
Emotional effects of the putative pheromone androstadienone on human participants

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Abstract

The existence of human pheromones is widely accepted among layman. However, the scientific evidence for possible effects on humans is scarce and still under scrutiny. The goal of this experiment was to test possible effects of androstadienone on mood changes (verbal evaluation) and peripheral psychophysiological measures (skin conductance, heart rate and modulation of the startle reflex). Sixty female participants were randomly assigned by two double-blind male experimenters to the experimental group (exposed to androstadienone) or to a control condition. They had to rate their mood before and after the experiment, and look to a series of emotional pictures (pleasant, unpleasant and neutral) while their skin conductance, heart rate, and startle reflex were monitored. In general, no differences between groups were obtained in the subjective ratings of the pictures and in the mood ratings before and after the exposure. However, the analysis of the eyeblink response comparing positive versus negative pictures showed a significant interaction between Group and Valence, revealing a better differentiation between positive and negative images in the experimental group. Although the general pattern of results is unclear, the fact that exposure to androstadienone seems to enhance the emotional differentiation between positive and negative stimuli, could be interpreted as a higher sensitivity to emotional material after exposure to androstadienone.

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