DO WOMEN’S BODY ODORS REVEAL THEIR OVULATORY TIMING?

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Prior research suggests that scent samples collected from women during the fertile window of the menstrual cycle are rated as more attractive than scents collected at other times, and that men exhibit both reactive testosterone increases and psychological priming effects after exposure to peri-ovulatory scents. Such findings have led some to suggest that scent cues may reveal women’s ovulatory timing. Here, 46 women each provided overnight scent samples (both axillary and genital) on six nights spaced five days apart, and completed luteinizing hormone tests to determine ovulatory timing. A sample of 61 men rated axillary scent samples collected within the estimated fertile window as significantly more attractive than scent samples collected at other times. Importantly, however, signal detection analyses showed that attractiveness ratings of fertile and non-fertile samples overlapped so much that raters essentially exhibited no ability to diagnose ovulatory timing from scent attractiveness. A second sample of 182 men was tested for hormonal and psychological responses to either plain water or to axillary or genital odor stimuli drawn from the same scent donors (but using samples from the arm that was not used in the attractiveness rating study). Planned comparisons between reactions to fertile window and other stimuli found no significant effects for changes in testosterone or cortisol, or for measures of sexual desire, inferred arousal of the donors, the priming of sexual concepts, or the desire to approach others. Together, these findings provide strong evidence against the idea that odor cues can reveal women’s ovulatory timing.