

By [Stefano Anitei](#), Science Editor

Scientists Have Obtained Fertile Cloned Sperm!

This could help in cases of male sterility

If a clone organism has 100 % of the genes of an organism, 50 % should not be that difficult to obtain. 50 % of an organism's genes are found exactly in the sperm or eggs. Now American researchers have figured out how to clone sperm, in order to restore fertility in men with very low sperm counts. By inserting the nucleus of a single healthy mouse sperm into a mouse egg from which the DNA had been removed, researchers at the Cornell University could achieve new sperm. With further development, this technique could be employed in the case of infertile couples where the man is the problem, as it happens in 40 % of the times. And more than 13 % of the couples trying a first pregnancy face this problem. The team led by Professor Takumi Takeuchi had achieved from cloned sperm four offspring that had grown into "normal adults", but some fertility experts are concerned about the safety of the method, as some mice embryos resulted from cloned sperm proved to display abnormalities, while others completely failed to develop. Still, further research could turn this into a potential viable fertility treatment. In the cases where the man in a couple does not produce enough sperm cells, doctors are faced with the difficult problem of retrieving a single viable sperm to inject into an egg. "If you only have one healthy sperm you would be reluctant to use it for anything but fertilization. But with this technique it should be possible to create enough sperm to be sure that the embryo which is implanted is healthy." said Takeuchi. "I do not think it has got utility at the moment, apart from in the research lab. Work like this is still in its infancy and we have a lot to learn. It would be important to look at future generations of mice born from the clone-made rodents because there might be abnormalities, such as a propensity to heart disease or diabetes, that could be passed down to offspring," said Professor Keith Campbell, an expert on artificial gametes at the University of Nottingham in the UK. In the UK, new proposed laws would forbid the employment of artificially created sperm, and eggs, in fertility treatments.