

## SECOND CONSENSUS WORKSHOP ON NOVEL FOOD

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### Abstract

Innovation in Food Technology: An overview of recent trends and processes

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Any food scientist, looking at the present abundance and variety of new food-related patents, scientific publications, equipment displayed in food machinery shows, analytical techniques, ingredients, packaging materials and containers, and food products in supermarkets, can be both amazed and confused. An examination of major and widely used food process innovations of the second part of the 20th century gives a better delimited picture. Each food process innovation can be classified according to different criteria: 1) from which branch of physics or chemistry does it originate? 2) is it related to a given food commodity (e.g. production of soy or whey proteins, breakfast cereals, snacks, yoghurts, RTE salads), to a specific unit operation (e.g. extrusion-cooking, ultra- or micro-filtration, osmotic drying, steam infusion, ohm heating), or to a whole production line? (e.g. surimi and seafood analogues, sous-vide cook-chill dishes) 3) what are its main objectives: food preservation; food transformation (e.g. fractionation or texturisation); improved product safety, quality or functionality; enhanced industrial productivity? 4) is it clearly visible by the consumer, or only by the producers? Other questions which should be addressed to new food processes are those of risk/ benefit evaluation, comparison with existing processes which may be displaced, and justification for restrictive regulations which undoubtedly retard innovation. Although it is impossible to predict future inventions, present trends in food process innovation can be discussed from known R&D activities and from awards given at a recent international food process exhibition.