NANOFORMULATED

PURE DHEA

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Pure DHEA provides a highly bioavailable form of micronized DHEA designed to balance female hormones in the perimenopausal, menopausal, and postmenopausal years.

Supplement Facts

Serving Size: 1 Pump (0.5mL)
Servings Per Container: 100

	Amount Per Serving	% Daily Value
DHEA (Micronized Dehydroepiandrosterone)	5mg	**

****Daily Value not established**

Other Ingredients: Glycerin, ethanol, tocofersolan, medium chain triglycerides, phospholipids (from purified sunflower seed lecithin), water

EDUCATION

WHAT IS DHEA, AND HOW DOES IT IMPACT WOMEN?

Dehydroepiandrosterone, or DHEA, is a steroid hormone produced by the adrenal glands, ovaries, testes, and brain. DHEA is particularly vital for postmenopausal women because, as ovarian production of sex hormones declines, DHEA can step in as a precursor to testosterone and estrogen and support healthy hormone levels. Unfortunately, as we age, the female body's production of DHEA declines precipitously.

DHEA regulates blood sugar, immune function, bone integrity, cognition, mood, and skin health.[1,2,3,4,5,6] Through these diverse effects, DHEA also supports healthy aging. Some of the body's DHEA is also converted into estrogen and testosterone, providing coverage for two of the body's major sex hormones. DHEA is synthesized from pregnenolone, the "mother hormone" and predecessor to all of the body's steroid hormones, including cortisol, estrogen, progesterone, testosterone, and DHEA.

DHEA production peaks between the ages of 25 and 30 and declines after that, leading a broad age range of women to be low in this vital hormone. Low DHEA is associated with high blood sugar and insulin resistance, loss of libido, and a loss of muscle mass with age, known as sarcopenia.[7,8,9] This constellation of physiological changes, in turn, accelerates biological aging.[10] Restoration of healthy DHEA levels may counteract these physiological shifts, supporting hormonal balance and healthy biological aging in midlife women.[11]

SUPPORTS HEALTHY BLOOD SUGAR REGULATION

In animal models simulating human female menopause, supplemental DHEA improves glucose regulation by increasing the ratio of p-Akt/Akt in pancreatic islet cells, where insulin is made, leading to more efficient insulin secretion.[12] DHEA may also accelerate glucose catabolism and improve glucose storage as glycogen.[13]

SUPPORT FOR A HEALTHY LIBIDO

Low levels of DHEA sulfate (DHEA-S), a metabolite of DHEA that circulates in greater relative concentrations than DHEA and is used to assess the body's DHEA levels, is associated with low sexual function in women.[14] Conversely, DHEA replacement may enhance libido in women through its androgenic effects. DHEA replacement is associated with improved desire, arousal,

and vaginal lubrication in premenopausal women dealing with compromised sexual function.[15] Increasing DHEA levels may also indirectly improve libido by correcting vaginal dryness, which is often cited by postmenopausal women as a reason for low libido.[16,17]

IMPROVES MUSCLE MASS AND BONE DENSITY

Postmenopausal women with osteoporosis, a condition in which bones become weak and brittle, and sarcopenia, the age-related loss of skeletal muscle mass and strength, are more likely to have low levels of DHEA.[9] Both osteoporosis and sarcopenia significantly increase the risk of bone fractures, which can vastly depreciate the quality of life in midlife and beyond. In postmenopausal women, 12 months of DHEA supplementation stimulated improvements in bone mineral density and an increase in osteocalcin, a protein hormone produced by osteoblasts that is a marker of bone formation.[18]

Supplemental DHEA may help maintain and even build lean body mass by bolstering total androgen levels. Once DHEA is delivered to skeletal muscle, it enhances muscle protein synthesis and bone anabolism.[19] DHEA may improve bone density by decreasing levels of IL-6, an osteolytic inflammatory cytokine, and increasing IGF-1 gene transcription.[20]

SUPPORTS RESILIENT COGNITION AND MOOD

DHEA is a neurosteroid, a steroid hormone synthesized within the brain that modulates neuron signaling. Declining levels of DHEA with age may depreciate cognition and even drive neurodegenerative diseases such as Alzheimer's disease,[21,22] by decreasing excessive glutamatergic neurotransmission, which can be excitotoxic to the brain.[23] Conversely, higher levels of DHEA are associated with more favorable markers of cognitive function, including better executive function, cognition, and working memory.[24] DHEA may also offer neuroprotective effects, support the growth of neurites (neuronal processes), and protect the brain from the harmful effects of excess cortisol.[25]

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References available at quicksilverscientific.com/PureDHEAreferences

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