

## Letters to the Editor

### Aspartame Consumption and Incidence of Hematopoietic and Brain Cancers

**To the Editors:** Lim et al. (1), using data from the 1995 to 1996 NIH-AARP Diet and Health Study, tested the hypothesis that aspartame consumption is associated with risk of hematopoietic cancers or gliomas (2). However, inappropriateness of subjects and study protocols renders any conclusions drawn from the Lim et al. study meaningless.

Basic flaws are each significant enough to invalidate the study. (a) Estimates of aspartame consumption were based on reports of beverage consumption. Chewing gum, pharmaceuticals, and foods listed by the Aspartame Information Center (3) as containing aspartame were not considered for either supposed aspartame users or non-aspartame users. (b) Estimated average aspartame consumption for aspartame-consuming subjects was equivalent to approximately one 12 oz can of diet soda per day. Thus, we know that few, if any, heavy users of aspartame were included. (c) Subjects, AARP members over 50 years old, are not representative of the at-risk population. In addition, 52,887 responders with histories of cancer or with only death reports of cancer were excluded by Lim et al. (d) Estimates of aspartame consumption were based on answers to questions about beverage consumption during a 12-month period. Aspartame consumption during subjects' other 49+ years was not considered. (e) Given the variability among subjects (2); the limited number of subjects who claimed to have consumed the equivalent of three, 12 oz cans or more of aspartame-containing beverages a day; and use of multivariate analyses on data wherein there were few subjects in a large number of subgroups; it is to be expected that the variability within the various groups and subgroups would be more than sufficient to obscure any difference between aspartame users and non-users (i.e., we would not expect Lim et al. to find statistically

significant differences in incidence of cancers according to aspartame intake levels).

In addition to the study's inherent flaws is the authors' claim that their findings "are in direct contradiction with [Soffritti et al.]..." who showed that aspartame is a multipotential carcinogenic compound. But, whereas Soffritti et al. (4) fed and observed subjects over a lifetime beginning at 8 weeks, Lim et al. estimated aspartame consumption in subjects 50 years and older and observed them for no more than one tenth of their lifetimes. Inappropriateness of subjects and study protocols renders any conclusion drawn from this study meaningless. To claim that their findings "are in direct contradiction with [the work of Soffritti et al.]..." is deceptive and misleading.

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### References

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