

essentials of health

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A new scientific review concludes that use of antioxidant supplements by men could help improve their partner's chances of conceiving.

ANTIOXIDANT SUPPLEMENT MAY IMPROVE FERTILITY IN MEN

It has been suggested that between 30% to 80% of male subfertility cases are a result of damaging effects of oxidative stress on sperm. Oral supplementation with antioxidants may improve sperm quality by reducing oxidative stress.

Researchers recently reviewed 34 randomized, controlled trials that included a total of 2,876 couples undergoing assisted reproductive techniques (ART) such as in vitro fertilization. Most men in these studies had reduced sperm counts and motility. Scientists included randomized controlled trials comparing any type or dose of antioxidant supplement (single or combined) with placebo, no treatment, or another antioxidant, and taken by the male partner of a couple seeking fertility assistance. The outcomes were live birth, pregnancy, miscarriage, stillbirth, sperm DNA damage, sperm motility, sperm concentration, and adverse effects.

Antioxidant use was associated with a greater likelihood of pregnancy and live birth compared to a placebo or no treatment. Improvements in sperm motility and concentration were also observed in association with antioxidant use in trials that evaluated these effects. No harmful effects associated with antioxidant treatment were noted.

Although more head-to-head comparisons are needed to understand whether any one antioxidant performs better than others, current evidence suggests that antioxidant supplementation in subfertile males may improve the outcomes of live birth and pregnancy rate for subfertile couples undergoing cycles of assisted reproductive treatment.

Showell MG, et al. Antioxidants for male subfertility. 2011. Cochrane Database Syst Rev 1:CD0074