



Centro de Investigación  
Mente, Cerebro y  
Comportamiento

## Women who experience more stress around the time of conception

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**Scientists from the University of Granada have analysed the levels of cortisol (a steroid hormone that is released in response to stress) in the hair of pregnant women in the period spanning from before conception to week 9 of their pregnancy, to determine whether there was any link to the sex of the baby**



**A total of 108 women participated in the research from the first weeks of pregnancy to delivery, having recorded their stress levels before, during, and after conception (via the concentration of cortisol in hair) and performed different psychological tests**

A study carried out by scientists from the University of Granada (UGR) has revealed that women who experience stress both before becoming pregnant and during conception are almost twice as likely to have a girl as a boy.

Researchers from the Mind, Brain and Behaviour Research Centre (CIMCYC), the Department of Pharmacology (Faculty of Pharmacy), and the Faculty of Psychology have analysed the levels of cortisol (a steroid hormone that is released in response to stress) in the hair of pregnant women in the period spanning from before conception to week 9 of pregnancy, to determine whether there was any link with the sex of the baby.

A total of 108 women were monitored from the first weeks of pregnancy through to delivery, to record their stress levels before, during, and after conception via the concentration of cortisol in their hair and various psychological tests. The measurement of cortisol in hair samples taken approximately in week 8-10 of pregnancy showed the concentration of cortisol in the pregnant woman for the

<http://cimcyc.ugr.es/>

previous three months (one month per centimetre of hair growth), meaning that it covered the period preceding and after conception. Subsequently, the UGR scientists recorded different variables relating to the birth and the sex of the baby.

Más información en [Canal UGR](#).