# Statement on Chemical Additives

### Committee on Chemicals Introduced in Foods

### Food and Nutrition Section

The existing federal Food, Drug, and Cosmetic Act prohibits the use of unnecessary and avoidable poisonous or deleterious substances in our food supply and provides for the establishment of safe tolerances for those which are necessary or which cannot be avoided in good manufacturing practice. Legislation pending before Congress would remove the outright prohibition of toxic chemicals in foods, regardless of amount, and adopt the concept of establishing tolerances for harmless amounts of toxic materials in foods, where there would be an advantage to justify such additions.

The several bills introduced in Congress vary in many respects. A basic question is whether the safety decision is to be made administratively before the chemical additive may be marketed, subject to the safeguards of administrative hearing and judicial review on the scientific record, or whether, if the opinion of the enforcing agency evaluating the additive is adverse, the sponsor of the chemical should be free to market the potentially harmful product subject to the risk of injunction or other legal action by the government.

This report of the committee was presented by Glenn G. Slocum, Ph.D., chief, Division of Microbiology, Food and Drug Administration, Washington, D. C., at the Eighty-Third Annual Meeting of the American Public Health Association, Kansas City, Mo., November 18, 1955. The Section Committee specifically has approved the following statement of its position regarding any legislation to deal with chemical additives to foods:

#### **Position Statement**

- 1. Because this committee (of the American Public Health Association) is composed entirely of scientists, who are concerned with the health aspects of the subject under consideration, the committee desires to limit its statement to the general objectives of any proposed bills that deal with additives to foods. The committee believes that a decision as to the safety of new additives to foods involves application of scientific knowledge and judgment to establish facts. Reliance upon such expert knowledge is essential and legislation enacted should be written with this view in mind. The legislation should apply to all foods, whether these foods are intended for domestic or foreign commerce.
- 2. The committee is in accord with the statement of general principles adopted by the Food and Nutrition Board of the National Research Council, November 5, 1954, which reads:
- a. A decision to use an intentional additive in foods should be based on the assurance (a) that it will be safe, and (b) that it will benefit the consumer.
- b. Results of critically designed tests of the physiologic, pharmacologic, and biochemical behavior of a proposed additive made in various species of animals can provide a basis for the evaluation of the safety of a chemical at a specified level of intake by man. It is impossible, however, to establish absolute assurance that the additive at this level will be completely safe for all human beings under all conditions.

c. Additives should be subject to continuing observations for possible deleterious effects under prolonged and varying conditions of use and should be reappraised whenever indicated by advances in knowledge.

d. The safety of an additive should be appraised in terms of the minimal level of physiologic response, of the extent of its use in foods, and of the amounts that may be eaten under all likely patterns of consumption. No substance should be added to a food if there appears to be a reasonable probability that the maximum amount likely to be consumed in the human diet will produce adverse deviations from normal physiologic function.

3. The committee is also in accord with the statement by the same body that "In order to judge the safety of the use of an additive in the light of these principles, information must be obtained on:
(a) the chemical and physical properties of the additive and, when possible, the forms to which it may be converted in the food product; (b) the biologic effects of varying dosages of the addi-

tive and its conversion products, including toxicologic, metabolic, and nutritional effects; and (c) the anticipated levels and patterns of consumption." It is imperative that the detailed protocols so obtained be submitted to the body charged with enforcement of such legislation.

4. The committee wishes to point out that the proposed legislation which has come to its attention apparently does not adequately cover the chemical changes resulting from radiation effects on foods or the new methods of processing.

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# 23 New Markle Foundation Scholars

The John and Mary R. Markle Foundation has appointed 23 scholars in medical science for the year 1956. The 23, selected from 49 candidates nominated by medical school deans, are faculty members of 22 medical schools in 16 states and one in a Canadian school. A total of \$690,000 has been appropriated, which will be granted to the schools at the rate of \$6,000 annually for five years for each appointed scholar. Seven of the scholars represent internal medicine, four, pediatrics, three each biochemistry and surgery, two, physiology.

During the nine years of the "Scholars in Medical Science" program, 181 faculty members in 69 medical schools have been helped "up the academic ladder" with total appropriations of nearly five and a half million dollars.

<sup>\*</sup> Deceased.