on a pollution syndrome that present-day "banning" cannot cure for decades, even if such restraint operated effectively anywhere and were being applied worldwide. Neither proviso holds true. The main point of Stokinger's article is the need for restraint against restraints, a half-truth that, like a half-brick, can be thrown quite a distance in this year of ecologic backlash.

10) *Honor both economic and ecologic facts and principles, since a viable future for man depends on gradually but surely bringing human ecology into the functional respect presently accorded economics.*

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Stokinger calls for the setting of standards for noxious agents in food and environment that are based on scientific facts, with the qualifications that "provisional, tentative, or best judgment standards" may be used when there is "definite need." He states that in the absence of definite need "it is better to withhold [standards] until such time as the facts are in." He apparently overlooks two points.

The first point, emphasized by Alvin M. Weinberg (Letters, 5 Nov., p. 546), is that in many situations (especially with carcinogens and mutagens) practical considerations prevent complete scientific answers, and thus trans-scientific judgments are required for standard setting. The notion that scientific research can provide absolute and definitive data before permissible standards are set for all noxious agents is a relic from the days when toxicologists were concerned only with acute toxic effects in situations where "no-effect levels" could be readily established. Weinberg points out that for some agents a "no-effect level" cannot be determined.

The second point is that although Stokinger modifies his commandment 1, "Standards must be based on scientific facts," to permit "provisional, tentative, or best judgment standards . . . ," it is possible that he could seem, to the casual reader, to be advocating the extensive use of human beings as guinea pigs. This, in fact, is what often happens when there is a practice of permitting widespread use or dissemination of any potentially toxic agent until a "definite need" for its control is demonstrated from studies on animals or humans. This is no longer a tenable public health practice. Prudence often demands action as soon as potential human injury is indicated; prudence will not countenance waiting to take action until the potential injury or harm is in fact an actuality. In addition, if one were to wait for hard scientific data before restricting the use of toxic agents, unconscionably long delays might occur because of limited research resources.

The "seven commandments," to be widely applicable, should be modified to mean that once an agent has been found to be a *potential* hazard to man, the setting of a "realistic level" for control must be based on available scientific facts, and *also* a reasonable interpretation of relevant governmental regulations, wise consideration of epidemiologically revealed trends, and use of a reasonable "safety factor" when scientific data are incomplete.

I do not mean to minimize the need for scientific data when permissible standards are being set for noxious agents in food or environment, but hard scientific data are rarely available (and if available are incomplete) when a potential human hazard is first perceived. Our society cannot always wait for such data before acting but must frequently set "provisional, tentative, or best judgment standards" on the basis of potential hazard, rather than demonstrated "definite need."

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"Scientists of North America"

Dora B. Goldstein (Letters, 17 Sept., p. 1080) is right to complain about titles as *American Men of Science*, which imply, however inadvertently, that scientists are always men and never women. The old rule that "the masculine includes the feminine" seems uncalled for here. It is only fair that we male scientists recognize such slights and try to eliminate them. In this case, a title such as *Scientists of North America* would seem to be most appropriate, since Canadians are also listed.

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