

Want a long life, girls?

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By Alexandra Smith

Searching for the secret to a long life, girls? Forget clean living, a positive outlook and good luck - just hope that your father didn't delay parenthood.

You can blame childbirth, a disadvantaged upbringing or your lifestyle, but a woman's life span may be shortened before she is even born.

Research from the University of Chicago's Centre on Ageing shows that daughters born to fathers in their late 40s or older live, on average, three years less than other women, yet their brothers are not affected.

It suggests that men, too, are racing a biological clock when it comes to having children.

Women know the dangers of delaying motherhood, but several genetic conditions have now also been linked to older fathers, including achondroplasia dwarfism, Apert syndrome and schizophrenia.

But the answer is not to leap into fatherhood early in life, because daughters born to fathers aged under 25 also have a shortened life span, said the centre's research associate, Natalia Gavrilova.

Dr Gavrilova, who will present her research to an international longevity conference in Sydney this weekend, said the discovery posed a problem for sperm donors. "The age constraints for donors of sperm cells used for in-vitro fertilisation should be carefully revised," a paper she co-authored says.

She said the explanation for sex-specific lifespan shortening was most likely to be found in the X chromosome, which was only inherited by females.

As men age, their sperm cells continue to reproduce, but each division introduces a slight risk of error in the genetic material of the new sperm, Dr Gavrilova said.

Another feature of the centre's research was the link between long life and motherhood. "We found that, in contrast to previous reports by other authors, women's exceptional longevity is not associated with infertility," she said. "There is no relationship between childlessness and longevity."

So what is the key to living a long life? Longevity may run in the family - but only once you make it into your 80s, said Dr Gavrilova.