

# Stressed mums may have 'moody' babies

Study links prenatal anxiety to risk of mood disorders; early nurturing vital

By **FENG ZENGKUN**

IF WOMEN are overly stressed or anxious during pregnancy, their babies stand a higher risk of developing emotional issues such as depression, or cognitive problems such as attention deficit hyperactivity disorder (ADHD).

Singapore scientists who studied 189 infants and their mothers found that, the sadder or more anxious the women were during pregnancy, the thinner their babies' pre-frontal cortices – an area of the brain associated with mood disorders.

Babies who had a specific variation of a gene called COMT (short for catechol-O-methyltransferase) suffered even more from their mothers' prenatal anxiety.

National University of Singapore (NUS) Associate Professor Qiu Anqi, who led the study, said the findings showed that women should seek help if they find them-

selves unable to cope with problems during pregnancy.

"We all have stressed or sad moments. But if you're feeling sad all the time, or you always feel that something bad is going to happen to you, then you should get help," said the professor, who is with the department of biomedical engineering.

A death in the family or financial problems could trigger such negative feelings, she said.

She noted that the findings do not mean that some babies are disadvantaged for life.

Infant brains are just 30 per cent the size of adult brains, and grow rapidly in the first four years of the child's life, to about 95 per cent the size of the adult brain.

This means that a nurturing environment during the child's early years is very important as well, said Prof Qiu.

The research is part of an ongoing project called Growing Up in

Singapore Towards Healthy Outcomes (Gusto), which was started in 2009 with around 1,200 expectant women. The project continues to track them and their children.

Gusto is a collaboration between the Agency for Science, Technology and Research, the National University Health System and KK Women's and Children's Hospital.

It was meant to shed light on how metabolic diseases arise early in life, but has branched into areas such as allergies and the developmental advantages of exposing babies to multiple languages.

The women were asked in their 26th week of pregnancy to fill out a form that scored their anxiety.

The brains of the 189 infants were imaged safely some time between five and 17 days after birth. The COMT genes were examined using umbilical cord samples.

The Gusto researchers are also looking at how brain growth in the children's early years might be used to predict their behaviour later.

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