

You Dirty Rats!

By ACSH Staff — May 30, 2006

This piece appeared in ^[1] the [Europe edition of TCSDaily.com](#) ^[2].

This past February, the *New York Times* ran a front page Business Section story noting that a Dr. Morando Soffritti, a cancer researcher "who has spent 28 years doing research on potential carcinogens" had concluded that the widely used artificial sweetener aspartame was likely to pose a human cancer risk.

Dr. Soffritti, whose research was sponsored by the European Ramazzini Foundation of Oncology and Environmental Sciences, was featured in the article smiling broadly, in a lab coat surrounded by his rodent subjects. His study was described by the Times as being the most thorough and long-lasting rodent testing project ever undertaken: "The Ramazzini study was conducted with 1,900 rats, as opposed to the 280 to 688 rodents used in Searle's (aspartame's manufacturer) studies, and the rats lived for up to three years instead of being sacrificed after two, which is the human equivalent of age 53." The Times noted, quoting Soffritti, "Cancer is a disease of the third part of life...so if you truncate the experiments at 110 weeks and the rats are supposed to survive until 150 or 160 weeks, it means you avoid the development of cancer at the time when cancer would be starting to arise."

In other words, the newspaper of record was telling us, the Soffritti study was the Mother of All Rodent Studies. Yes, indeed, they imply, aspartame did cause cancer. And as the ultimate proof that the Foundation's results were credible and beyond dispute, the Times noted that the Ramazzini cancer lab was financed by "private bank foundations, governments, and 17,000 individual members." (Read: this lab was not a paid liar for industry.)

Aspartame -- those little blue packets with the trade name NutraSweet -- cause cancer! It was official! Not so fast. Earlier this month, the European equivalent of the FDA said, "Never mind."

The European Food Safety Authority (EFSA) concluded that the Ramazzini assertion that aspartame was a carcinogen was not supported by data, and the agency saw no need to further review the safety of aspartame or to revise current recommendations on consumption levels. There were major flaws in the laboratory research, the EFSA concluded, noting that confounding factors, including chronic inflammation in the organs of the test animals, rendered the results invalid. And this in Europe, where the precautionary principle prevails, and where other food scares have pushed regulatory agencies into a very cautious stance.

What can we learn from this episode? Rodent tests are unreliable in many different respects. Even a study that was showcased as impeccable can be flawed. The Ramazzini aspartame-cancer study was evaluated and dismissed. But the U.S. Environmental Protection Agency (EPA) still cites Ramazzini data as "evidence," to take just one example, that the fuel additive MTBE causes

cancer in rodent -- even though the protocol for those rodent tests on MTBE has been criticized for being as flawed as the aspartame study. Indeed, that MTBE study was sufficiently flawed that EPA scientists repeatedly tried to arrange a visit to Ramazzini labs to doublecheck the work, and the U.S.'s National Research Council, part of the National Academy of Sciences, stated that "because of the importance of this study for eventual use in risk assessment, the superficial reporting of the data, and the nature of the observed [rodent] lesions...an independent, in-depth review of the data...is warranted."

My group, the American Council on Science and Health (ACSH), has long argued that cancer tests using high doses and performed on just one species are simply not useful in predicting human cancer risk. ACSH supports the use of animal tests in all human safety assessments, but the results should be interpreted cautiously to avoid the knee-jerk conclusion that "if it causes cancer in rodents it must cause cancer in people." Whatever animal tests are used as possible evidence of human hazard should be meticulously performed and able to survive peer review. The Ramazzini rodent cancer data on aspartame did not meet those criteria. Happily, the data concluding that aspartame was a "carcinogen" was rejected. The EPA should take notice and refrain from citing other Ramazzini rat cancer data, regardless of methodology, as justification for designating other chemicals as human "carcinogens."

COPYRIGHT © 1978-2016 BY THE AMERICAN COUNCIL ON SCIENCE AND HEALTH

Source URL: <https://www.acsh.org/news/2006/05/30/you-dirty-rats>

Links

[1] <http://www.tcsdaily.com/article.aspx?id=053006B>

[2] <http://www.tcsdaily.com/Europe.aspx>