Melatonin

This sheet is about exposure to melatonin 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 melatonin?**

Melatonin is a hormone made by the body that helps with the natural sleep-wake cycle (called circadian rhythm). Melatonin is made by the body mostly during periods of darkness in the night. During pregnancy, the body typically makes more melatonin. Studies suggest that melatonin levels are highest in the third trimester of pregnancy and levels are expected to return to normal after delivery.

Melatonin is also available as a supplement sold over the counter. Taking melatonin supplements during pregnancy has not been well studied. In general, it is suggested to speak with your healthcare provider before taking any supplements. Many supplements are not recommended for use during pregnancy unless your healthcare provider has prescribed them to treat a medical condition. This is because they are not well-regulated nor studied for use in pregnancy. For more detail on supplements, please see the fact sheet at https://mothertobaby.org/fact-sheets/herbal-products-pregnancy/.

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

A small number of limited studies that have looked at use of melatonin among people with infertility who were undergoing in vitro-fertilization (IVF) treatments have not shown an increase in pregnancy rates.

**Does taking melatonin increase the chance of miscarriage?**

This has not been well studied. Miscarriage is common and can occur in any pregnancy for many different reasons. Studies that have looked at melatonin use for infertility have not shown any increases in the chance of miscarriage.

**Does taking melatonin 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 taking melatonin would increase the chance of birth defects. The few studies that have been done in humans with the use of melatonin for the treatments of some conditions in pregnancy (to reduce blood loss during C-section and improve success of in vitro fertilization) have not suggested an increased chance of birth defects.

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

Studies have not been done to see if taking melatonin supplements can increase the chance of other pregnancy-related problems, such as preterm delivery (birth before week 37) or low birth weight (weighing less than 5 pounds, 8 ounces [2500 grams] at birth). Studies exploring the use of melatonin to reduce blood loss during C-section deliveries found mixed results with 3 studies showing less blood loss and 1 study showing no difference in blood loss.

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

Studies have not been done to see if taking melatonin supplements can cause behavior or learning issues for the child.

**Breastfeeding while taking melatonin:**

Melatonin made by the body is present in breastmilk in higher amounts at night. Taking melatonin supplements while breastfeeding has not been well studied. One case has been reported of an infant with a bleeding problem while being breastfed by an individual who was taking a supplement that had melatonin and valerian. This bleeding problem has not been reported in other studies, including studies where melatonin was given directly to infants. Be sure to talk to your healthcare provider about all your breastfeeding questions.

**If a male takes melatonin, could it affect fertility or increase the chance of birth defects?**

Based on the studies reviewed, it is not known if melatonin supplements could affect male fertility (ability to get partner pregnant) 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 to view references.