

Case studies: harnessing new technology

Extend shelf life

Heartwarmer Food asked us to assess the potential of HPP to extend the chilled shelf life of their fruit smoothies while retaining vitamin C. We found that HPP reduced mould counts after treatment and this reduction was maintained over shelf life. Vitamin C levels were higher in the HPP samples than in the heat-treated samples.

Maintain product safety

HPP processing is effective against bacteria, yeast and moulds. **Innocent** wanted to investigate how HPP could improve the safety of two vegetable juices, which were about to be launched.

We showed that there was a decrease in microorganisms of the order of 4-5 log cfu/ml following HPP treatment, with less than 1 log cfu/ml present in the juices. Pathogens such as *Escherichia coli*, *Salmonella* and *Listeria monocytogenes* were all absent for at least 35 days after HPP treatment.

Independent validation of equipment and technology

Surface decontamination

Pulsed light is a novel system that can be used for surface decontamination of foods and food contact surfaces, including packaging.

We carried out independent trials for **Claranor**, a developer of pulsed light equipment and technology, to show how pulsed light systems can be effective for their clients.

