

# Study finds food in early life affects fertility

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The reproductive success of men and women is influenced by the food they receive at an early stage in life, according to new research by the University of Sheffield.

The research, which was published online this month (17 December 2010) in the journal *Ecology*, is the first study of its kind to show that early life food can have a serious influence on the life-long fertility of individuals.

The research team, led by Dr Ian Rickard from the Department of Animal and Plant Sciences at the University, used a combination of church record data on births in 18th century Finland and agricultural data on [crop yields](#) of rye and barley from the same time and place.

The study showed that in men and women born into poor families, food in very early life was related to the probability of reproducing. Approximately half of the poor people who were born in a year in which both rye and barley yields were low would not go on to have any children during their entire lives. However almost everyone from a poor family born in bumper harvest years, when both crops were high, would reproduce at least once in their life.

These results indicate that food received during prenatal or early postnatal life may limit the development of the reproductive system.

Dr Rickard said: "Our results show that the food received by children born into poor families had an influence on their later [reproductive](#)

[success](#). These results have implications for our understanding of early environmental effects on human and animal health and will help shed light on our current understanding of fertility and whether it is influenced by individual or [social factors](#)."

Provided by University of Sheffield

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