Previous research shows that menstrual cycle phases affect female mate preference, and that romantic kissing is utilised in mate assessment. This study found that women at high risk of conception place greater value on kissing in the early stages of a relationship (when it can assist with mate assessment), and that this effect is driven by levels of progesterone.

**Introduction & Background**

- The menstrual cycle affects female mate choice, shifting preferences towards signals of genetic quality during high conception risk phases - such as sexual dimorphism\(^1,2\), dominance\(^3\), and scents related to genetic quality and compatibility\(^4\).
- Past research suggests the courtship ritual of romantic kissing aids the assessment of potential mates\(^5,6\) (see inset).
- The current research examined menstrual cycle shifts in attitudes towards romantic kissing.

**Methodology**

An international online questionnaire asking about attitudes towards romantic kissing was conducted. Participants included 173 normally cycling women: 50 at low risk of conception (luteal phase); 34 at high risk of conception (late follicular phase).

Cycle phase was estimated using reverse day count methods\(^7\), with estradiol and progesterone levels estimated using mean serum reference values\(^8\).

**Analyses**

Estimated progesterone and estrogen levels were regressed onto answers to the questions "How important do you think kissing is at the [very initial stages of a relationship / established phases of a relationship]?".

A 2x2 mixed-design ANOVA also analysed answers to these questions, with conception-risk / relationship phase between / within subject factors.

**Results**

![Importance of kissing across the menstrual cycle](image1)

**ANATOMY OF A KISS**

Proposed ways in which romantic kissing might mediate mate choice

- **Offactory-based Cues**: Physical proximity may facilitate assessment of mate availability through olfactory sampling of pheromonal cues\(^9\).
- **General Health Cues**: Halitosis (bad breath) may signal poor health conditions (i.e. gingivitis, diabietic acidosis, respiratory infection)\(^10\).
- **Increased Arousal**: Physical contact may elevate autonomic arousal and increase likelihood of encounter leading to coitus\(^11\).
- **Gustatory Assessment**: Lip contact may allow for the gustatory assessment of health-related cues in saliva and skin semiochemicals\(^12\).
- **Mediating Attachment**: May act to mediate initiation and strengthening of pair-bonds\(^13\).

**Conclusion**

- Women at high conception risk place greater value on kissing in the early stages of a relationship than women at low conception risk.
- This preference shift is driven by menstrual cycle fluctuations in progesterone.
- The courtship ritual of romantic kissing may be valuable in assessing signals of mating partner quality.

**References**

12. Mixed-design ANOVA also analysed answers to these questions, with conception-risk / relationship phase between / within subject factors.