

UK may OK creating babies with DNA from 3 people

June 27 2013, by Maria Cheng

(AP)—Britain may allow a controversial technique to create babies using DNA from three people, a move that would help couples avoid passing on rare genetic diseases, the country's top medical officer says.

The new techniques help women with faulty [mitochondria](#), the energy source in a cell, from passing on to their babies defects that can result in such diseases as [muscular dystrophy](#), epilepsy, heart problems and [mental retardation](#). About one in 200 children is born every year in Britain with a [mitochondrial disorder](#).

For a woman with faulty mitochondria, scientists take only the healthy [genetic material](#) from her egg or embryo. They then transfer that into a [donor egg](#) or embryo that still has its healthy mitochondria but has had the rest of its key DNA removed. The fertilized embryo is then transferred into the womb of the mother.

Some groups oppose artificial reproduction techniques and believe the destruction of eggs or embryos to be immoral. British tabloids jumped on the procedure when it was first announced in 2008 and labeled it the creation of a three-parent baby—the mother, the donor and the father—a charge scientists claim is inaccurate because the amount of DNA from the donor egg is insignificant.

"Scientists have developed ground-breaking new procedures which could stop these diseases being passed on," Britain's chief medical officer, Dr. Sally Davies, said in a statement on Friday. "It's only right that we look

to introduce this life-saving treatment as soon as we can."

Similar research is going on in the U.S., where the embryos are not being used to produce children.

Earlier this year, the U.K.'s fertility regulator said it found most people supported the new in vitro fertilization methods after a public consultation that included hearings and written submissions. Critics have previously slammed the methods as unethical and say there are other ways for people with genetic problems to have healthy children, like egg donation or tests to screen out potentially problematic [embryos](#).

In a response to the public consultation, the charity Christian Medical Fellowship said the techniques were unethical. "We do not consider that the hunt for 'therapies' that might prevent a small number of disabled children (with mitochondrial disease) being born justifies the destruction of hundreds if not thousands of embryonic human lives," the group said. It also said there were lingering concerns about the safety of the techniques.

British law forbids altering a human egg or an embryo before transferring it into a woman, so such treatments are currently only allowed for research. The government says it plans to publish draft guidelines later this year before introducing a final version to be debated in the U.K. Parliament next year. Politicians would need to approve the use of the new techniques before patients could be treated.

If British lawmakers agree, the U.K. would become the first country in the world where the technique could be used to create babies. Experts say the procedures would likely only be used in about a dozen women every year.

"Many of these (mitochondrial) conditions are so severe that they are

lethal in infancy, creating a lasting impact upon the child's family," said Alistair Kent, director of the charity, Genetic Alliance U.K., in a statement. "An added option for families at risk of having a child with such a condition is welcome."

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