

# Berberine

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

## ***What is berberine?***

Berberine is an ingredient found in many plant species, including goldthread, huang lian, Oregon grape, and barberry. It has been used to treat many conditions, such as diarrhea, diabetes, and high cholesterol. It has also been used for weight loss.

Berberine is available as a supplement sold over the counter. 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 or 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 berberine. Can it make it harder for me to get pregnant?***

It is not known if berberine can make it harder to get pregnant. There is some information to suggest berberine can increase fertility and pregnancy rates in females with polycystic ovary syndrome (PCOS).

## ***Does taking berberine increase the chance of miscarriage?***

Miscarriage is common and can occur in any pregnancy for many different reasons. It is not known if berberine increases the chance for miscarriage. One study suggests that berberine may cause uterine contractions and miscarriage. However, information is very limited. As there can be many causes of miscarriage, it is hard to know if an exposure, the medical condition, or other factors are the cause of a miscarriage.

## ***Does taking berberine 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. One report looking at 218 pregnancies exposed to huang lian (which contains berberine) did not show an increased chance of birth defects above the background chance.

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

Studies have not been done to see if berberine increases the chance for 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).

Berberine can change how bilirubin (a yellowish pigment that is made during the breakdown of red blood cells) binds to serum albumin (the main protein in blood plasma). This can cause a buildup of bilirubin in the brain, which can lead to brain damage and other issues. While information on this is very limited, one author suggests avoiding herbs and products that contain berberine during pregnancy.

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

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

## ***Breastfeeding while taking berberine:***

Berberine passes into breastmilk, but how much berberine gets into breastmilk is not known.. It is possible that berberine in breastmilk could cause a buildup of bilirubin in the infant brain, which can result in brain damage and other issues. This makes berberine exposure via breastmilk a concern, especially in newborns. Also, because berberine is a supplement, it is not recommended for use during breastfeeding unless your healthcare provider has prescribed it to treat a medical condition. Be sure to talk to your healthcare provider about all your breastfeeding questions.

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

Studies have not been done in humans to see if berberine 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.**

**Questions? Call 866.626.6847 | Text 855.999.3525 | Email or Chat at [MotherToBaby.org](https://mothertobaby.org).**

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