

# DHEA

Dehydroepiandrosterone

## Fact Sheet

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## What is DHEA?

DHEA or dehydroepiandrosterone is an androgen hormone that is produced predominantly by the adrenal glands but also the ovaries.

Androgens may have an important role in protecting follicles from degeneration and in promoting growth during folliculogenesis. DHEA is of interest to fertility specialists because of its effect in a women's eggs as she ages. As women age the quality and quantity of eggs they produce declines. DHEA levels peak in women in their mid to late 20's then begin to slowly decline. However, recent clinical research suggests that DHEA supplements may in some cases, enhance the chances of having a baby especially in the lead-up to IVF treatment.

## What is the evidence for DHEA Supplements?

An improved response to follicle stimulation following oral DHEA has previously been demonstrated in a case series of 5 women with poor ovarian response (Casson et al., 2000).

There is some evidence of increase in the number of oocytes retrieved and embryos transferred following DHEA in a case series of 25 women (Barad et al., 2006).

Clinically higher pregnancy rates were reported in study of 190 women (28.9% vs 10.1%,  $p < 0.01$ ) following oral DHEA (75mg, 4 months prior to IVF treatment) in women with diminished ovarian reserve (Barad et al., 2007). DHEA, when combined with estrogen-progestogen therapy and melatonin may optimise fertility and pregnancy success rates for women with premature ovarian insufficiency (Vasiljević et al., 2020).

## What are the potential risks of DHEA Supplements?

The optimal dose of DHEA has not yet been established by the research evidence. For this reason I discuss with my patients the dose that suits their specific situation. Side effect of DHEA can include oily skin, acne, and hair loss. Some patients report increased libido or higher energy levels.

More research is required to understand the effect of DHEA in enhancing fertility outcomes. However, approximately a quarter (25.8%) of all IVF clinicians prescribe DHEA as an adjuvant treatment for those with poor ovarian response.

## References

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