



Review Article

What All Women Need To Know About Alcohol Consumption before and During Pregnancy

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How much Alcohol can you really drink during pregnancy? What sort of complications can drinking cause even before pregnancy?

We often get asked how much alcohol is really safe to consume whilst pregnant. The answer to this question is zero alcohol!

Ever wanted to know how much Alcohol can impact your future's baby overall development including its IQ? And how as little as 2 drinks per week during pregnancy and breastfeeding can cause physical and cognitive defects, including poor growth development to your fetus [1,2]?

Consuming an average of more than 3 drinks per day before pregnancy is classified to be binge drinking according to a 2014 study in Denmark, and also further discovered excessive consumptions of alcohol can cause neurological and cognitive development disorders in unborn babies, including short attention span, below average IQ levels, affecting their ability to analyze information and solve problems [3].

Binge drinking is also associated with miscarriage, as a 2014 Danish study found that among women who consumed 4 or more drinks per week, 99 women out of 1932 women suffered miscarriage within the first trimester and a further 51 women suffered miscarriage in their second trimester [4].

When You Drink Alcohol, Your Baby Drinks Too

When a Pregnant woman consumes alcohol, the body breaks it down to form two common compounds namely; acetaldehyde (also known as an agent called Teratogen) and Ethanol which enters the

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placenta and is absorbed directly into the defenseless growing fetus, causing birth defects and decreased fetal growth [5,6].

The placenta is one of the most important organs during pregnancy as it helps maintain the fetus and provides a gateway of nutrition between the mother and the unborn baby. Drinking alcohol during pregnancy can impact the overall development of the placenta and cause fetal growth restriction as well, by:

- Restricting blood flow to the placenta
- Causing blood clots in the placenta
- Reducing oxygen and nutrient supply to the placenta and the fetus
- Increasing placental cell death and decrease in cell growth and [7]
- Potentially lead to pre-eclampsia; a serious condition which is responsible for about 18% of maternal deaths and up to 40% of fetal mortality worldwide [5].

Can I Drink When I Am Breastfeeding?

Alcohol not only affects the Placenta but also gets into breast milk by passive diffusion, moving freely from your blood and straight into the baby's body causing interrupted sleep patterns and poor gross motor skills development, such as walking, running, sitting, throwing a ball as found in a Perth, Australian study in 2008 [8].

Can Drinking Cause Birth Defects?

Even at low levels of prenatal alcohol which amount to be approximately 2 drinks per week can cause physical deformities, behavioral issues and neurocognitive disabilities [1].

A study conducted in California found that for every additional drink pregnant women consumed on top of their average alcohol intake of less than 1g of alcohol per day, increased their baby's risk of being born with [9];

- 25% more likely to have a missing philtrum- a facial deformity where the baby has no groove between the nose and upper lip
- 22% more likely to have an abnormally thin upper lip
- 18% more likely to be small in size at birth
- 16% more likely to weigh less at birth
- 12% more likely to have microcephaly- a birth defect of an abnormally small head associated with incomplete brain development.

Further Studies Suggest Drinking Affects My Child's Development

A 2014 study conducted in Britain found that having more than 2 drinks per week during the first trimester can double the baby's chances of being born with 'small for gestational age' causing a defect in a baby's normal birth size and a decrease in birth weight by 100g. Another 2014 Australian study found that babies born to mothers who drank during pregnancy were 16.8% more likely to be born pre-mature [1,10].

Acupuncture

Preliminary studies support the use of acupuncture to reduce alcohol cravings as discovered in a 2015 Korean study showed the effectiveness of acupuncture point Kidney 9 (Chinese name “ZHUBIN”) had on reducing cravings in a group of people with alcohol dependence. The people in this study who were treated with acupuncture experienced significant reduction to alcohol cravings compared to the group that received placebo acupuncture [11].

Take Home Messages Summary

Alcohol breaks down into:

- Acetaldehyde which can cause birth defects
- Ethanol which restricts nutrient supply and decreases fetal growth

Effects of Alcohol:

- Drinking before and during pregnancy can affect your child’s neurodevelopment and impact IQ levels
- Even low level drinking during pregnancy can cause birth defects
- Drinking during pregnancy can decrease birth size and birth weight
- Drinking during pregnancy can cause maternal death and fetal mortality due to pre-eclampsia
- Drinking during breastfeeding affects the development of the child’s poor gross motor skills development and interrupted sleep pattern

What Can I Do? Support and Help Lines

Speak to your GP who can refer you to local support services. For more information, you can contact St Vincent’s Alcohol & Drug Information Service (ADIS) Call: 02 9361 8000 (Confidential & 24/7 operation) Website: <http://yourroom.com.au/>

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