

## This Week

- 372 **Altered Antibody Boosts Transplants**  
*Nathan Seppa*
- 372 **New elements pop in, cousins may linger**  
*Peter Weiss*
- 373 **Prehistoric bacteria revived from buried salt**  
*John Travis*
- 374 **Streambed bugs eat gasoline pollutants**  
*Corinna Wu*
- 374 **Elderly show their emotional know-how**  
*Bruce Bower*
- 374 **Controversy simmers at atomic-waste site**  
*Richard Monastersky*
- 375 **Besieged tadpoles send chemical alert**  
*Siri Carpenter*

## Articles

- 376 **Fibonacci at Random**  
Uncovering a new mathematical constant  
*Ivars Peterson*
- 380 **Son of Long-Horned Beetles**  
Scientists fight a wood-boring invader that could change the landscape of North America  
*Susan Milius*



**Cover:** The Asian long-horned beetle, roughly the size of a peanut shell, can chew a tree to death in a few years. Invading beetles munched away in Illinois and New York for years before entomologists noticed. Now, they suspect that more of these beetles are still lurking out there.  
**Page 380** (Photo: USDA/APHIS)

Visit SCIENCE NEWS ONLINE for special features, columns, and references.

<http://www.sciencenews.org>

## Letters

### Farm physics

In your article "A call for more college science and math" (SN: 4/10/99, p. 239), you report on the findings of an expert panel that concluded that undergraduates should be required to take more science and math courses to help them make "technically competent decisions about their health, communities, and economic lives." As someone with multiple physics degrees, I can state from experience that very little I learned in my math and science courses is much help in making such decisions. When I worked on a friend's farm, I learned more about health, communities, and economic lives than I did in any college course. Perhaps we should require more farmwork from college students.

*David Mantell  
Rochester, N.Y.*

### Hard-hearted reality

The correlation of coronary artery atherosclerosis with hostility ("Bad attitude may be bad for heart," SN: 4/17/99, p. 255) fills in the causal chain shown by J.C. Barefoot, W.G.

Dahlstrom, and R.B. Williams in 1983. Medical students scoring high on the hostility scale of the Minnesota Multiphasic Personality Inventory had markedly elevated coronary risk when followed up 25 years later. Similar results were obtained by Barefoot and others in a 1989 study of law students.

*Paul E. Meehl  
University of Minnesota  
Minneapolis, Minn.*

### It's all in the water

In response to the report "Souping up and other tricks produce satiety" (SN: 4/24/99, p. 261), I'd like to suggest that the ineffectiveness of drinking water in providing satiety, as opposed to water used to 'soupify' the casserole, may be a result of swallowing compared with chewing.

### CORRECTION

In "What's that smell?" (SN: 5/15/99, p. 316), the statement that choline is an amino acid and a protein building block is wrong. Nevertheless dietary restriction of choline, a B-complex vitamin, can control the odor associated with trimethylaminuria.

Maybe power to satiate depends on both amount of chewing and the volume ingested. It would be interesting to test this possibility by checking whether the amount of chewing correlated with portion size in the second study reported in this article.

*Louis A. Mulieri  
Hinesburg, Vt.*

**I noted that** the article concluded that water in different forms may have different effects on satiety. I think an alternative hypothesis is more attractive: In the process of soup making, chemicals are leached out of the vegetables into the water. I suspect that the chemical leached out is magnesium. Magnesium is known to induce satiety. To confirm this hypothesis, cholecystokinin levels and caloric intake could be measured after soups with differing levels of magnesium are administered.

On hearing of the soup experiment a few months ago, I started several of my patients on soup with meals and magnesium supplements. Not enough time has yet passed to assess the effects.

*Stephen Holland  
Peoria, Ill.*