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High hormone levels in women linked to unfaithfulness

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Women with high levels of oestrogen may adopt a simple relationship strategy more often associated with men: love 'em and leave 'em.



Young women with high levels of oestrogen may be more likely to love 'em and leave 'em (Image: Nick Cunard / PYMCA/Rex Features)

New research suggests that young women who produce naturally high levels of an oestrogen compound linked to fertility are more prone to hop from man to man, as well as cheat on their current partner. They also see themselves as more attractive than other women.

"These women are willing to trade up when the opportunity arises and continue to extract these lucrative resources from men when they can," says [Kristina Durante](#), an evolutionary psychologist at the University of Texas in Austin, who led the study. She thinks the behaviour could be an adaptation to the high costs of giving birth.

"For women it's all about the resources that we need. If you're going to be getting knocked up there's a significant cost," she says.

Previous research had shown that women who produce high levels of an oestrogen hormone called oestradiol are perceived as more attractive and mother more children than women with lower amounts of the sex hormone.

Oestradiol levels also wax and wane across a woman's ovulatory cycle - generally corresponding to fertility and [interest in sex](#), Durante says.

Attractiveness advantage

To rule out the effect of these monthly fluctuations, Durante and colleague Norman Li measured the

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hormone in 52 female university students at two points in the cycle, representing a woman's baseline level of the hormone.

The researchers also asked the students, who averaged 19 years and five months, to rate their own attractiveness and fill out a survey that gauged their propensity to cheat on a partner by flirting, kissing, dating, having sex, or maintaining a serious affair.

High oestradiol levels corresponded to higher self-attractiveness ratings. As independent confirmation, a panel of two men and seven women also judged them the prettiest.

High oestradiol women reported that they had dated more men and were more willing to cheat, from innocent flirts to serious affairs. These women, however, proved no more interested in one-night stands than women with lower levels of oestradiol.

"Highly attractive women can get the Brad Pitts to be long-term partners, not just the one-night stand," Durante says.

Unneeded hunks?

Behaviour associated with high oestradiol levels could have evolved when women were more dependent on men to support them through childbirth and child-rearing. Most modern women, she says, rely less on male support for food, shelter, and other resources, than their ancestors.

But these deep psychological inclinations linger, modified by modern environments. Take actress Angelina Jolie, an attractive woman more than capable of supporting her self and a fast-growing family. "She doesn't need Brad Pitt long term, but she still faces these same preferences," Durante says.

[Grażyna Jasieńska](#), a psychologist at Jagiellonian University of Krakow, Poland, notes that oestradiol levels tend to fall when women lose weight, exercise regularly, and age. The study only looked at younger women, so "it would be interesting to see if this [longer-term] variation in oestradiol corresponds to variation in behaviour," she says.

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