What Are The Odds of Twins?

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Lifespan Development

What are the odds of having twins in your family? Which parent controls this occurrence, is it mom or is it dad? Or is it all just a coincidence? Is a single child pregnancy different from a twin pregnancy? These questions intrigued me after noticing my family has a few sets of twins on one side. My mother's side of the family has a few sets of twins. After doing a little family research, we discovered that my maternal grandmother had twin siblings. Since then, one of my aunt's (my mother's sister) had two sets of fraternal twins, giving birth to four girls on two separate instances. My cousin, the daughter of a different aunt, gave birth to fraternal twin girls as well, and finally, my sister recently gave birth to fraternal twin girls. So, the likelihood of having fraternal twin girls in my family seems very possible.

Twins are the conception of two children at one time. There are two types of multiple births, identical and fraternal twins. Identical twins occur when the zygote (egg) splits in half. In this case, the twins would share the same DNA and therefore be identical. Identical twins develop in the same sac and share the

food and oxygen supply from the placenta. Identical twins are always same sex, due to the fact that the twins come from the same chromosomes. Fraternal twins occur when two separate zygotes (eggs) are fertilized at the same time. In this case, the twins would not be identical. They develop in two separate sacs, and there similarities are no more likely then siblings born at different times. The chances of fraternal twins being boy and girl occur 50% of the time; having two girls occur 25% of the time and having two boys are likely 25% of the time.

The odds of having a genetic link to producing twins in a family, really depends on the type of twins. There is no scientific research proving that identical twins are genetically linked, therefore the conception of identical twins is random. However, there is a genetic link to producing fraternal twins. There is a hyper ovulation gene that is carried on the X chromosome. Hyper ovulation is the tendency to release multiple eggs during ovulation; this tendency increases the chances of fraternal twins. This gene can be carried by both parents, but only women ovulate. Which parent controls this occurrence, is it mom or is it dad? Dads do not ovulate, though they may carry the hyper ovulation gene and give it to their daughters, they do not directly play a role in the conception of twins. So in families

where it appears that fraternal twins skip generations it could be possible that Dad was carrying the gene.

Ethnic descent also plays a role in the chances of women releasing more than one egg per cycle. Women of African descent are twice as likely than women of Caucasian descent to have twins, and four times more likely than women of Asian descent. Food also plays a role in the conception of twins. I watched a special on The Learning Channel that states that eating yams prior to getting pregnant increases the chance of having twins. Through further research, I found that within the skin of the yam, there is a chemical that causes hyper ovulation. There is a tribe in West Africa called the Yoruba Tribe, where 4.4% of their children are twins, which is the highest rate of twins in the world. One of the Yoruba Tribe's main crops is the yam. Many people of African descent, especially African Americans from the south enjoy eating yams. My mother's side of the family is of a southern background and almost all of them love yams. My sister, who recently gave birth to fraternal twin girls, does not like yams. Eating yams and consuming a large consumption of dairy products adds to the probability of having twins.

Age also plays an important role in the odds of having twins, women over 30 are more likely to have twins than women in their 20s; but women in their 40s are even more likely to have

twins than women in their 30s. Women are born with 2 to 3 million follicles, only 300,000 to 400,000 follicles remain by the time of puberty, during menstruation thousands of follicles are lost and only one follicle becomes an egg (in cases where hyper ovulation occurs, two follicles become eggs), which begins ovulation. Only about 400 eggs actually go through ovulation. Menopause normally occurs between the ages of 48-55. Therefore, for women in their 40s, their bodies are getting rid of the remaining eggs prior to menopause and hyper ovulation can occur, which is likely to produce twins. Weight as well, is another important factor in the occurrence of having twins, women with a body mass index of 29, which is considered slightly obese are more likely to have twins.

There are differences in twin pregnancy as compared to single child pregnancy, 37 weeks is considered full term for a twin pregnancy as compared to 40 weeks for a single pregnancy. Twins are normally smaller than single pregnancy children, due to the development of more than one child and the sharing of nutrients. Movement is felt much sooner and more frequent in a twin pregnancy than in a single child pregnancy. During a twin pregnancy, the mother is more likely to feel very fatigue and exhausted in her first and last trimester in comparison to a

mother with a single pregnancy in her first and last trimester. There is normally at least a 10 pound increase in weight gain with twin pregnancies as compared to single child pregnancy. Twins have a 50% chance of being born prematurely, before the 37 weeks.

The growth of each fraternal twin during the pregnancy depends on the child's DNA makeup. Twins are rarely ever the same size at birth; normally one child is at least a few ounces more than the other. If more than a one pound difference occurs between the twins in weight, the doctors will begin to run further test. Labor and delivery can be different for twin birth as well. Many people believe that twin delivery will automatically be by cesarean section (C-section), where instead of having a vaginal birth, a surgical birth is performed. In this procedure, the doctor makes an incision in the mother's abdomen and another in her uterus to safely remove the children from the placenta. Only 50% of twin births are performed through C-section, leaving the other 50% to natural vaginal births. The position of the children in the belly is one of the most important factors in the decision of the type of delivery. As compared to single child pregnancy if the child is in distress, such as the heart rate is dropping, the child is not breathing or one or both babies are breeched, then a C-section is normally

the method of delivery chosen. There have been cases where both vaginal and surgical births were performed due to one child being faced downward in vaginal delivery position and the other facing upward in breeched position.

In conclusion, I feel all the research conveyed above all relates back to "Nature vs. Nurture." What are the odds of having twins in your family? Nature vs. Nurture answers this question completely. I have illustrated that females play a valuable role in the likelihood of having twins. Nature comes into play with the hyper ovulation gene, which is passed down through the family from generation to generation, the role of the mother whose body actually controls this process, sorry Dads. Nature controls the age factor of having twins for women in their 40s. Nurture on the other hand, occurs with the change in diet. The medical field also made this possible, where the couple decides they would like to have twins and are willing to make additional efforts in the process. In all the research above, I realized that there are a lot of factors that may take part in the conception of twins. I also found it rather interesting that there is no scientific conclusion to identical twins, with all the technology and research available. Identical twins are just an incidental occurrence.

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