Mad cow detected in blood

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Researchers at the University of Texas Medical Branch at Galveston have found a way to detect mad cow disease in blood.

The discovery is expected to lead to a much more effective detection method for the infectious proteins responsible for brain-destroying disorders, such as bovine spongiform encephalopathy, or BSE in cattle and variant Creutzfeldt-Jakob disease, or vCJD in humans.

The blood test would make it much easier to keep BSE-infected beef out of the human food supply, ensure that blood transfusions and organ transplants do not transmit vCJD, and give researchers their first chance to figure out how many people may be incubating the disease, according to senior author Claudio Soto.

"The concentration of infectious prion protein in blood is far too small to be detected by the methods used to detect it in the brain, but we know it's still enough to spread the disease," said Soto. "The key to our success was developing a technique that would amplify the quantity of this protein more than 10 million-fold, raising it to a detectable level."

The findings appear online in Nature Medicine.

https://phys.org/news/2005-08-mad-cow-blood.html