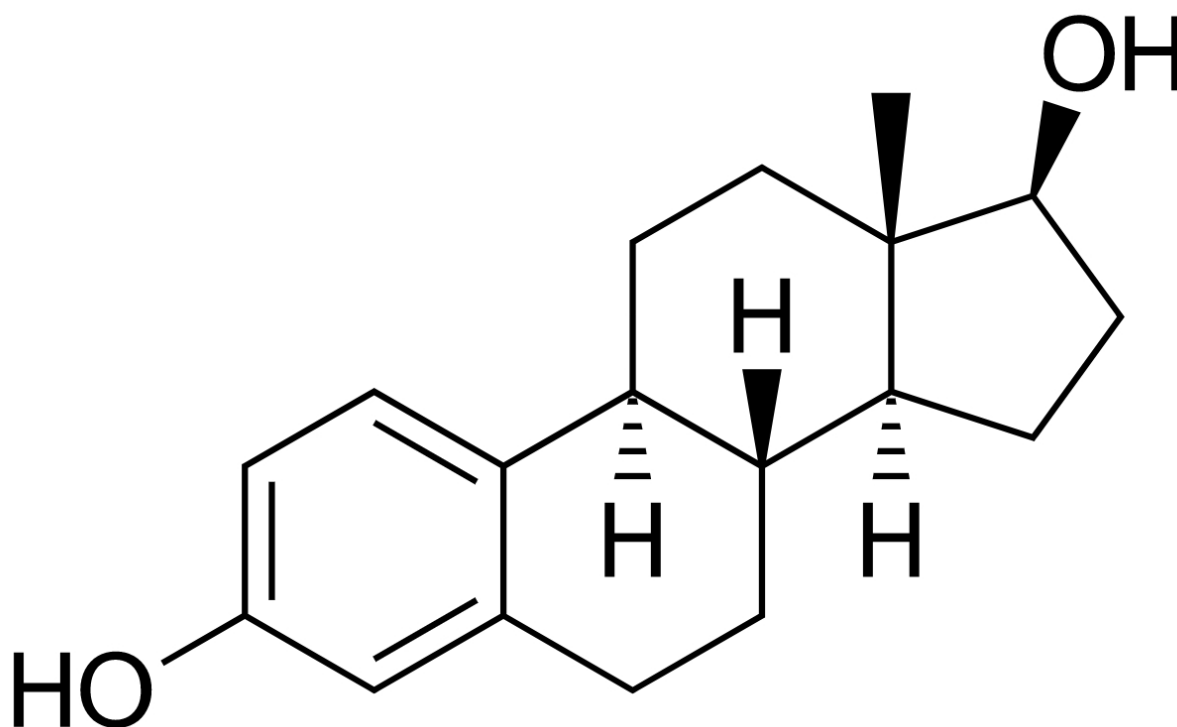


Estrogen turns up volume of mating song in female birds

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Estradiol, the major estrogen sex hormone in humans and a widely used medication. Credit: Public Domain

Does estrogen affect the way females perceive male sexual signals? That is a question a team of Yale researchers explored in a study, focusing on the female house sparrow.

The research team investigated how female sparrows exposed to estrogen responded to the songs of [males](#) from their own species and a different species. Using PET scan technology designed for [small animals](#), the researchers observed [brain activity](#) in the birds noninvasively on multiple occasions. They found that the female sparrows given estrogen were more stimulated by the songs of their own males, while they tuned out other songs. The effect lasted up to one month after hormone exposure, the researchers noted.

The study results suggest that being in breeding condition changes the way birds perceive different kinds of sounds, said the researchers. The findings could provide insights into the effects of estrogen, which is the same in humans as in birds, on the brain and on hearing. The full study is published in *PLOS ONE*.

More information: Christine R. Lattin et al. Estradiol modulates neural response to conspecific and heterospecific song in female house sparrows: An in vivo positron emission tomography study, *PLOS ONE* (2017). [DOI: 10.1371/journal.pone.0182875](https://doi.org/10.1371/journal.pone.0182875)

Provided by Yale University

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