



Status on Development of Codex Alimentarius Standards for Vegetable Proteins

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ABSTRACT

The Codex Alimentarius Commission was established in 1962 to implement the Joint FAO/WHO Food Standards Program. The purpose is to protect the health of consumers, ensure fair practices in food trade, promote coordination of food standards, and to draft, finalize, and publish standards. At the Twelfth Session of the Codex Alimentarius Commission in 1978, the establishment of a Codex Committee on Vegetable Proteins was accepted. The terms of reference for the Committee are "to elaborate definitions and worldwide standards for vegetable protein products deriving from soyabeans, cottonseed, groundnuts, cereals, and from other vegetable sources as they come into use for human consumption; and to elaborate guidelines on utilization of such vegetable protein products in the food supply system, on nutritional requirements and safety, on labeling, and other aspects as may seem appropriate." The first meeting of the Codex Committee on Vegetable Proteins was held in Ottawa, November 1980. The Committee considered proposed international standards for vegetable protein flours, concentrates and isolates; reviewed draft guidelines for the use of vegetable proteins in foods; and considered labeling declarations concerning the use of vegetable proteins in other foods. In preparation for a second meeting of the Committee, a future program of work was established.

Membership of the Codex Alimentarius Commission is open to all member nations and associate members of FAO and WHO. There are presently 117 members. The commission has held 13 sessions, the most recent being in December 1979. The Commission has 28 committees, of which 5 deal with general policy and coordination, 6 with subject matters relevant to the work of all commodity committees, and 17 with specific groups of foods. A Rome-based secretariat provides professional and administrative support to the Commission. A 10-step procedure is used for the elaboration of Codex standards. Ample opportunity is provided for member nations to comment on draft standards. The recommended standard (step 9) may be accepted, accepted with specific deviations, or rejected. A Codex standard accepted by a country in accordance with its established legal and administrative procedures ensures that the product concerned, whether imported or home-produced, will be permitted to be distributed freely. The distribution of any sound products conforming with the standard will not be hindered by any legal or administrative provisions. To date, Codex has established over 170 food standards, 32 codes of practice, 1,000 maximum residue limits, and 20 codes of hygienic practice. In addition, modified draft Codex standards are frequently used in food trade.

CODEX COMMITTEE ON VEGETABLE PROTEINS

At the Twelfth Session of the Commission in 1978, the establishment of a Codex Committee on Vegetable Proteins (CCVP) was accepted. The decision was made against the background of growing use of vegetable proteins in the food supply system, considerable research and development activity, and the absence of an international agreement governing the use of such proteins. In addition, the Commission recognized the importance of the following: (a) vegetable proteins intended for human food have to meet definite nutritional requirements, be safe in use, and offer economic incentives to both producers and consumers; (b) the use of vegetable proteins in improving the diets of populations at nutritional risk is of particular economic and social interest when foods such as milk, meat and fish are in short supply or are beyond the economic reach of such groups; (c) encouragement in the expansion of oilseed production in developing countries offers the additional advantages that the proteins of the presscake or the extracted oilseed meal can add to the food supply of the country.

The terms of reference for the CCVP are "to elaborate definitions and worldwide standards for vegetable protein products deriving from soyabeans, cottonseed, groundnuts, cereals, and from other vegetable sources as they come into use for human consumption; and to elaborate guidelines on utilization of such vegetable protein products in the food supply system, on nutritional requirements and safety, on labeling, and other aspects as may seem appropriate." It is intended that the terms of reference cover the full spectrum of vegetable proteins for human consumption, including unconventional food proteins from plants.

The CCVP does not intend to draft and propose standards for the multitude of food products to which vegetable proteins are added. The appropriate Codex Committees will undertake this task (i.e., the Codex Committees on Processed Meat and Poultry Products, Cereal and Cereal Products, Fish and Fishery Products, Food for Special Dietary Uses, Edible Ices and Ice Mixes, and Milk and Milk Products). The guidelines drafted by CCVP would guide the above-listed Commodity Committees in drafting their standards and also make a contribution to the work of the Codex Committee on Food Labelling.

The Government of Canada's offer to host the CCVP at the Thirteenth Session of the Commission in 1979 was accepted. N.W. Tape is Committee Chairman.

First Meeting

The first meeting of the CCVP was held in Ottawa in November 1980. Twenty-four delegations from member nations attended, as well as five international organizations. The agenda of the first meeting was: (1) review of current national regulations; (2) consideration of format and content of vegetable protein standards; (3) consideration of proposed draft international standards for vegetable protein flours, concentrates and isolates; (4) consideration of draft guidelines for the use of vegetable proteins in foods; (5) consideration of labeling declarations concerning the use of vegetable proteins in foods; (6) future work program.

Progress

Terms of reference for the Committee were approved. The Committee's role is to develop standards for vegetable protein products, coordinate and harmonize the use of vegetable protein products in food by the preparation of general guidelines, and provide advice on the processing and utilization of vegetable protein products, particularly to developing countries.

The Committee reviewed and revised the proposed draft standards for vegetable protein flours, concentrates and isolates. The proposed draft standards will go to step 3 of the Codex process and be sent to all member countries and interested international organizations.

The preparation of general guidelines for the use of vegetable protein products in food is a difficult task. Some delegates questioned whether it was possible to prepare guidelines covering the wide range of commodity applications and economic situations affecting utilization, as well as the varying roles for protein (functional, supplementation and substitution), levels of use, nutritional considerations and labeling. However, it was agreed that an attempt will be made to draft the guidelines for consideration at the next meeting. The Committee noted that the Codex Committee on Processed Meat and Poultry Products meeting in September 1980 instructed the Danish secretariat to prepare draft guidelines for the use of vegetable protein in meat and poultry.

Considerable discussion took place on the advisability of having class standards (e.g., flours, concentrates and isolates) or specific standards for each protein (e.g., soya, groundnut, cottonseed). The delegates agreed that class standards were preferred and that specific protein standards

would only be developed as required. In this regard, the Committee members agreed that a proposed draft standard for gluten would be developed.

Because the nutritional quality of vegetable protein products is an important property, a Working Group was established to review the adequacy of methods to determine the biological quality of protein and identify the best available methods of measurement.

The Committee also recognized the need for quantitative methods of analysis for vegetable proteins in a mixture with animal proteins. A Working Group was established to review the situation.

Work Program

The Committee noted that, at its next session, it would have before it for consideration: (a) the following proposed draft standards at step 4: (i) vegetable protein flours; (ii) vegetable protein concentrates; (iii) vegetable protein isolates; (b) a proposed draft standard for gluten at step 2 (to be prepared by the delegation of Finland); (c) draft guidelines for the use of vegetable protein in foods, which should also include labeling aspects (to be prepared by the delegation of Canada); (d) report of Ad Hoc Working Group on Protein Quality Measurement (to be prepared by the delegation of Canada in collaboration with the delegation of Italy and the U.S.); (e) report of the Ad Hoc Working Group on Quantitative Methods for the Differentiation of Vegetable and Animal Proteins (to be prepared by the delegation of the Netherlands in collaboration with the delegations of Italy, United Kingdom and the European Vegetable Protein Federation; (f) paper on toxicity of lysinoalanine (LAL) (to be prepared by the delegation of the U.S.).

In line with reorientation in the direction of the Codex Commission's program of work and its decision to place increased emphasis on the needs and concerns of developing countries, the Committee unanimously agreed to place its collective expertise at the disposal of member countries—particularly developing countries—which might wish to have guidance and advice on such matters as processing technology, safety and nutritional value in connection with, e.g., the use of indigenous vegetable proteins in stable foods. In this connection, the Committee unanimously agreed that it would be willing, if requested, to establish a Working Group within the Committee to keep under review current research and developments in the vegetable protein field and to provide advice where required.