

The Weekly Newsmagazine of Science

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Cover: Some researchers suspect that, contrary to traditional economic theory, people often want to cooperate with others in divvying up available resources and seek to punish those who try to take more than their fair share. **Page 205**

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Letters

No smoking gun for artery damage?

Careful reading of the scientific report upon which "Secondary Smoke Carries High Price" (SN: 1/17/98, p. 36) is based reveals figures that call into serious question any conclusions drawn by the authors.

First, there is no dose-response relationship between hours of exposure to second-hand smoke and intimal-medial thickness of the carotid artery. Second, there is no proof that arterial thickness is a useful marker for progressive atherosclerotic disease.

Third, although the authors claim to have adjusted for the effects of "dramatic" socioeconomic differences on illness and death, the use of proxy variables is insufficient to control for the effects of true risks.

Unfortunately, given the current political climate, it has become all too common for even responsible publications to jump uncritically upon the antitobacco bandwagon. We now view any reports from mainstream medical journals and education facili-

ties regarding secondhand smoke with as much suspicion as those funded by the tobacco industry.

Anne Fennell Littlewood & Fennel, P.A. Austin, Texas

The authors acknowledge that finding a doseresponse effect would support the hypothesis that secondary smoke causes atherosclerosis, but they argue that not finding a dose response doesn't rule it out. While exposure or lack of exposure to secondary smoke is easy to determine, they say, calculating hours of exposure is less precise. In earlier studies, people's descriptions of how much secondary smoke they breathed didn't always jibe with the amount of nicotine products that showed up in tests of their blood, the authors note. Thus, this study identified people simply as being exposed to at least 1 hour of secondary smoke per week or to none.

In their report, the authors cited research by other investigators showing that arterial wall thickness is linked to subsequent heart disease and stroke. Moreover, they accounted for socioeconomic differences in their test participants by comparing groups that were similar in terms of obesity, history of heart disease, alcohol consumption, and other factors.

—N. Seppa

Bounded criticism

The intriguing article "Circles in the Sky" (SN: 2/21/98, p. 123) consistently uses the word "finite" to mean "bounded." The two concepts are fundamentally different. "Finite" refers to number, "bounded" to extent. For example, the set of points on the line between 0 and 1 is bounded but infinite.

Leonard Gillman Austin, Texas

Send communications to: Editor, Science News 1719 N Street, N.W. Washington, D.C. 20036 or: scinews@sciserv.org All letters subject to editing.

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