

# DHEA



Dehydroepiandrosterone (DHEA) is one of the hormones made in the human body by the adrenal glands. DHEA circulates in the bloodstream as DHEA-sulfate and is converted as needed into other hormones. DHEA serves as the precursor to male and female sex hormones (androgens and estrogens). DHEA levels are reported to be low in some people with anorexia, end-stage kidney disease, type 2 diabetes (non-insulin dependent diabetes), adrenal insufficiency, and in the critically ill. DHEA levels may also be depleted by a number of drugs, including insulin, corticosteroids, opiates, and danazol. Pure DHEA that has been micronized to a very small particle size to facilitate absorption is provided in these 10 mg vegetarian capsules.

## Where does DHEA in supplements come from?

The starting source material for DHEA is a class of plant hormones called sterols extracted from wild yams that are grown commercially. The most common plant sterol is diosgenin that has a molecular structure very similar to DHEA. Diosgenin is converted to DHEA in the laboratory by removing several side chains through various chemical reactions.

## Will natural yam extracts increase DHEA levels?

No. Although DHEA can be synthesized in a laboratory using wild yam extract, conversion of wild yam into DHEA by the body has not been demonstrated. Products that claim wild yam to be “natural DHEA” are inaccurate.

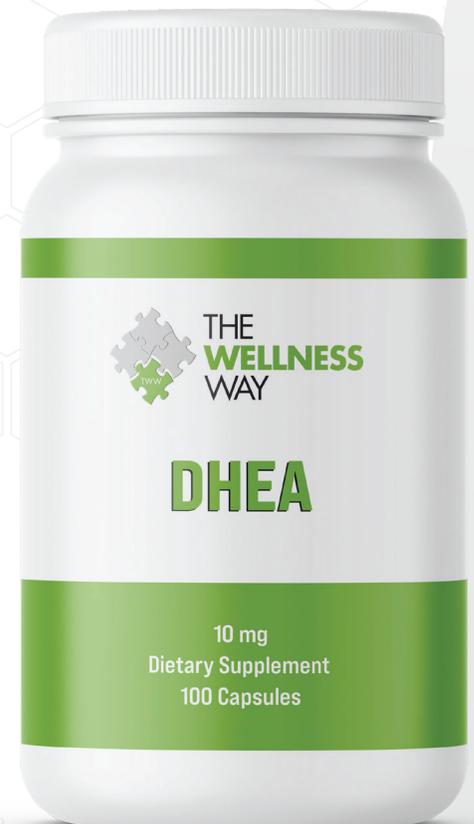
## FREQUENTLY ASKED QUESTIONS

### What is DHEA?

DHEA is an abbreviation for dehydroepiandrosterone, a hormone produced chiefly by the adrenal glands. The testes, ovaries, and brain can also make DHEA. As the most prevalent adrenal steroid in the body, DHEA serves as a precursor to the human sex steroid hormones, testosterone and estrogen.

### How is DHEA produced in the body?

Cholesterol is the starting material used to make all steroid hormones in the body. In the adrenal glands, cholesterol is converted to pregnenolone and pregnenolone is converted into DHEA and a number of sex hormones including the female hormones estrogen and progesterone and the male hormone testosterone.



These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

# DHEA



## Will DHEA supplements suppress the body's natural DHEA production?

Although the production of most steroids in the body is controlled by a feedback loop that limits synthesis when hormone levels get too high, DHEA appears to be an exception to this rule. Using appropriate small, supplemental amounts of DHEA will not stop the body's natural DHEA production. However, supplementation with high amounts of DHEA for a long period may influence the body's natural DHEA production. Baseline blood levels of DHEA should be evaluated prior to initiating supplementation with DHEA.

## How are levels of DHEA measured in the body?

To assess blood levels of DHEA, DHEA is often measured in its sulfate form (DHEAS) because of its greater stability. DHEAS is formed in the liver by adding a sulfate (504) molecule to it. DHEAS is cleared much more slowly by the kidneys, and blood levels of this metabolite remain much more stable throughout the day.

## How much DHEA does the body make?

It is estimated that humans produce between 1 and 2 mg of DHEA and 10 to 15 mg of DHEAS (the sulfate metabolite) per day. Some researchers, however, have estimated higher levels. DHEA levels peak in early adulthood and then start a lifelong descent.

## Are there any side effects to taking DHEA?

Few side effects are reported when DHEA supplements are taken by mouth in recommended doses. Because DHEA is a hormone related to other male and female hormones, there may be side effects related to its hormonal activities. In women, there are occasional reports of acne, facial hair, hair loss, and increased sweating when taking more than needed. Men may develop more breast tenderness or increased aggressiveness. Use of DHEA needs to be under the guidance of a qualified healthcare professional who can monitor its effects. DHEA is not recommended during pregnancy or breastfeeding.

This product is free of the following common allergens: milk/casein, eggs, fish, shellfish, tree nuts, peanuts, wheat/gluten, corn, yeast, and soybeans. Contains no artificial colors, flavors, or preservatives.

This product was made in a GMP and ISO 9001:2008 registered facility.

## Supplement Facts

Serving Size 1 Capsule  
Servings Per Container 100

### Amount Per Capsule

DHEA (dehydroepiandrosterone, micronized) 10 mg\*  
(derived from wild yam)

\*Daily Value not established.

0111/200000 02

Other ingredients: Microcrystalline cellulose, vegetarian capsule (hydroxypropyl methylcellulose, water), and L-Leucine.

These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.