Parents of a child with attention deficit hyperactivity disorder (ADHD) are nearly twice as likely to divorce by the time the child is eight years old than parents of children without ADHD, according to a study conducted by UB researchers.

Moreover, among couples in the study who were divorced, marriages involving children with ADHD ended sooner than marriages with no ADHD-diagnosed children.

William E. Pelham Jr., PhD, UB Distinguished Professor of Psychology and distinguished professor of education at the University of Pittsburgh, is first author on the study, which is the first to look at this question.

Results showed that 22.7 percent of parents of children with ADHD had divorced by the time the child was eight years old, compared to 12.6 percent of parents in the control group. Divorce rates of parents with and without children with ADHD were not significantly different after children passed the eight-year mark.

"Families that 'survive' through that age, perhaps because they are on all of the risk factors, apparently will make it through the rest of the child's childhood," Pelham notes.

Of the characteristics that may contribute to risk of divorce, a father's antisocial behavior proved to be the largest factor.

To learn more about this study, its methodology and findings, visit the UB NewsCenter website at www.buffalo.edu/news and search "ADHD."

M oreover, the researchers have shown for the first time that the metabolic programming occurs in the fetal hypothalamus, the area of the brain responsible for maintaining the body's energy homeostasis (body weight) throughout life.

Levels of the hormones insulin and leptin also were elevated in fetuses of these obese mother rats, abnormalities that have been correlated with increased appetite and insulin resistance (a predilection to diabetes), as well as obesity and hypertension. "Our earlier studies looked at newborn rats of the obese mothers in the post-weaning period, so we didn't know how early this programming occurred," said Mulchand Patel, PhD, UB Distinguished Professor of Biochemistry and senior author on the study. "Now we know it occurs in utero and specifically in the hypothalamus.

"While these studies were done with rats, there is good reason to think the mechanism would be similar in humans," he says. "The fact that more than one-third of women of child-bearing age in the United States are expected to be overweight or obese during pregnancy, based on a 2003 study, does not portend well for adult-onset obesity under the importance of women maintaining optimal conditions during their pregnancies," concludes Patel.

Additioanal contributors to the study from the School of Medicine and Biomedical Sciences were Catherine Dobbs and Tao Gao, in the Department of Biochemistry; Hasam Ghanim and Parveen Dandona, in the Department of Medicine; and Peter J. Ross and Richard W. Browne, in the UB Department of Biotechnical and Clinical Laboratory Sciences.