Methylphenidate (Ritalin®)

This sheet is about exposure to methylphenidate in pregnancy and while breastfeeding. This information should not take the place of medical care and advice from your healthcare provider.

**What is methylphenidate?**

Methylphenidate is a stimulant medication that has been used to treat attention deficit disorder (ADD), attention deficit hyperactivity disorder (ADHD), and sleep disorders (narcolepsy). It has also been used to lower appetite. Methylphenidate is sold under brand names including Ritalin®, Metadate®, Cotempla®, and Concerta®. A transdermal (skin) patch called Daytrana® is approved for children and adolescents.

Sometimes when people find out they are pregnant, they think about changing how they take their medication, or stopping their medication altogether. However, it is important to talk with your healthcare providers before making any changes to how you take this medication. Your healthcare providers can talk with you about the benefits of treating your condition and the risks of untreated illness during pregnancy.

**I take methylphenidate. Can it make it harder for me to get pregnant?**

Studies have not been done in humans to see if methylphenidate could make it harder to get pregnant. Animal studies have not shown negative effects on fertility at doses up to 200 times the maximum dose given to humans.

**Does taking methylphenidate increase the chance for miscarriage?**

Miscarriage can occur in any pregnancy. Based on the studies reviewed, it is not known if taking methylphenidate increases the chance for miscarriage. One small study found a small increased chance for miscarriage.

**Does taking methylphenidate increase the chance of birth defects?**

Every pregnancy starts out with a 3-5% chance of having a birth defect. This is called the background risk. Based on the studies reviewed (looking at about 2,200 pregnancies), methylphenidate is not expected to increase the chance of birth defects above the background risk. Most studies have reported healthy babies delivered at full-term after exposure to methylphenidate. One large database study suggested an increased chance for heart defects when methylphenidate is used in pregnancy. Other studies have not suggested an increased chance for heart defects. Research has not been done on the skin patch and pregnancy.

**Does taking methylphenidate in pregnancy increase the chance of other pregnancy-related problems?**

Based on the studies reviewed, it is not known if methylphenidate can cause other pregnancy-related problems, such as preterm delivery (birth before week 37) or low birth weight (weighing less than 5 pounds, 8 ounces at birth). Limited research does not suggest an increased chance for preterm delivery or low birth weight when methylphenidate is taken as prescribed during pregnancy.

**I need to take methylphenidate throughout my entire pregnancy. Will it cause withdrawal symptoms in my baby after birth?**

Some babies exposed to stimulants close to the time of delivery may show temporary signs of withdrawal after they are born. However, this hasn’t been seen with use of methylphenidate when taken as prescribed.

**Does taking methylphenidate in pregnancy affect future behavior or learning for the child?**

Based on the studies reviewed, it is not known if methylphenidate increases the chance for behavior or learning issues. Limited studies have shown typical growth and development in children up to one year of age who were exposed to methylphenidate during pregnancy.

**Breastfeeding while taking methylphenidate:**

Methylphenidate passes into breast milk in low amounts. When taken as prescribed, methylphenidate is not expected to cause problems for a nursing infant. There are reports on five nursing infants exposed to methylphenidate through
breastmilk. The people who were breastfeeding were taking doses of methylphenidate that ranged from 35-80mg per
day. The nursing infants reportedly had typical weights, and typical sleeping and feeding habits. Breastfeeding studies
haven’t been done on the skin patch. Be sure to talk to your healthcare provider about all of your breastfeeding
questions.

If a male takes methylphenidate, could it affect fertility (ability to get partner pregnant) or increase the
change of birth defects?

Based on the studies reviewed, it is not known if methylphenidate could affect fertility or increase the chance of birth
defects above the background risk. In general, exposures that fathers or sperm donors have are unlikely to increase
the risks to a pregnancy. For more information, please see the MotherToBaby fact sheet Paternal Exposures at
https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/.

Please click here for references.