

'The pill' for him: Scientists find a hormonal on-and-off switch for male fertility

30 November 2009

A new research report published in the December 2009 print issue of *The FASEB Journal* could one day give men similar type of control over their fertility that women have had since the 1960s. That's because scientists have found how and where androgenic hormones work in the testis to control normal sperm production and male fertility. This opens a promising avenue for the development of "the pill" for men. The discovery also offers hope to those who cannot have children because of low sperm counts. Although the research was conducted in mice, a similar effect is likely to obtain in other mammals, such as humans.

"This study provides a new opportunity to identify how androgens control sperm production, which could provide new insight for the development of new treatments for male infertility and perhaps new male contraceptives," said Michelle Welsh, Ph.D., co-author of the study, from the Centre for [Reproductive Biology](#) at The Queen's Medical Research Institute in Edinburgh, UK.

To make this discovery, Welsh and colleagues performed studies in two groups of mice. The first group of mice was normal, but the second group of mice was missing a gene from the peritubular myoid cells in the testis. This gene that was missing codes for the androgen hormone receptor, and when missing, sperm production was significantly decreased when compared to the normal group. The result was infertility.

"Although 'the pill' arguably has been liberating for women since its development in the 1960s, a similar birth control drug for men has been elusive," said Gerald Weissmann, M.D., Editor-in-Chief of *The FASEB Journal*. "Not only does this research pinpoint androgenic hormones and their cellular receptors as prime targets for the development of new birth control drugs, but it promises to speed the development of new agents to boost [sperm production](#)."

More information: Michelle Welsh, Philippa T. K. Saunders, Nina Atanassova, Richard M. Sharpe, and Lee B. Smith Androgen action via testicular peritubular myoid cells is essential for [male fertility](#). *FASEB J.* 2009 23: 4218-4230. [doi:10.1096/fj.09-138347](https://doi.org/10.1096/fj.09-138347)

Source: Federation of American Societies for Experimental Biology ([news](#) : [web](#))

APA citation: 'The pill' for him: Scientists find a hormonal on-and-off switch for male fertility (2009, November 30) retrieved 23 August 2022 from <https://medicalxpress.com/news/2009-11-pill-scientists-hormonal-on-and-off-male.html>

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