyle enhancement, and even shyness.¹

However, all is not well with selective serotonin reuptake inhibitors (SSRIs), such as Prozac, Paxil®, or Zoloft®. We know this because already the pharmaceutical industry is delivering yet another generation of antidepressants. These are the selective serotonin/noradrenaline reuptake inhibitors (SNRIs), including Milnacipran® and Serzone®, and the selective noradrenaline reuptake inhibitors (NARIs), such as Edronax®. The SNRIs and NARIs are claimed to be an improvement over SSRIs because they result in improved social adaptability.² Even though the new generation of reuptake inhibitors is similar in effectiveness to the SSRIs, they have a different emphasis: they have the ability to reverse negative self-perceptions and to revive prior levels of interest and activity. This is all to the good, but they are still *drugs*, and drugs have side effects, some seen readily and others not so readily. Only time will tell.

A new study has found DHEA to possess significant antidepressive effectiveness in major depression.

And if we are enjoined to "Make Love, Not War" - as a recent ad for the Academy Award-winning movie *Shakespeare in Love* does - then SSRIs, SNRIs, and NARIs will not do. Their sex-negative side effects are well established and far too likely to occur for comfort. A recent review of SSRI-induced sexual dysfunction found that these side effects are dose-related and that their occurrence varies from a small percentage to more than 80%.³ They include loss of sexual desire (libido), difficulties with arousal, and delayed or absent orgasm. We have not yet seen published reviews on SNRIs or NARIs, but early reports have attributed some sex-negative side effects to them as well.

DHEA IS NEW AGAIN

So it is with great excitement that we announce the arrival of a natural alternative. For those of us in the nutrient forefront, ready to go out on a limb for a brand-new alternative, in this case there is no need: the alternative is our old friend DHEA, albeit for a new use. A new study authored by Dr Owen Wolkowitz et al, billed as the first double-blind, placebo-controlled trial for its subject, has found DHEA to possess significant antidepressive efficacy in major depression.⁴

Not surprisingly, recent studies have found DHEA to alleviate depression.

As a successor to studies launched back in the 1950s - which found that DHEA could improve mood, energy, confidence, interest, and activity levels, especially for those defined with "inadequate personalities" or "emotional and constitutional immaturity"⁵⁻⁸ - the new study reiterates a common thread woven through much of the previous work: *people feel better on DHEA*.

It comes as no surprise, therefore, that DHEA has now been found to alleviate depression. Dr Wolkowitz, whose earlier open-label (unblinded) work has been cited in this publication, and a group of researchers including Dr Eugene Roberts [see [What's New With Pregnenolone](#)] divided 22 subjects into two groups of 11 each. The subjects

ranged in age from 33 to 53 years, with a mean age of 44. All of the subjects had been diagnosed with major depression (20 unipolar and two bipolar), as measured by the standard Hamilton Depression Rating Scale. Seven were medication-free, and 15 were taking antidepressants. Ten of the subjects were women.

Studies launched in the 1950s found that DHEA could improve mood, energy, confidence, interest, and activity levels.

RESTORING YOUTHFUL LEVELS

Each of the two groups was given either DHEA or placebo for a period of six weeks (those taking traditional antidepressant medications continued to do so). The initial DHEA dosage of 30 mg/day was increased at the start of the third week to 60 mg/day and then again at the start of the fifth week to 90 mg/day. In the experimental group, this progressive increase resulted in the restoration of circulating DHEA to the high end of the physiological level for healthy 20-30-year-old-adults - the age range in which DHEA levels peak.

At the end of the six weeks, the subjects were again given the Hamilton depression test. The results clearly showed that five of the 11 subjects treated with DHEA had a 50% or greater decrease in their depressive symptoms, compared to none showing significant improvement in the placebo group.

In other studies, high DHEA levels have been associated with greater frequency and enjoyment of leisure activities, taking responsibility, personal growth, and being adventurous.

In the DHEA group, the mean decrease in depressive symptoms was 30.5%, compared to just 5.3% for the placebo group. This clinically meaningful improvement was especially noteworthy because more than half of the subjects were at least partially resistant to treatment with conventional antidepressant medications. This means that DHEA was outperforming the prescription drugs, or perhaps it was enhancing the drugs' effectiveness.

AN AGE OF WELL-BEING

Furthermore, the improvements were independent of gender (DHEA was shown to be beneficial for both men and women) and of the concurrent use of other antidepressants (DHEA worked for those taking, and for those not taking, any medication). Due to the small sample size, it is not possible to say for certain whether DHEA may also increase the benefit of traditional antidepressants used along with it. DHEA produced no side effects of any consequence; all of the subjects remained in the trial until the end.

High DHEA levels have also been associated with increased energy, stamina, libido, and sense of well-being.

The preponderance of data in the scientific literature shows inverse correlations between age-related syndromes and serum DHEA levels (without supplementation, DHEA declines by about 2% per year, to as much as 90%, between the ages of 20 and 70).⁹ Nonetheless, DHEA may still not be desirable for everyone, because there are indications that it can occasionally cause oily skin, acne, and, less frequently, hirsutism or deepening of the voice.¹⁰ These appear to be entirely reversible by reducing the dosage or stopping the supplementation. It is best to have a knowledgeable health professional test your level, if possible. Alternatively, Life Enhancement Products sells self-test kits that can be of value in this regard.

In other studies, high DHEA levels have been associated with greater frequency and enjoyment of leisure activities,¹¹ taking responsibility,¹² personal growth,¹³ and being adventurous.¹⁴ They have also been associated with increased energy, stamina, libido, and sense of well-being.¹⁵⁻¹⁸ These alone are reasons to consider supplementation with DHEA. When combined with the findings that people feel better on DHEA and that it may help restore personality function to normal, this opportunity is difficult to ignore. Why shouldn't some things get *better* as we age? Why not an "age of well-being"?

**DHEA may be a positive adjunctive therapy
along with traditional antidepressants.**

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