Genetic Risk Factors For Eating Disorders Discovered

**Date:** May 12, 2007  
**Source:** Michigan State University  
**Summary:** Until recently, it was generally believed that eating disorders such as anorexia nervosa and bulimia nervosa resulted solely from environmental influences such as peer pressure and certain perceived expectations of society. But new research suggests that there are genetic risk factors at work as well.

FULL STORY

Until recently, it was generally believed that eating disorders such as anorexia nervosa and bulimia nervosa resulted solely from environmental influences such as peer pressure and certain perceived expectations of society.

But research at Michigan State University has found that there are genetic risk factors at work as well. The research of Kelly Klump, an MSU associate professor of psychology, published in the May issue of Psychological Medicine, indicates that the origin of eating disorders has biological roots, similar to how bipolar disorder and schizophrenia are thought to have biological causes.

Specifically, Klump’s work found that when girls enter puberty their chances of developing such a disease grow rapidly.

“During puberty, there is an increased risk for developing an eating disorder,” said Klump. “Up to 50 percent of this risk can be attributed to genetic factors that emerge during puberty.”

Klump’s research looked at more than 500 female 14-year-old twins who were examined using sophisticated statistical modeling techniques. It was found that before puberty, environmental factors alone contribute to the development of various eating disorders. As puberty progresses, the genetic risk is activated and increases in importance to accounting for more than half the risk for eating pathology.

These findings extend previous research by Klump in which she found that at age 11 there were no genetic influences on disordered eating. However, by age 17 the heritability of disordered eating was more than 50 percent. The recent findings implicate puberty in the dramatic increase in genetic effects across time.

The female twins were part of the Minnesota Twin Family Study. An ongoing research project at the University of Minnesota, the project seeks to identify the genetic and environmental influences on the development of psychological disorders. More than 8,000 twins and their family members have participated in the project.
“This research underscores a need to fund future research in eating disorders,” said Klump, who also is the president of the Academy for Eating Disorders. “There is a significant biological and psychological component to eating disorders that needs to be further examined.”

The study was funded by grants from the National Institute of Mental Health, National Institute on Drug Abuse and National Institute on Alcohol Abuse and Alcoholism.

**Story Source:**

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