Could CRISPR on humans spell end to heart disease, high cholesterol and diabetes?

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis.

Could gene editing spell the end of heart disease, inherited high cholesterol and diabetes? Qiurong Ding...uses stem cells to study new ways of curing life-threatening illnesses.

We also use gene therapy to treat high cholesterol in mice. Scientists have discovered a gene mutation that allows some people to consume high levels of fat and sugar without it affecting their cholesterol levels or raising the risk of a heart attack. We are trying to find out whether this gene might be introduced into normal people to improve their health.

Two years ago, we used the CRISPR material to introduce the mutation into liver cells in mice, via a virus. We also humanized the mouse by repopulating its liver with human liver cells, so it was a mouse with a human liver. With this mouse, we are able to test the efficacy of our approach to lower cholesterol in the human liver, but inside a mouse body. Just a single shot of the mutant gene led to a 40% decrease in cholesterol, which was very dramatic and exciting.

Read full, original post: Gene Editing Takes on Heart Disease