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Cover: Heart disease, traditionally viewed as a "male" malady, is the nation's number-one killer of men and women alike. In fact, women with the disease run an even higher risk than men of suffering a fatal heart attack or dying during coronary bypass surgery. Researchers are now trying to figure out why. (Illustration: Randy Fletcher)

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# Letters

#### Immunologic pudding

I read with interest your report on our work on a peptide vaccine for asthma/hay-fevertype allergies ("New allergy vaccine brings relief to rats," SN: 12/1/90, p.341), the culmination of years of probing into the molecular pathology of anaphylactic antibodies

Our "shaky" hypothesis, as NIH immunologist Henry Metzger refers to it, postulates that the IgE antibody plays an active role in initiating mediator release by providing a triggering signal to the sensitized mast cell as a consequence of allergen challenge. By using histamine-releasing polypeptides as models, we predicted the likely chemical characteristics of such a trigger site within the Fc region of the IgE molecule. We identified just one region within the CH4 domain of human IgE that possessed all these structural credentials. A synthetic peptide comprising this sequence was shown to initiate histamine release from nonsensitized mast cells in a manner closely resembling the regular IgE antibody-allergenmediated release process. And now we have shown that an immunogen based on this peptide brings about a dramatic reduction in the allergic response of experimentally sensitized rats immunized with it.

In contrast, Metzger and his colleagues on your side of the Atlantic have always maintained that the IgE antibody plays only a passive role in the immunological stimulation of mast cells, merely acting as a "surrogate receptor" in permitting the cross-linking by allergen and consequent association of the Fc receptors to which the antibody is tightly bound. They have come to this conclusion on the basis of observations that an antibody (e.g., raised in rabbits) against the Fc receptor itself is capable of initiating histamine release from nonsensitized mast cells. But so is the calcium ionophore A23,187 - another artificial secretagogue - and no one is suggesting that this means of getting calcium ions into the mast cells has any role in the native immunological release process.

In science, as elsewhere, the proof of the

pudding will be in the eating.

Denis R. Stanworth **Immunologist** University of Birmingham Birmingham, England

## Dandelion wine?

The studies implicating lecithin as an anticirrhotic phospholipid ("Soybean Lecithin May Prevent Cirrhosis," SN: 12/1/90, p.340) may vindicate the folkloric use of yellow flowers, in particular dandelions, as a treatment for yellow jaundice. Out of curiosity, I dipped into my "Father Nature's Farmacy database after reading your story, to see which edible species had the most lecithin in the reports I had covered. To my surprise, dandelion flowers excelled, with a lecithin concentration of 29,700 parts per million (ppm). Soybeans had 15,000 to 25,000 ppm, mung

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