

《羡慕别人生出双胞胎？科学家告诉你其中的奥秘》

导读:看到双胞胎宝贝，没有人不喜欢吧？多么盼望自己也能生出一对双胞胎呀。今天小编就来告诉你，生出双胞胎的奥秘是什么。



Twins, and the reasons behind why some people have them and others don't, has fascinated scientists for centuries.

??

They are relatively common - occurring once in 100 pregnancies - and while the cause of non-identical twins has been linked to genetics, the genes involved had not been identified until now.

????????????——?100?????1?????——????????????????????????????????

Researchers have pinpointed two gene variants related to twinning, and one can play a major role in the age of a girl's first period, age at menopause and infertility.

??

The breakthrough was made by Dr Hamdi Mbarek and Professor Dorret Boomsma from the Vrije Universiteit in Amsterdam.

???????Hamdi Mbarek???Dorret Boomsma????????????

The department established the Netherlands Twin Register nearly 30 years ago and questions about the etiology of twinning are among the most frequently asked by the participants.

???????30????????????????????????????????????

The first gene variant is close to the gene coding for the secretion of follicle stimulating hormone, called the FSHB gene.

????????????????????????????FSHB???

This hormone is released by the pituitary, the small brain region that governs almost all major hormonal events in the body

????????????????????????????????????

This gene also has significant effects on fertility measures, including the age of a girl's first menstruation, syndrome, which is a major cause of infertility in women.

??

The second variant relates to the so-called SMAD3 gene and is likely to be involved in the way the ovaries respond to follicle stimulating hormone.

????????SMAD3????????????????????

Both variants result in the multiple follicle growth needed for the development of non-identical twins.

????????????????????????????

Non-identical twins, medically known as dizygotic, develop from two separate eggs from separate follicles fertilised by separate sperm cells.

?????,????????????????????????????

Whereas identical twins develop from one embryo that splits in half, dizygotic twinning thus starts with a multiple ovulation.

??

The researchers studied a sample of 1,980 mothers who gave birth to spontaneous dizygotic twins. The mothers were carefully selected to only include mothers who did not receive fertility treatments, such as IVF, which can also lead to twin pregnancies.

???????1980??

Their genetic profiles were compared to those from a large group of people who were not related, either as mothers or as family members, to dizygotic twins.

??

The findings were then were replicated using the deCODE group in another large population study in Iceland.

???deCODE????????????????????????????????

The relative chance of a mother having dizygotic twins is increased by 29 per cent if she has one copy of the twinning gene - or alleles - at both **locations** in the genome.

??29%?

Discovery of the main genes **behind** the **mystery** of spontaneous dizygotic twinning was long awaited, and is of great scientific interest and **clinical importance**,' said Professor Boomsma.

Boomsma?????"??"

However, there are still more genes to be found that influence spontaneous dizygotic twinning.

????????????????????????????????

The findings appear in the international scientific journal The American Journal of Human Genetics.

????????????????????????????????