The Effects of Low to Moderate Alcohol Use in Pregnancy

According to a study published in the journal *Alcoholism: Clinical and Experimental Research*, even low to moderate drinking during pregnancy may cause subtle brain damage to the developing fetus. Daniel Savage and his colleagues at the University of New Mexico Medical School found significant learning deficits in the grown offspring of rats that had consumed low levels of alcohol during pregnancy. According to Dr. Savage, the data indicate that something equivalent to one-and-a-half drinks of alcohol a day by pregnant women could produce increased risk of subtle brain damage. Dr. Savage’s study found that the release of the brain chemical glutamate, which is involved in learning, was reduced in the rats whose mothers consumed alcohol compared with the unexposed animals.

The results of this study are supported by the work of Dr. Nancy Day and her colleagues at the University of Pittsburgh. In a study also published in *Alcoholism: Clinical and Experimental Research*, Dr. Day followed the growth of more than 500 children of low income mothers. The children’s development was relatively normal, but if their mother’s consumed alcohol at even low to moderate levels, their development was impacted. The children born to mothers who consumed alcohol during pregnancy were negatively impacted in height and weight, even those children whose mother’s consumed low levels of alcohol. According to Day and her colleagues, adverse effects were found among children whose mothers consumed as little as two drinks per week.

For more information regarding these studies, please see *Alcoholism: Clinical and Experimental Research*. For further information on prevention efforts regarding alcohol use during pregnancy, please contact Karen Kuehn Howell, Ph.D., at the Maternal
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