Ibuprofen

This sheet talks about using ibuprofen in pregnancy and while breastfeeding. This information should not take the place of medical care and advice from your healthcare provider.

What is ibuprofen?

Ibuprofen is a pain reliever drug that belongs to the group known as nonsteroidal anti-inflammatory drugs (NSAIDs) commonly used to treat arthritis, headaches, muscle aches, fever, and menstrual cramps. The brand names for ibuprofen include Motrin®, Advil®, and Nuprin®. Ibuprofen is also an ingredient in many over-the-counter combination products.

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

I take ibuprofen regularly. Can it make it harder for me to become pregnant?

A few small studies have suggested an increased chance for one type of temporary female infertility called unruptured follicle syndrome with the use of NSAIDs such as ibuprofen. This occurs when the follicle (organ where the egg grows) fails to release an egg at the time of ovulation, even with an otherwise normal cycle. This syndrome seems to be more likely to occur with ongoing daily NSAID use.

Does taking ibuprofen increase the chance of miscarriage?

Miscarriage can occur in any pregnancy. It is not known if taking ibuprofen early in pregnancy increases the chance for miscarriage. Some studies show a higher chance for miscarriage compared to those who do not take NSAIDs but other studies do not. The reason why a person is taking ibuprofen (such as a medical condition or viral infection) may have an effect on the chance of having a miscarriage.

Does taking ibuprofen 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. A few studies have suggested a possible association with the use of NSAIDs in early pregnancy and a low chance for certain birth defects.

A few studies have suggested that using ibuprofen in the first trimester might lead to a small increased chance for gastroschisis (a defect in which an infant’s intestines stick out of a hole in the abdominal wall). These studies suggest that ibuprofen use in the first trimester raises the chance of having a baby with gastroschisis from 1 in 10,000 to between 1 and 4 in 10,000. However, other studies looking at gastroschisis cases have not supported this association.

A small increased chance for heart defects has been reported in a few studies looking at NSAID prescriptions in early pregnancy. However, the reason the NSAID was prescribed was not available in most of the reported data. This information is important because some illnesses, like viral infections, have been associated with heart defects.

It is not known whether ibuprofen increases the chance for heart defects or gastroschisis. Ibuprofen is generally not the pain reliever of choice during pregnancy because there are concerns with the use of ibuprofen during the second and third trimesters.

Could taking ibuprofen cause other pregnancy complications?

Ibuprofen is not recommended for use after week 20 of the pregnancy.

There have been some reports that NSAID use in the 2nd half of pregnancy might affect the kidney of the developing baby. The baby’s kidney starts to make amniotic fluid (the fluid that surrounds the baby) around week 20 of pregnancy. If there is not enough amniotic fluid (called oligohydramnios) other pregnancy complications, such as poor lung development and skeletal problems such as joint contractures (joints can become stiff or unable to move), could happen. Oligohydramnios can also increase the chance for the need for early delivery through induction of labor or c-section. In some cases, oligohydramnios could cause fetal demise.
Ibuprofen use later in pregnancy might also cause premature closure of the ductus arteriosus (a vessel that runs from the pulmonary artery to the aorta). Premature closure of this blood vessel can cause high blood pressure in the lungs of the developing baby (called pulmonary hypertension).

The use of ibuprofen later in pregnancy might also stop or slow down labor.

Therefore, ibuprofen should only be used under a healthcare provider's supervision, particularly in the 2nd and 3rd trimesters. Talk with your healthcare providers about the benefits and risks of these medications during pregnancy before using them. If your healthcare provider feels that ibuprofen use is needed, they will likely discuss using the lowest dose needed for the shortest time needed to treat your medical condition. Your healthcare providers can closely monitor your pregnancy if you need to use ibuprofen after week 20.

**Does taking ibuprofen in pregnancy cause long-term problems in behavior or learning for the baby?**

One study found that those who used NSAIDs during pregnancy reported more attention problems in their children at ages 1.5, 3, and 5. However, there was no difference in teacher-reported attention problems at age 6 between children who were exposed to NSAIDs during pregnancy and those who were not.

**Can I breastfeed while taking ibuprofen?**

Ibuprofen is found in low levels in breastmilk. No negative effects have been reported in exposed newborns, and when needed, it is given to infants at higher doses than they would get from breastmilk. Ibuprofen is often a preferred medication to treat pain or inflammation in those who are breastfeeding. Be sure to talk to your healthcare provider about your breastfeeding questions.

**I take ibuprofen. Can it make it harder for me to get my partner pregnant or increase the chance of birth defects?**

There are no studies looking at the chance for birth defects when the father or sperm donors take ibuprofen. 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.