

Soya could make men infertile

by JAMES CHAPMAN, Daily Mail

The increasing amount of soya being eaten in Britain could be putting the fertility of a generation of men at risk, according to an alarming new study.

Researchers believe that pregnant or breast-feeding women who eat soya and soya-based products, such as tofu, could be endangering their babies because these foods contain chemicals that mimic the female hormone, oestrogen.



Experts fear that exposure in the womb, or through breast milk, could lead to reproductive abnormalities in boys.

They are also concerned about the possible impact of soya-based infant foods.

The scientists, based at Johns Hopkins University in Baltimore, Maryland, tested the effects of genistein - the key chemical found in soya beans - on pregnant rats.

Abnormal reproductive organs

Alarmingly, they found that their male offspring developed abnormal reproductive organs and experienced sexual dysfunction as adults.

The researchers are calling for more research to be carried out urgently to see if the increasingly popular soya and soya-based foods affect human reproductive development in the same way.

The warning is supported by the Scientific Advisory Committee On Nutrition, which advises the British Government. It said last month there is 'clear evidence' that soyabased formula milk could damage children's sexual development and fertility as adults.

Large amounts of genistein are found in some baby formula milks and supplements taken by women as an alternative to hormone replacement therapy.

Drop in sperm count

The average sperm count of a European male has dropped by a quarter over the past 25 years and about 27,000 British couples seek treatment for infertility problems each year, an increase of 55 per cent in five years.

As many as one in six couples is thought to have problems conceiving.

In the new study, published in the latest issue of the Journal Of Urology, pregnant female rats were randomly assigned a genistein-free

Father figure: more men may be unable to become dads diet or one containing the chemical.

Male offspring were exposed to genistein indirectly through maternal consumption during pregnancy and after birth through breast milk.

When the offspring who were exposed to genistein matured, researchers found the males had smaller testes, and a larger prostate gland and lower testosterone levels compared to unexposed rats.

Although their sperm counts were normal, exposed adult males had lower testosterone levels and were also less likely to mate successfully.

'The effects of genistein continued long after the rats were exposed,' said Dr Amy Wisniewski, who led the research at the Johns Hopkins Children's Centre.

Longterm effects

'This leads us to believe that exposure to this plant-derived oestrogen during reproductive development can have longterm detrimental effects in males.'

Dr Sabra Klein, another member of the research team, added: 'Genistein may act as an oestrogen or an anti-androgen, blocking the function of endogenous androgens - the sex hormones necessary for males to develop a normal reproductive system. 'Ultimately, it appears this leads to the reproductive abnormalities and sexual dysfunction we saw in the exposed rats.

'However, additional research is needed to determine if this is the case.'

Whether the long-term effects of genistein on reproductive development are caused by exposure during gestation, lactation or both also requires further investigation, the scientists said.

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