

Researchers report mad cow breakthrough

January 1 2007

U.S. researchers say they have developed cattle that may be biologically incapable of getting mad cow disease, the Washington Post reported.

As a result of genetic engineering, the animals lack a gene that is crucial to the progression of the disease. The cattle were not designed for use as food -- rather, they were developed so human pharmaceuticals can be made in their blood without the risk that the products might get contaminated by the infectious agent that causes mad cow, the newspaper said.

The agent -- a protein known as a prion -- can cause variant Creutzfeldt-Jakob disease, which can be fatal to humans.

Scientists said the animals will facilitate studies of prions, and similar techniques might be used in subsequent development of animals with more nutritious meats. The U.S. Food and Drug Administration has said it will set more stringent standards for engineered food animals than it recently set for clones.

"This is a seminal research paper," said Barbara Glenn, director for animal biotechnology at the Biotechnology Industry Organization.

The Washington industry group represents Hematech, the Sioux Falls, S.D., company that created the gene-altered cattle.

"This shows the application of transgenics to improving livestock production and ultimately food production."

Copyright 2007 by United Press International

Citation: Researchers report mad cow breakthrough (2007, January 1) retrieved 4 May 2024 from <https://medicalxpress.com/news/2007-01-mad-cow-breakthrough.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.