

Eating liquorice in pregnancy may affect a child's IQ and behavior

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Expectant mothers who eat excessive quantities of liquorice during pregnancy could adversely affect their child's intelligence and behaviour, a study has shown.

A study of eight year old children whose mothers ate large amounts of liquorice when pregnant found they did not perform as well as other youngsters in cognitive tests.

They were also more likely to have poor attention spans and show disruptive behaviour such as ADHD ([attention deficit hyperactivity disorder](#)).

It is thought that a component in liquorice called glycyrrhizin may impair the placenta, allowing stress hormones to cross from the mother to the baby.

High levels of such hormones, known as glucocorticoids, are thought to affect fetal brain development and have been linked to behavioural disorders in children.

The results of the study are published in the [American Journal of Epidemiology](#). Eight year olds whose mothers had been monitored for liquorice consumption during pregnancy were tested on a range of cognitive functions including vocabulary, memory and spatial awareness.

Behaviour was assessed using an in-depth questionnaire completed by

the mother, which is also used by clinicians to evaluate children's behaviour.

The study, carried out by the University of Helsinki and the University of Edinburgh, looked at children born in Finland, where consumption of liquorice among young women is common.

Professor Jonathan Seckl, from the University of Edinburgh's Centre for Cardiovascular Science, said: "This shows that eating liquorice during pregnancy may affect a child's behaviour or IQ and suggests the importance of the placenta in preventing stress hormones that may affect cognitive development getting through to the baby."

Women who ate more than 500mg of glycyrrhizin per week - found in the equivalent of 100g of pure liquorice - were more likely to have children with lower intelligence levels and more behavioural problems.

"Expectant mothers should avoid eating excessive amounts of liquorice", said Professor Katri Räikkönen, from the University of Helsinki's Department of Psychology.

Of the [children](#) who took part in the study, 64 were exposed to high levels of glycyrrhizin in liquorice, 46 to moderate levels and 211 to low levels.

The research followed on from a study which showed that liquorice consumption was also linked to shorter pregnancies. Laboratory studies have also shown a link between the placenta not working to prevent [stress hormones](#) from passing through to the fetus, as well as a link to cardiac and metabolic disorders and behavioural problems in later life.

Source: University of Edinburgh

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