## Could birth control pills alter mate choices?

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Birth control pills may alter women's abilities to choose, compete for and retain mates, a new report suggests.

The paper published online on Oct. 7 in the research journal *Trends in Ecology and Evolution* reviews emerging evidence that oral contraceptives affect these activities by distorting natural hormonal cycles.

Women are fertile briefly during their menstrual cycle, just before ovulation. Studies have found that both sexes' partner preferences vary according to predictable hormonal fluctuations associated with this cycle. Ovulating women prefer more masculine, dominant and competitive males, as well as males more genetically unlike themselves. Meanwhile men, some studies suggest, detect women's fertility status, preferring ovulating women in situations where they can compare different women's attractiveness.

Contraceptive pills alter the hormonal fluctuations associated menstrual cycles and essentially mimic the more steady hormonal conditions associated with pregnancy, according to researchers. "Little effort has been invested in understanding the consequences" of this, said study author Alexandra Alvergne of the Department of Animal and Plant Sciences at the University of Sheffield, U.K.

Alverne and colleague Virpi Lumma reviewed recent studies suggesting use of the pill disrupts women's variation in mate preferences across their menstrual cycle. The authors speculated that the use of the pill may also influence a woman's ability to attract a mate by reducing attractiveness to men.

Interesting, women on the pill don't show the ovulation-specific attraction to genetically unlike partners, said Lummaa. "The ultimate outstanding evolutionary question concerns whether the use of oral contraceptives when making mating decisions can have long-term consequences on the ability of couples to reproduce."

Taken together, a growing number of studies suggest the pill is likely to affect mating decisions and thus reproduction, she added. "If this is the case, pill use will have implications for both current and future generations, and we hope that our review will stimulate further research."