

Development and Prospect of Food Radiation Processing in Indonesia

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Abstract

SUMMARY Several factors such as insufficient harvesting and handling methods as well as inadequate methods of storage and distribution, poor processing techniques and poor quality of raw materials used in making ready to eat foods may lead to the cumulative causes of food borne illness particularly in developing countries. Public trend in the world nowadays are demanding access to more and more fresh eating products practical but nutritious, safe and preferably processed under non thermal treatments. The new and emerging post harvest technologies in controlling pathogen and maintaining quality of food products is ionizing radiation, because it is applicable for almost all type of foods without impairing the overall quality as well as sensory attributes. The foods either fresh, dried, or ready to eat meals in the packages can be exposed to ionizing radiation for different purposes such as quarantine measures, control of sprouting and germination, shelf-life extension of perishable foods, delaying ripening and aging of fruits and vegetables, destruction of parasites and harmful pathogenic microorganisms. International trade of agricultural commodities opens the possibility of the movement of pests such as insects from country to country. The countries involve in this business have established laws and regulations, including international trade regulation of irradiated foods, in order to minimize the risk and trade barrier. The future of food irradiation is filled with promise although the needs for this technique relates to consumer acceptance. Consumers will grow to appreciate the technology for the lifesaving and good food availability. It should be kept in mind that irradiation is controlling contamination and it does not prevent it.

Key words : *consumer acceptance, food irradiation, post harvest losses*