

Are You One Or Two?

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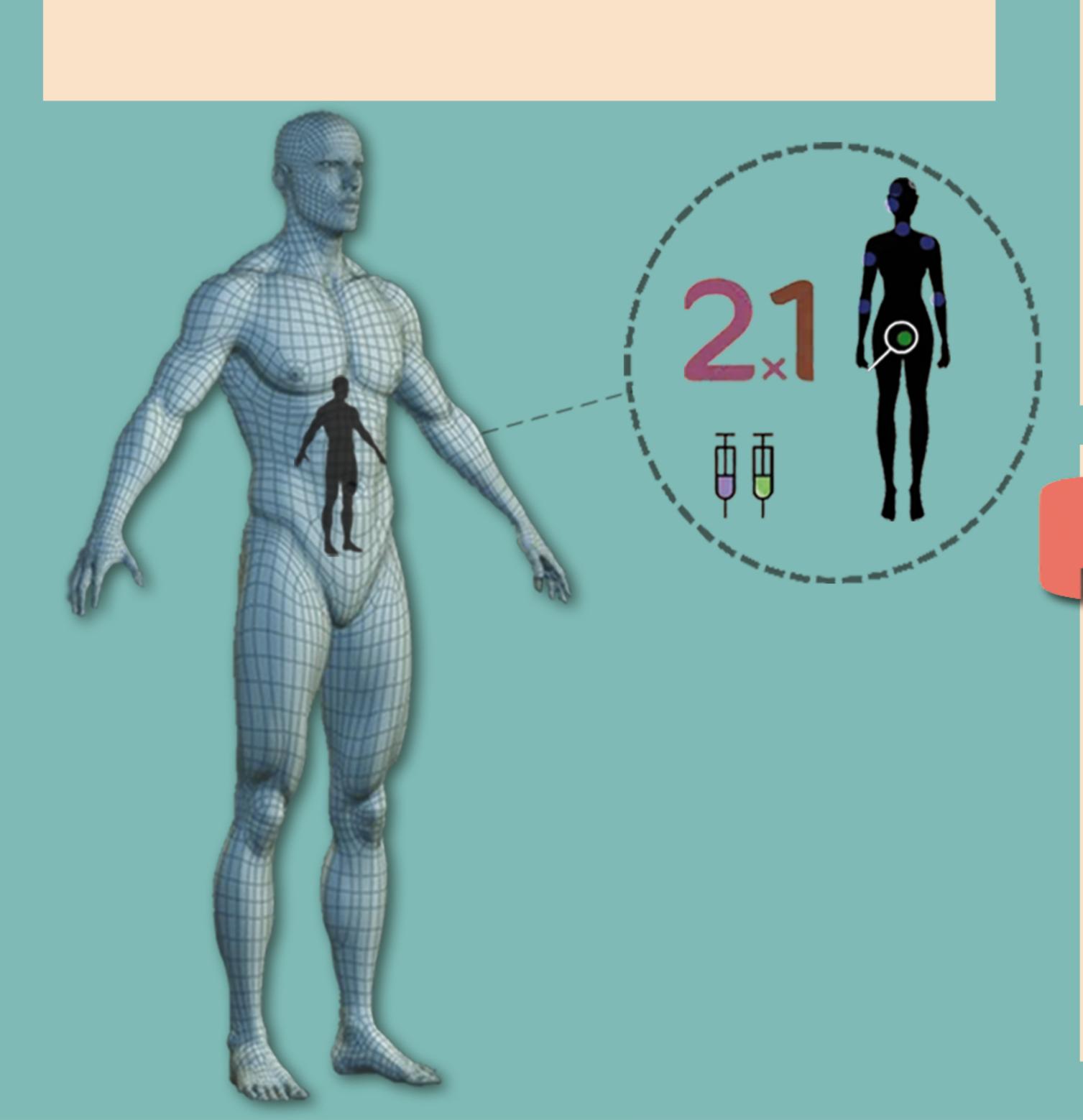
Strange but true

Can one person born with two sets of DNA? Actually some people's bodies do indeed contain two sets of DNA. A person with that tcondition is a chimera and the condition is called chimerism. The word chimera comes from a famous creature in Greek mythology that had the head of a lion, the body of a goat and the backside of a snake.



How does chimerism occur?

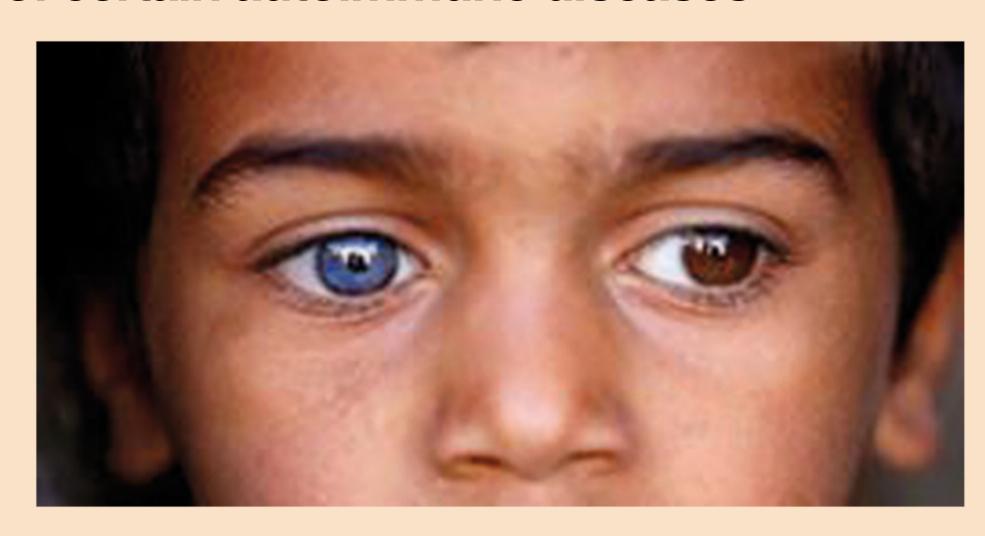
Chimerism occurs when two or more zygotes fuse together into a single form during early cell duplication. The zygote "fertilized egg" imbeds in the wall of the uterus and starts to develop, in case of fraternal twins "two zygotes" sometimes something strange can happen, the zygotes will embed themselves quite close to each other and fuse, or in other times one growing zygote will absorb the other one creating one being with two different DNA sets.



Are there any complications?

Chimerism can often go completely unnoticed but very often it manifests itself as the distribution of different pigmentation on the skin, different eye colors or differential hair growth.

- 1-There is a certain percentage of couples that are infertile due to this condition.
- 2-Chimerism may cause problems in affirmation of paternity or maternity.
- 3-Chimeras have two blood types so that will cause many problems in case of blood transfusion and organ transplantation.
- 4-Chimerism have been associated with an increase risk of certain autoimmune diseases.



Conclusion

At the end, chimeras from a geneticist's point of view are living creatures that contain two or more genetically distinct lines of cells. Scientists believe that chimerism is not rare to happen but rare to discover. Who knows, perhaps many of us are chimeras and just don't know it!



References

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