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Smoking Mothers Have Sterile Daughters!

Due to PAHs

A mother 'pumping' nicotine into her body and having a baby growing inside her womb affects the baby's brain development, causing long-term behavioral and learning impairment and these children have usually lower weights. Smoking mothers increase the risk for the baby to be born mentally retarded, with physical anomalies and even behavioral changes. Future mothers must be even careful not to inhale "second hand smoke" (not to be passive smokers). A 2007 Japanese research discovered that nicotine in the breast milk shortens a baby's sleep time. Mothers smoking in the first three months of pregnancy will also deliver children that are about thrice more likely to experience obesity later, probably as children of mothers who smoke experience nutrition shortage while in the uterus. Also, by skipping breakfast during pregnancy, mothers boost by 2.4 times the likelihood of their children developing obesity. But this new discovery comes with also a tough effect of smoking on the offspring: if in adult males smoking causes impotence and low sperm count (sterility) and in women sterility, watch this out: girls having smoking mothers may be sterile, too. The team led by Andrea Jurisicova at the University of Toronto, Canada, shows that smoking before pregnancy or while breastfeeding could significantly decrease the fertility of female offspring. Female mice injected under the skin with polycyclic aromatic hydrocarbons (PAHs) (toxic chemicals encountered in cigarette smoke) during pre-pregnancy or while lactating delivered normal-sized litters. But this female offspring possessed significantly lower numbers of resting and early growing follicles (cell clusters delivering a sole ovule). The team found that PAHs activated aryl hydrocarbon receptors (Ahr), which controls the activity of the gene Harakiri encoding a protein triggering cell death (apoptosis). PAHs acted similarly in human ovarian tissue transplanted into immunocompromised mice, thus PAHs could explain decreased fertility in smoking women.