## Alzheimer's Contagious Study May Be Mad Science The NEWS media has scared people with contagious report.

Smart Sugars Lesson # 36

by JC Spencer

On October 4, 2011, CBS and other NEWS outlets took this story and frightened those who have loved ones with Alzheimer's. This is one of the most sensationalistic and potentially damaging science reports I have read.

The first words by CBS NEWS were: Is Alzheimer's contagious? What new study says "A provocative new study may have you pondering that question next time you offer a hug and a kiss to someone affected by the devastating neurological disease. It showed that the brains of mice injected with tissue from a human with Alzheimer's exhibited changes characteristic of the disease - suggesting that some cases of Alzheimer's may spread from person to person in much the same way that "mad cow" disease spreads."

How could the University of Texas study make an assertion that Alzheimer's may be contagious? Are they dead wrong? We understand prions can cause protein plaque buildup that leads to Alzheimer's.

Science currently knows of only seven pathogens that are CONTAGIOUS: viruses, bacteria, fungi, protozoa, parasites, mycoplasma, and prions. And, they are all subject to mission failure from a good immune system. These seven are the cause of disease epidemics and without them no infectious epidemic can occur.

Contagious means that any of these deadly infections must enter, survive and multiply within the host. The ease with which a disease can enter, survive, and spread determines its contagious level.

The EASE of infectiousness is not present in this study. Using a needle, the student(s) injected Alzheimer's brain cells from a human directly into the brain of a mouse. The most likely scientific method for showing contagious would be to eat the tissue, not inject it into the brain.

Dr. Claudio Soto, the study author and professor of neurology at the University of Texas Medical School at Houston, said in a written statement, "Our findings open the possibility that some of the sporadic Alzheimer's cases may arise from an infectious process, which occurs with other neurological diseases such as mad cow and its human form. Creutzfeldt-Jakob disease."

Even the worst of the Mad Cow disease cases is believed to be transmitted by contaminated meat-and-bone meal fed

to cattle. Not touched. Not breathed, but by actually eating the prion infected meat or bone meal.

A different study done by Robert Vassar of Northwestern University found that when the brain doesn't get enough of the simple sugar called glucose - as might occur when cardiovascular disease restricts blood flow in arteries to the brain - a process is launched that ultimately produces the sticky clumps of protein that appear to be a cause of Alzheimer's.

Working with human and mice brains, Vassar discovered that a key brain protein is altered when the brain's supply of energy drops. The altered protein, called eIF2alpha, increases the production of an enzyme that, in turn, flips a switch to produce the sticky protein clumps.

"This finding is significant because it suggests that improving blood flow to the brain might be an effective therapeutic approach to prevent or treat Alzheimer's," Vassar said.

Another team of scientists have found evidence that the amyloid-beta protein (A-beta) is a, if not THE, front line innate immune system of the brain. The best defense against an infection or the misfolding of proteins is a strong offense in the form of a well performing immune system. That is where Smart Sugars do their work.

To Dr. Soto's credit, he said that there is no need for dramatic precautions. "We know that there is no risk [to] family members of people with prion diseases," he told CBS News. "There are no cases of disease in relatives. The prions don't go through the air."

Optional home work for this Lesson is to type into our local search engine at <a href="http://endowmentmed.org">http://endowmentmed.org</a> the words "protein misfolding" and read those papers.

Download Lesson #36

http://www.endowmentmed.org/pdf/SmartLesson36.pdf

## Source:

http://www.cbsnews.com/8301-504763\_162-20115519-10391704.html http://www.eurekalert.org/pub\_releases/2011-10/uoth-uam100311.php http://www.newsmaxhealth.com/health\_stories/Alzheimers\_contagious\_/2011/10/04/410219.html?s=al&promo\_code=D304-1 http://www.ivanhoe.com/channels/p\_channelstory.cfm?storyid=23731

© The Endowment for Medical Research, Inc www.endowmentmed.org