

## High Pressure Processing

High Pressure Processing (HPP) is being commercialized globally and has received significant attention in the Canadian food processing industry. The Leduc Food Processing Development Centre (FPDC), a branch of Alberta Agriculture and Rural Development, has installed a High Pressure Processing unit in its pilot plant to facilitate the adoption of this technology in Canada. This 150L commercial scale unit is available for applied research, development and commercialization activities.

High Pressure Processing is an emerging preservation technique that has minimal detrimental effects on the nutritional value, texture and flavour of food products as compared to traditional thermal processing techniques. These attributes are important to consumers who desire fresh, safe and minimally processed foods with high nutritive value and a clean label (preservative free).

Research has shown that HPP is effective in inactivating vegetative cells of spoilage microorganisms and foodborne pathogens. It has also been shown to control *Listeria monocytogenes* in ready-to-eat meats and to extend the shelf life of ready-to-eat meats. Additionally, HPP has been successfully applied to fresh juices, fresh apple sauces, freshly chopped onion, fresh fruits and vegetables, seafood, and ready-meal components.

On January 27-28 2010, the FPDC hosted a High Pressure Processing seminar. The seminar attracted participants from across the country from industry, academia, government, and regulatory agencies. The seminar presented the theory and practical applications of HPP technology, demonstrated the use of HPP equipment, and facilitated an interactive panel discussion among experts from industry, academia, and government. Participants learned about practical considerations and issues from early adopters of the technology. The seminar fostered the development of national and international networks and served as a platform to establish future collaborations in the area of HPP.

For further information, please contact:

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**High Pressure Processing Equipment  
Leduc Food Processing Development Centre**

