

Females can change their reproductive tracts depending on the sperms X or Y chromosome

Old wives' tales abound about how to tip the odds of conceiving a boy or a girl. Some say that depositing the sperm closer to the cervix gives Y chromosome-carrying sperm a better chance to reach the egg first. Another urges would-be moms to eat a more acidic diet if they want to have a girl. Much of the advice focuses on how to give sperm carrying either an X or Y chromosome some sort of advantage, but for the most part, none of it has been validated by science.

A study published May 21 in BMC Genomics now suggests that female mammals may be able to sense and respond differently to X and Y chromosome sperm. Alireza Fazeli, a reproductive biologist at the University of Sheffield in the U.K., and colleagues show that in the presence of either predominantly X or Y sperm populations, the oviducts of pigs respond differently—by increasing or decreasing the expression of various genes.

According to coauthor Carmen Almiñana, a research fellow at the University of Murcia in Spain, this is the first evidence that the female can somehow tell the difference between X and Y chromosome sperm prior to fertilization and activate signaling pathways in a sex-specific way.

Read the full, original story: [Female Pigs May Sense Sex of Sperm](#)