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Incorporating Science News Letter

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COVER: A set of flies, in which part of each body is male and part female, is useful in analyzing the biological basis of behavior. In the presence of a female, none of the 40 flies on the left of the diagram vibrated their wings, the first step in male courtship. The flies on the right did display wing vibration. Female surface cells are indicated by dark shading; light areas are male. See p. 107. (Diagram: Hotta and Benzer, PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES)

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FEBRUARY 12, 1977

LETTERS

Nutritionally uneducated

The need for a national nutrition policy as outlined in your article on the conclusions of Worldwatch Institute (SN: 1/8/77, p. 22) constitutes a sorry comment on the condition of modern, industrialized man.

Prior to this century nobody needed nutritional education. Neither do present-day people living in technologically primitive and self-supporting communities. Such people eat everything they can (barring religious taboo items); and what goes in the mouth is for the most part highly nutritious, since it is untampered with by any food "technologist" more sophisticated than a cook.

The age of petroleum has, for the first time in history, introduced a choice between two types of food: good and bad. Prior to the high energy consuming society, all food was good; one had no choice but to be well nourished if one got enough of it in sufficient variety. Economic growth, however, has given us the option of being malnourished—an option that is, unfortunately, chosen by large numbers of affluent people. These are the people who now have to be educated out of their choice.

An education which will lead people to reject the sugar, salt and preservative-loaded semisynthetic foods that comprise some two thirds of the stock of a modern grocery store must, however, be in conflict with the economic growth that put these things on the shelves. As with doctors, who need unhealthy people to survive, so the food industry needs nutritionally uneducated people in order to survive.

Gerald McHugh
Center for Wetland Resources
Louisiana State University
Baton Rouge, La.

The critical upper limits

The article "Energy Limits Crop Improvement" (SN: 1/8/77, p. 23) reveals an important aspect of the earth's limiting features: Input=Output, or in common terms, "There ain't no free lunch on this job." Increasing protein content has not increased total yield. This can be accomplished by the application of fertilizers and by meteorologic control, but the energy expended from such practices is costly to our resource bank and our checking accounts. When are we to realize that our technology can not exceed

the supportive capabilities of earth without endangering our species?

Mel F. Oberst
Elkton, Ore.

Hoover's scholarship

Pursuant to the letter of L. F. Goeller Jr. (SN: 1/15/77, p. 35), Hoover may not have been an outstanding student, but he was a pretty good scholar.

It is not well known but he did in fact do the English translation of *De Re Metallica* by Georgius Agricola, considered to be the father of modern mining engineering.

D. J. Raden
General Manager
Swift Agricultural
Chemicals Corp.
Bartow, Fla.

It's a protozoan

In your note on biomedicine entitled "Nationalities Prone to Certain Bacteria" (SN: 1/8/77, p. 28), you referred to *Giardia lamblia* as a bacterium. This reference is not correct.

Giardia lamblia is an intestinal protozoan parasite which is found in the upper small intestine of infected persons and causes what is known as flagellate diarrhea.

A fact that might merit mention is that *Giardia lamblia* are commonly found in their cyst form in the snows of Aspen, Colo., and also in Moscow, USSR. This latter location has been a source of intestinal difficulties for travelers returning from Russia.

Alan Hecht
New York University School of Medicine
Division of Parasitology
New York, N.Y.

It is not often anymore that I am able to find outright error in any of your articles or reports. In the report "Nationalities Prone to Certain Bacteria" is an error. It reads "... were infected with the bacterium *Giardia lamblia*.". Of course every physician, laboratory technician and parasitologist knows *Giardia* is a protozoan, not a bacterium. *G. lamblia* is a cause of diarrhea at times and is one of the few intestinal protozoans considered pathogenic.

I am sure that others will pick up this mistake and perhaps write you about it. We parasitologists are a bit sensitive when our pet microorganisms are not properly identified.

John D. Goodman
Professor of Biology
Anderson College
Anderson, Ind.

(Yes, a number of other readers wrote.—
Ed.)

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