Depression and poor diet during pregnancy 'can affect child cognitive function'

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(Medical Xpress)—New research led by King's College London shows that women who are depressed during pregnancy are more likely to have an unhealthy diet – which can negatively impact on their children's cognitive functioning in later life.

The study, published online by the *British Journal of Psychiatry*, was led by Dr Edward Barker of the Institute of Psychiatry, King's College London. The research team studied 6,979 women and their children who were part of the Avon Longitudinal Study of Parents and Children in the UK (also known as the 'Children of the 90s' study - ALSPAC).

The women were assessed for symptoms of depression five times between when they were 18-weeks pregnant and when their child was 33 months old. The women were asked to complete a food questionnaire to

assess their eating habits when they were 32-weeks pregnant and again when their child was 47 months old. The children's cognitive function was assessed when they were eight years old.

Healthy eating was defined as a diet of nutrient-rich foods, with limited intake of salt, solid fats and added sugar (e.g. fish, pulse, vegetables). Unhealthy foods were defined as being high in saturated fat (e.g. fast food), trans fat (e.g. junk food), salt (e.g. processed food) and added sugar.

The researchers found that women who had symptoms of depression during pregnancy were more likely to have unhealthy diets. The children of these mothers had lower scores on the tests for cognitive functioning at age eight.

Lead researcher Dr Edward Barker said: "Our study provides evidence that prenatal maternal depression symptoms relate to both increased unhealthy and decreased healthy prenatal diets which, in turn, is associated with reduced child cognitive function. During pregnancy, the diet of the mother directly influences the nutritional environment of the foetus, which presumably will affect the development of the foetal nervous system including the brain.

The researchers point out that their research does not show a causal relationship between prenatal depression and children's cognitive functioning – only a correlation. However, they believe their findings show the importance of encouraging women who are depressed during pregnancy to eat more healthily.

Dr Barker added: "Helping women adopt a healthier diet during pregnancy could be highly effective in reducing the association between reduced postnatal cognitive functions in children and prenatal maternal depression."

More information: Barker E. et al. Prenatal maternal depression symptoms, prenatal nutrition and child cognitive function, *British Journal of Psychiatry*, bjp.bp.113.129486, ePub ahead of print, 10 October 2013 .

Provided by King's College London