

# Dehydroepiandrosterone (DHEA)

## for People Living with HIV

### Definition

DHEA is secreted by the adrenal gland and is a hormonal precursor to both androgens and estrogens. It can also be synthesized using wild yam or soy, but there is no evidence to show that humans are able to increase DHEA levels by consuming these foods.

### Uses

People living with HIV may be interested in taking DHEA for a variety of reasons, including treatment of depression, increasing bone density, decreasing arterial plaques, improvement of immune function with HIV, increased memory, and increased muscle strength. Research has not been conducted in all of these areas in the HIV positive population; information in the table is based on available research in other populations.

### Safety and Side Effects

DHEA should always be used under the supervision of a medical professional. It is likely safe for people with low DHEA levels to take oral supplements short-term (<6 months) to restore DHEA to normal, but long-term use and doses resulting in high DHEA levels are possibly unsafe. Side effects are often seen with higher doses and long-term use.

Side effects may include acne, skin rash, GI upset, hirsutism, hypertension, and increased HDL. In people with HIV, additional side effects may include fatigue, nasal congestion, and headaches.

### Drug-nutrient interactions

There are possible interactions between supplemental DHEA and foods, medications, and herbal medicine, as well as substances that may affect the level of naturally occurring DHEA. Alcohol, insulin, and dietary fiber may have been negatively correlated with blood DHEA level; however alcohol may also increase DHEA effectiveness.

Effectiveness and tested doses for uses of DHEA, based on Natural Standard Professional Monograph.

<b>Depression</b> <ul style="list-style-type: none"><li>• 30-90mg/d for up to 9mo</li><li>• 200-450mg/d for up to 8wks in HIV/AIDS</li></ul>	There is good scientific evidence to support use of DHEA for treatment of depression in both general and HIV+ populations.
<b>Bone Density</b> <ul style="list-style-type: none"><li>• 20-200mg/d for up to 12mos</li></ul>	There is unclear evidence for the use of DHEA to increase bone density, to improve CVD outcomes, or to improve immune function in people living with HIV/AIDS.
<b>CVD</b> <ul style="list-style-type: none"><li>• 25mg/d for up to 12wks</li></ul>	
<b>HIV</b> <ul style="list-style-type: none"><li>• 750-2250mg/d for up to 16wks</li></ul>	
<b>Memory</b> <ul style="list-style-type: none"><li>• 50mg/d for up to 13wks</li></ul>	There is fair evidence demonstrating ineffectiveness of the use of DHEA to improve memory or muscle strength (not tested in HIV/AIDS population).
<b>Muscle Strength</b> <ul style="list-style-type: none"><li>• 100mg/d for up to 1yr</li></ul>	

### References:

DHEA. (2012). *Natural Medicines Comprehensive Database Consumer Version*. Available from MedlinePlus Supplements. <<http://www.nlm.nih.gov/medlineplus/druginfo/natural/331.html>>

DHEA. (2013) *Natural Standard Professional Monograph*. <<http://www.naturalstandard.com/databases/herbssupplements/dhea.asp>>