Regular Strength Aspirin

This sheet is about exposure to regular strength aspirin in pregnancy and while breastfeeding. This information is based on available published literature. It should not take the place of medical care and advice from your healthcare provider.

What is regular strength aspirin?
Aspirin, also known as acetylsalicylic acid, is a non-steroidal inflammatory drug (NSAID) that has been used to treat inflammation, fever, and pain. It has also been used to prevent blood clots. It is available over the counter and by prescription. A single tablet of regular strength aspirin is 325mg. This sheet will focus on the use of more than 325mg of aspirin in a 24-hour period.

Low dose aspirin is sometimes used in pregnancy for different reasons. The pregnancy information for low dose aspirin is different. MotherToBaby has a fact sheet on low dose aspirin here: https://mothertobaby.org/fact-sheets/low-dose-aspirin/.

In October 2020, the U.S. Food and Drug Administration (FDA) made a recommendation to avoid the use of NSAIDs, including regular strength aspirin, after 20 weeks of pregnancy, unless your healthcare provider feels it is necessary.

I take regular strength aspirin. Can it make it harder for me to get pregnant?
It is not known if regular strength aspirin can make it harder to get pregnant. Some studies suggest that using NSAIDs, including regular strength aspirin, may stop an egg from being released from the ovary (ovulation inhibition), which can make it harder to get pregnant.

Does taking regular strength aspirin increase the chance of miscarriage?
Miscarriage is common and can occur in any pregnancy for many different reasons. An increased chance of miscarriage has been reported with the use of regular strength aspirin, especially with use around the time of conception.

Does taking regular strength aspirin 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. It is not known if there is an increased chance for birth defects with the use of regular dose aspirin. Most studies on the use of regular strength aspirin do not show an increased chance of birth defects above the background risk. A few small studies have reported an increased chance of gastroschisis (opening in the stomach wall of the fetus) with early pregnancy use of regular strength aspirin.

There are some studies that suggest an association between NSAID use, including regular strength aspirin, during the first trimester and a chance for congenital heart defects. However, other studies did not find an increased chance for heart defects when looking specifically at regular strength aspirin use during pregnancy.

Does taking regular strength aspirin in pregnancy increase the chance of other pregnancy-related problems?
The use of regular strength aspirin (and/or other NSAIDs) is not recommended after 20 weeks of pregnancy. There have been reports that NSAID use in the 2nd half of pregnancy might affect the fetal kidneys and the amount of amniotic fluid (fluid that surrounds the fetus in the uterus). If there is not enough amniotic fluid (called oligohydramnios), pregnancy complications such as poor lung development and joint contractures (joints become stiff or unable to move), could happen. Oligohydramnios can also lead to the need to deliver the pregnancy early with induction of labor or C-section. In some cases, oligohydramnios can cause fetal death.

Use of NSAIDs (including regular strength aspirin) in the 3rd trimester might also cause premature closure of the ductus arteriosus in the fetus. If the ductus arteriosus (an opening between the two major blood vessels leading from the heart) closes before it should, it can cause high blood pressure in the fetal lungs (pulmonary hypertension).

There can also be an increased chance for other problems, such as bleeding during pregnancy, bleeding after delivery (post-partum hemorrhage), and bleeding in the brain of the newborn with the use of regular strength aspirin in
pregnancy. Regular strength aspirin should only be used under a healthcare provider's supervision, particularly in the 2nd and 3rd trimesters.

*Does taking regular strength aspirin in pregnancy affect future behavior or learning for the child?*

Some studies have shown an increase in newborn bleeding, including bleeding in the brain, from the use of regular strength aspirin during pregnancy. This might affect future brain development.

*Breastfeeding while taking regular strength aspirin:*

Aspirin passes into breastmilk and is broken down by an infant's body more slowly than in an adult's body. This means aspirin levels in the infant's body could build up over time. High doses of aspirin can lower the body's ability to clot blood (could lead to easier bruising or bleeding). Reye's syndrome, a rare condition involving brain swelling and liver damage, can be caused by giving aspirin to an infant while they are recovering from a viral infection such as a cold, the flu, or chickenpox. The same risk has not been reported when a baby is exposed to aspirin through breast milk. If you suspect the baby has any symptoms (bleeding or bruising), contact the child's healthcare provider. Be sure to talk to your healthcare provider about all your breastfeeding questions.

*If a male takes regular strength aspirin, could it affect fertility (ability to get partner pregnant) or increase the chance of birth defects?*

Studies have not been done to see if regular strength aspirin could affect male 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 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.*