



Progesterone

In every pregnancy, a woman starts out with a 3-5% chance of having a baby with a birth defect. This is called her background risk. This fact sheet talks about whether exposure to progesterone may increase the risk for birth defects over that background risk. This information should not take the place of medical care and advice from your health care provider.

What is progesterone?

Progesterone is a hormone that is naturally produced in the body by the ovaries. The body uses progesterone to build the lining of the uterus during the menstrual cycle and help the fertilized egg attach to the wall of the uterus. During pregnancy, the placenta makes progesterone to help prevent miscarriage. Progesterone can also be taken in pill form, vaginal suppository, injection, gels, and creams. Progesterone is sold under many brand names including Aygestin®, Crinone®, Endometrin®, Prometrium®, Prochieve®, and Progestrona®. Some forms of progesterone are identical to the natural hormone and others are a little different. There are also man-made substances with similarities to progesterone called progestins. Progestins are included in some forms of birth control. This fact sheet does not discuss progestins when used for birth control. See our fact sheet on Depot medroxyprogesterone at <https://mothertobaby.org/fact-sheets/depot-medroxyprogesterone-depo-provera-pregnancy/>.

Why are women of reproductive age prescribed progesterone or progestins?

Progestins are used to treat abnormal bleeding from the uterus and to restore normal menstrual periods in women who have stopped having them for several months. Pregnant women might be prescribed progesterone early in pregnancy to help prevent miscarriage. A form of progesterone might also be prescribed later in pregnancy to help prevent a premature delivery (a birth that occurs early, before 37 weeks). Progesterone may be prescribed to help a woman become pregnant and in infertility treatment. It is important that you speak with your health care provider before beginning any treatment.

Will taking progesterone cause a birth defect?

It is unlikely that using progesterone or progestins will increase the chance of birth defects. Studies that have looked at the children of women who took progesterone during pregnancy found that the number of birth defects was no higher than expected when compared to children of women who did not take progesterone.

A few studies suggest that there is a higher chance of a baby boy being born with hypospadias after exposure to progestins. Hypospadias is when the opening where urine comes out is not at the correct location on the penis. Sometimes this can be treated with surgery.

Can I take progesterone while breast feeding?

Yes. Some reports suggested that using birth control methods that contain progestins too soon after delivery may reduce your milk supply, but the chance for this appears to be low. Be sure to talk to your health care provider about all your options for breastfeeding.

My baby's father was taking progesterone when I became pregnant. Is there any risk to the baby?

There have been no studies looking at how a father's progesterone intake affects pregnancy. In general, fathers' exposures are unlikely to increase risks to a pregnancy. For more information, please see the MotherToBaby fact sheet Paternal Exposures and Pregnancy at <https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/>.

Selected References:

- Carmichael, SL, et.al. 2005. Maternal progestin intake and risk of hypospadias. Archives of pediatrics & adolescent medicine, 159(10):957-962.
- Committee on Drugs. 2001. The transfer of drugs and other chemicals into human milk. Pediatrics, 108(3), 776-789.
- Heinonen OP, et al. 1977. Birth Defects and Drugs in Pregnancy. Littleton, Mass.: John Wright-PSG, pp 389, 391-392, 394, 443, 478, 497.
- Massai R, et al. 2005. Extended use of a progesterone-releasing vaginal ring in nursing women: a phase II clinical trial. Contraception.72:352-7.
- Norman JE, et al. 2009. Progesterone for the prevention of preterm birth in twin pregnancy (STOPPIT): a randomised, double-blind, placebo-controlled study and meta-analysis. Lancet 373(9680):2034-2040.
- Practice Committee of the American Society for Reproductive Medicine. 2008. Progesterone supplementation during the luteal phase and in early pregnancy in the treatment of infertility: an educational bulletin. Fertility and Sterility. 89(4):789-92.
- Silver RI, et al. 1999. In vitro fertilization is associated with an increased risk of hypospadias. J Urology 161(6):1954-1957.

November, 2016