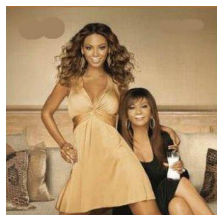


9 January 2008

By: Stefan Anitei, Science Editor



## [When Mothers Have More Sex, Daughters Are More Fertile](#)

### *Balanced sexual conflict*

A female should have sex once, fertilize her eggs and that's it. But many researches show that, in the animal kingdom, females have much more sex, even if bouts of mating consume energy that could have been used to produce more offspring. The natural selection should remove such behavior. But a new study published in the "American Naturalist" shows that frequent mating females have an evolutionary advantage: their daughters have higher fitness. The team from the University of Virginia made its research on fruit flies (*Drosophila melanogaster*). The researchers discovered that more sex plummeted maternal survival and reproductive output, but boosted the number of "grandchildren" delivered by daughters. "Frequent mating was more hazardous to females than we had suspected. Increased mating frequency actually accelerated the female aging process. But, the daughters of frequent mating mothers had enhanced offspring production", said co-author Nick Priest. When the team assessed the multi-generation costs and benefits of mating frequency, they discovered that the costs to mothers were buffered by daughters' increased fertility and high mating frequency was neither bad nor good. This sexual pattern in the fruit fly amazed the researchers, as this species is seen as a classical example of sexual conflict, as males and females have opposite optimal mating frequencies. This study reveals that the genes causing female mating frequency could spread faster than thought, as their costs are not negative when observed over several generations. "Sexual conflict might still have an important role in the evolution of mating behavior. But, clearly, we have to consider the fitness consequences of mating over more than one generation. Males and females are not in conflict with respect to mating frequency, as they both appear to benefit from frequent mating", said Priest.