

# Science<sup>®</sup> News

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**COVER:** Whole grain foods may be the simplest preventative medicines to come along in quite some time. Scientists are beginning to link the consumption of whole grain foods to the proper functioning of the body's alimentary system, and the prevention of a long list of diseases. See p. 379. (Drawing from Hugo Thomas' *Bewick's Woodcuts*)

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December 14, 1974

# To the Editor

## Poison in paradise

While working as a marine biologist for the Fisheries Division in the Kingdom of Tonga I have noted that most buildings have corrugated galvanized sheet metal roofs. Due to the harshness of the tropical climate most roofs deteriorate rapidly. To prevent this oxidation many roofs are painted with anti-rust lead-based paints, which produce a soft finish that is easily abraded by the intense rainfall, wind, and acidic runoff from trees. The problem is that the major supply of water is from collection tanks that are filled by runoff from the painted roofs. I suspect that possibly dangerous levels of lead may exist in the bodies of the people using this type of water supply. Also new homes are being constructed with pressed asbestos roofing and I am concerned about the carcinogenic effect of this material. I will bring these concerns to the attention of the Health Department. The paint is sold by retail stores and is labeled with a minor precautionary note but its use continues.

I am an avid reader of your magazine, particularly the health and environmental sections, and I am aware of its wide circulation. I am wondering if amongst your readers there exist persons with the knowledge of techniques to detect lead in the water or tank sediments, in the bodies of humans, and what levels of lead are considered toxic. The analysis tools available are basic so the most simple techniques would be best at present.

Your assistance would be greatly appreciated and may be of major importance to the Tongan people.

Scott L. Hennessy—P.C.V.  
Fisheries Division  
Department of Agriculture  
Nuku'alofa  
Kingdom of Tonga

## The perfect hideaway

Your report on carcinogens (SN: 11/16/74, p. 311) got to me. I'm scared. I now realize I must avoid exposure to any suspected carcinogen. I shall build a buried living cell, after checking for natural radioactivity. Walls shall be layers of lead alternated with aluminum, with an entrance trap. Asbestos and fiberglass will be avoided, as shall tarry compounds and plastics.

My water supply will be triple distilled, and prechecked for trace carcinogens. Water piping shall be of glass. Heat will be electrical, but no voltage over 30. Food

intake will be entirely "natural" foods; no additives. Fish of any kind will be avoided. Air: filtered through several non-carcinogenic fiber filters, an electrostatic precipitator, and an ozone eliminator.

No television or electronic oven will be used, and no fluorescent lights. No synthetic detergents, or other household aids will be permitted, and all aerosol products avoided. All medicines will be carefully screened. Visitors who smoke will be barred; all visitors will remain on the opposite side of a transparent screen, which may have to be of glass. These are only the major defensive precautions; I am studying more detailed necessities.

Still, I am scared: I do not know whether I have a family history, way back, of cancer. I am not able to stop cosmic rays. And there is the minor concern of how I am going to pay for this living plant, and its operation, though probably "the Government" may be counted upon to take over this problem.

I do not believe I have overlooked anything. I have had a number of tissue samples excised, and am waiting for the reports of biopsies. After all, a fatal probability of one in whatever-it-is has already been ignored for too many centuries. Now that the law of survival of the fittest has been repealed, the human race could be doomed. And the lack of appreciation in some quarters is appalling. I have an otherwise intelligent neighbor who insists that this is only another cry of "wolf." He simply does not understand.

George V. Morris  
Sequim, Wash.

## Starch, not glucose

You say that phaseolamin inhibits the body's utilization of glucose (SN: 11/2/74, p. 286). It does not; it interferes with the utilization of starch. If it was administered with glucose it would, of course, have no effect.

J. J. Marshall, Ph.D.  
Howard Hughes Medical Institute  
Miami, Fla.

## Kudo

I have always admired your magazine's reporting standards. Dietrick Thomsen did an excellent job of summarizing the main points of my colloquium (Gravity, the big bang and the numbers game, SN: 11/16/74, p. 317).

Ralph Alpher  
General Electric Co.  
Schenectady, N.Y.

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