

Could mitochondria DNA editing be a more sound alternative to three-person IVF?

Salk Institute scientists used specifically engineered molecular scissors to snip out mutations in embryos, leaving healthy DNA intact.

They hope it could one day be used to prevent human mitochondrial diseases.

But experts say though it is a “technical masterpiece”, it raises ethical and scientific challenges.

Reporting in the journal *Cell*, scientists tested molecular scissors on mice with two different types of mitochondrial DNA (mtDNA).

They were able to recognise and cut out disease-causing mtDNA in mouse embryos. And the resulting offspring were healthy.

Researchers also used the technique successfully on faulty human mtDNA, inserted into mouse eggs.

They say the next step is to run preliminary laboratory tests on discarded human embryos.

And if proven safe and effective, they argue it would provide a simpler alternative to mitochondrial transfer therapy [recently given the green light](#) by UK authorities.

This controversially relies on DNA from three individuals – two parents and healthy mitochondria from a female donor.

But experts remain divided about the ethical and scientific questions this new approach brings.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis. Read full, original post: [Mitochondria editing tried in mice](#)