

MATTERS OF INTEREST ARISING FROM THE WORK OF WHO

Statement by the Representative of the World Health Organization (WHO)
at the Meeting of 15-16 October 1997

Since the last session of the SPS Committee, WHO convened two expert meetings relative to food safety matters in cooperation with other international agencies.

1. Food Safety Implication of Products from Aquaculture

A Study Group on Food Safety issues associated with products from aquaculture was jointly organised from 22 to 26 July 1997 in Thailand by the Fisheries Department of the FAO, the Network of Aquaculture Centres in Asia and the Pacific, and the Programme of Food Safety and Food Aid of the WHO. The meeting was attended by experts from 15 countries.

Aquaculture is currently one of the fastest growing food production systems in the world with production increasing at an average rate of 9.6 per cent per year over the past decade. The increasing global importance of aquaculture is directly related to the contribution it makes to reducing the gap between supply and demand for fish and fishery products. With over-exploitation in the capture fisheries sector in most regions, initiatives to strengthen environmentally-friendly and sustainable aquaculture development, particularly among small-scale producers, need to be pursued to ensure a maximum contribution to world food security. Approximately 90 per cent of global aquaculture production is based in Asia, where it provides an important source of dietary animal protein of the region and income for many small-scale farmers. Commercial aquaculture contributes significantly to the economies of many producing countries, where high valued species are a major source of foreign exchange.

The Study Group considered food safety issues associated with farmed finfish and crustaceans, particularly those associated with biological and chemical contamination that may occur during the production of these aquatic products. It considered the identification and quantification of hazards and how to implement measures for control of potential food safety hazards, including current national and international programmes.

The main conclusions from the meeting were that:

- (i) there is a need for an integrated approach to controlling hazards associated with products from aquaculture which requires close collaboration between the health, agriculture and aquaculture, food safety, and education sectors;
- (ii) food safety assurance measures should be included in fish farm management programmes;

- (iii) the food safety assurance measures should be based on the HACCP system, although all participants recognized the difficulty in applying such measures to subsistence aquaculture;
- (iv) the risks to human health from chemicals used as fertilizers and water treatment compounds in aquaculture production are low;
- (v) risks from chemotherapeutants used in aquaculture are associated with residues in edible portions of fish flesh and these can be significant, especially in countries where the sale and use of these compounds are uncontrolled;
- (vi) there is the added risk of antimicrobial resistance developing in the bacterial flora of fish farms and of such antibiotic resistant bacteria entering the food chain;
- (vii) pesticides required in aquaculture can pose food safety hazards, and more information is needed on the types of compounds that are actually used, and studies should be conducted to determine if pond treatments with pesticides result in residue levels that are potentially harmful to human health.

2. Wholesomeness of Food Irradiated with Doses above 10 kGy

A Joint FAO/IAEA/WHO Study Group on High Dose Food Irradiation was convened from 15 to 19 September 1997 in Geneva. Irradiation has been considered as one of the effective options to manage microbial food hazards. In the context of universally growing concern on the outbreaks of foodborne diseases, the Study Group was organised to consider if the field of application of the technique, currently recognised as safe at least up to 10 kGy, could be expanded.

The Study Group reviewed all relevant data related to the toxicological, microbiological, nutritional, radiation chemical and physical aspects of food exposed to doses higher than 10 kGy with a view to determining if food so treated is safe and nutritionally adequate. It also considered if a maximum dose needs to be specified.

The main conclusions of the Study Group included:

- (i) Food irradiated under proper conditions to all doses appropriate to the intended technological objectives is safe to consumers and adequate for nutrition.
- (ii) The process is self-limiting, which means that no upper dose limit should be imposed.