Consuming Caffeine During Pregnancy

By Karen Kuehn Howell, Ph.D.

Caffeine is consumed daily by more than 80% of the world’s population and world coffee consumption is increasing. In the United States, the per capita intake of caffeine is 200 mg daily, which is the average dosage obtained in two cups of coffee, two or three cups of tea, three or four cola drinks, or six to eight analgesics-pain relievers. Caffeine is consumed by people of all ages, but consumption increases during early adulthood, plateaus during middle age, and decreases slightly during old age. One important aspect of the age trends in caffeine consumption is that use is particularly high among women of childbearing age.

In 1980, the United States Food and Drug Administration removed caffeine from the list of drugs generally regarded as safe and advised pregnant women to restrict or eliminate coffee consumption. In subsequent years, various professionals have repeated this advice and popular guides for pregnant women have advocated reduced consumption of caffeine. Despite these influences, most women continue to consume caffeine during pregnancy and some do so in relatively large quantities.

Is consuming caffeine during pregnancy harmful for a fetus? Although it is unclear, to date, whether consuming small amounts of caffeine during pregnancy affects fetal development, several studies have suggested that consuming high amounts of caffeine (i.e., more than 300 mg per day) during pregnancy may be harmful. During pregnancy, the fetus receives all of its oxygen and nutrients from the mother through the placenta. Caffeine crosses the placenta easily, because of its low molecular weight and high lipid solubility. In addition, just as caffeine easily crosses the placenta to the fetus, it
is also passed into breastmilk. Although the concentration of caffeine in breast milk is low, caffeine accumulates in the infant across exposures, particularly in the first months of postnatal life.

Most studies show that small amounts of caffeine have negligible effects on the fetus. However, large amounts of caffeine have been associated with heart defects in a very small number of babies, lower birth weight and an elevated risk of spontaneous abortion. Studies have also found behavioral effects that include a slightly higher heart rate, more startles and tremors, and lower consolability.

Until more is known about the potential dangers of caffeine to fetal development, it is recommended that pregnant women and women actively trying to get pregnant avoid caffeine as much as possible.

For further information regarding this article please contact the Maternal Substance Abuse and Child Development Project, Emory University School of Medicine, Department of Psychiatry and Behavioral Sciences, Emory West Campus, 1256 Briarcliff Road N.E., Suite 323-West, Atlanta GA, 30306. You can email us at msacd@listserv.cc.emory.edu, visit our website at http://www.emory.edu/MSACD, or phone us at 404-712-9800.

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