SUMMARY

Food industries and technologists have come to realise that although improved hygiene and the application of Hazard Analysis and Critical Control Point (HACCP) techniques may help to improve food quality. Most of these modern methods of food preservation may be the modification of the existing methods. These modifications are to improve the quality of food products, without the use of extreme or single technique.

When multiple methods are introduced in smaller doses so as to preserve the sensory and nutritional quality of food, the microorganisms present cannot overcome these hurdles, and thus the food becomes microbiologically stable and safe. Organic acids behave as preservatives changing the micro environment into an acidic environment and also by acting on the cell membranes of the spoilage organisms. Since high hydrostatic pressure (HHP) denatures proteins and polysaccharides, the technology also presents interesting applications in the area of food texturisation

The major benefits of microwave processing is it can replace the need for water or steam as a heating source. Therefore, it is possible to manufacture continuously rather than batch-wise.

In drying processes, microwave energy is applied as the conventional drying process at a cheaper cost. Heating adjustments can be made on line with precise control. These features has made food irradiation as a major technology in feeding the world's increasing population.