

Andrew Gibb Marketing Pty Ltd

AG^M

**Global Trends in HPP Products.
Fresh Convenience Congress
London, June 15, 2011**

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Consumer concerns

health, nutrition, diet, obesity, immunity and food safety

Consumer wants

fresher, natural / less processed foods

improved nutritional values

natural texture, flavour, colour & aroma

vitamin and nutrient retention

no preservatives or additives

foods that help build immune systems

foods that provide the highest levels of food safety

HPP Delivers

More natural foods with better:

quality

flavour

colour

texture

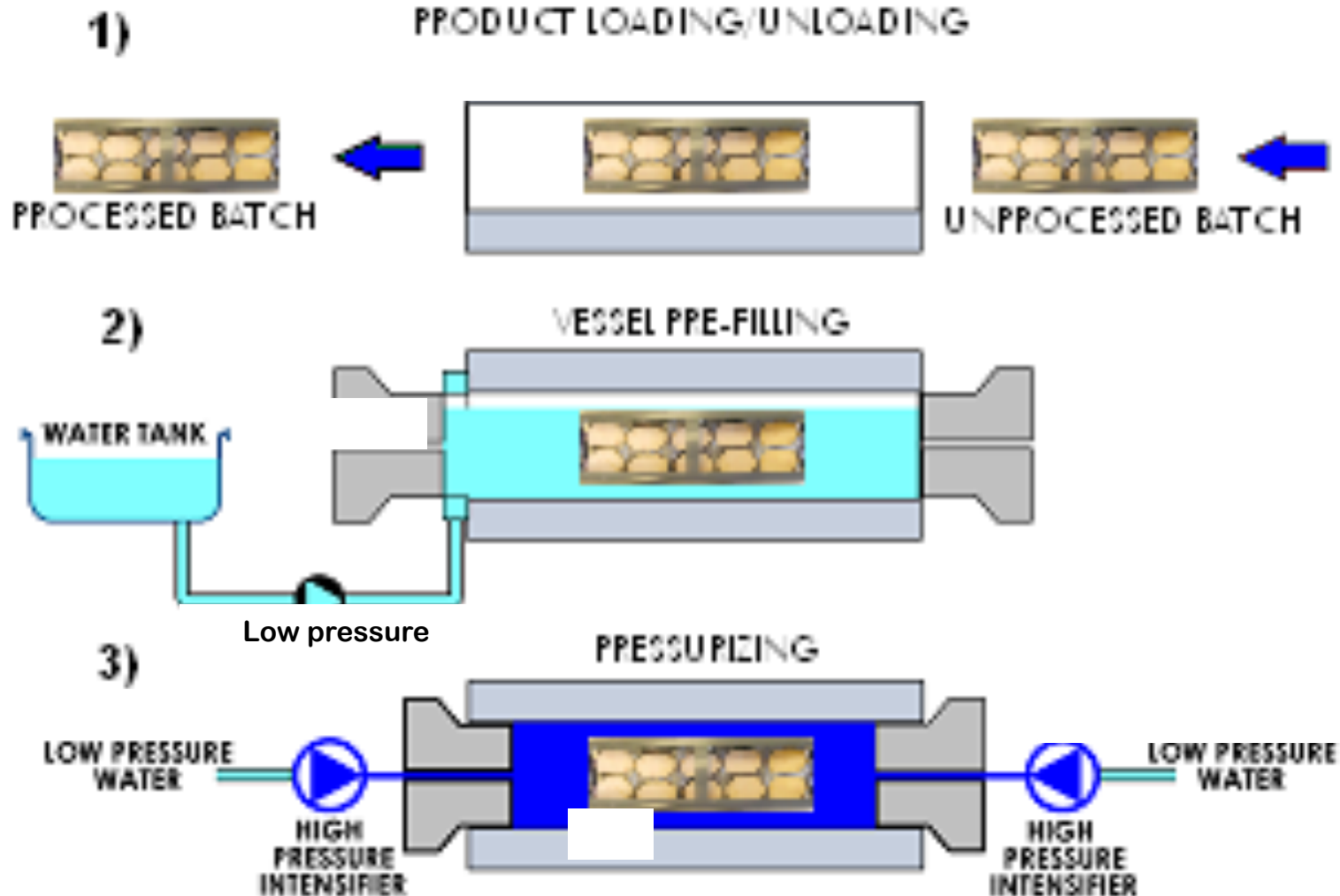
aroma

nutrient retention

shelf life (up to 165 days)

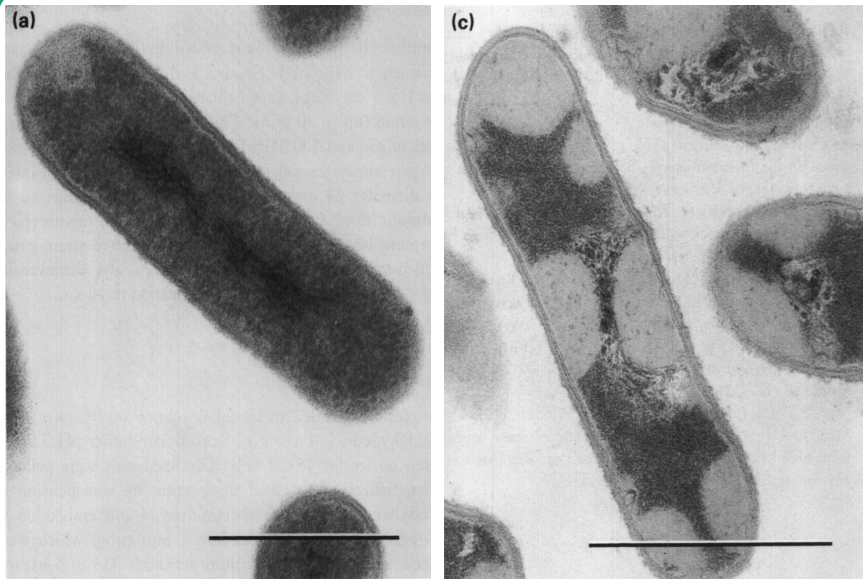
food safety

The HPP Process



how does HPP work?

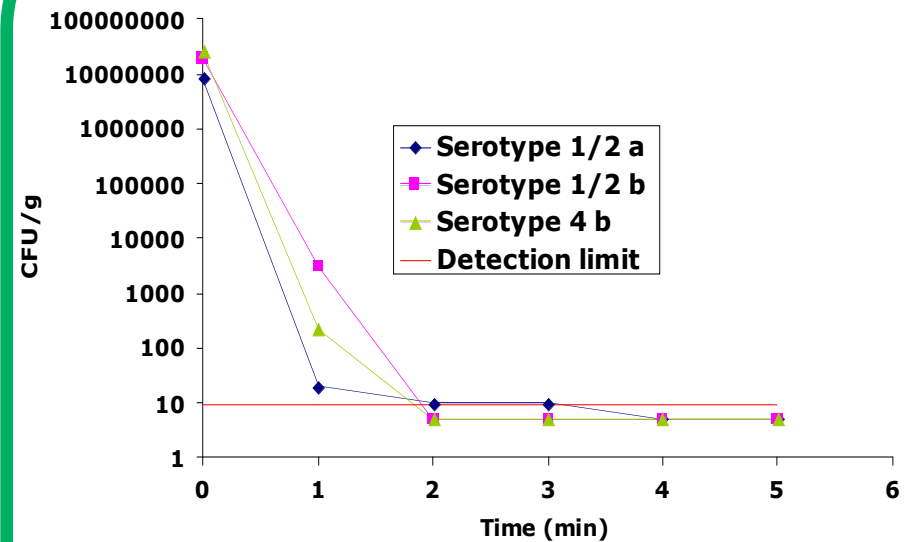
Effective lethality on pathogens : *Listeria*, *Salmonella*, *E.coli* ...



Not treated

500 MPa - 10 min

Electron microscopy pictures of *Listeria monocytogenes*
(from Mackey *et al.*1994)

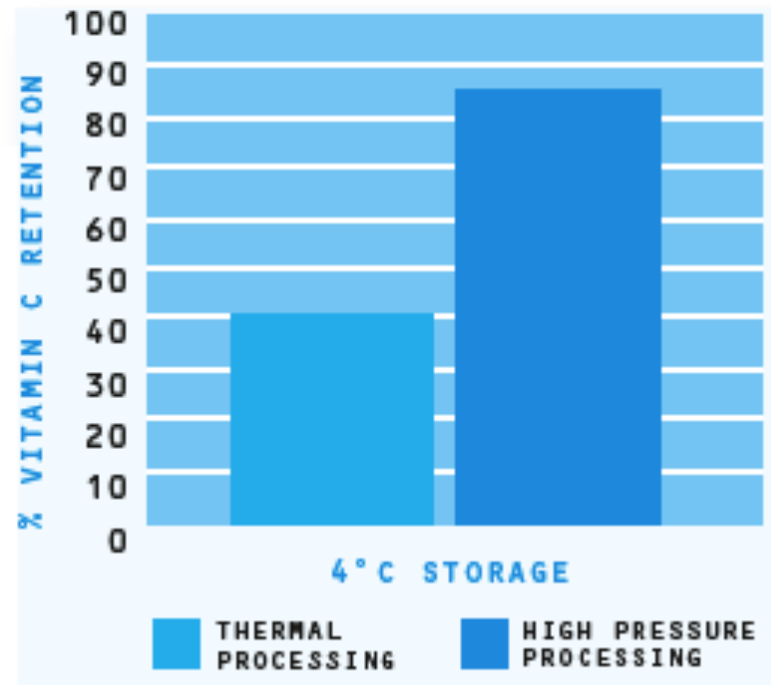


Reduction of *Listeria monocytogenes* in dry cured ham
at 600 MPa and +5°C (Heinz, 2004 not published)





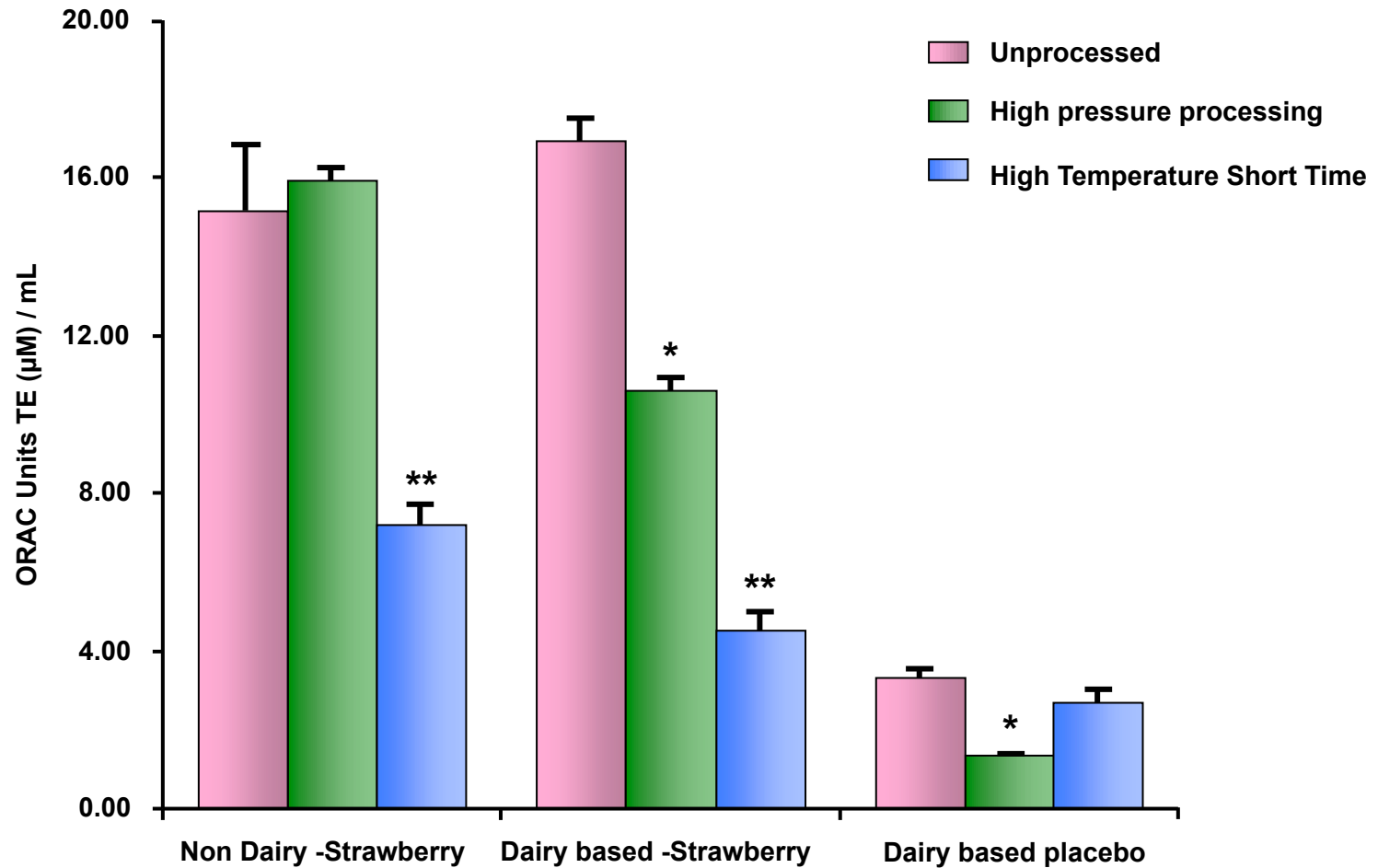
vitamin retention



HPP Valencia Orange Juice retains 85% of its Vitamin C when stored at 4 ° C for 20 weeks compared to heat pasteurised juice which only retains 40% Vitamin C.*

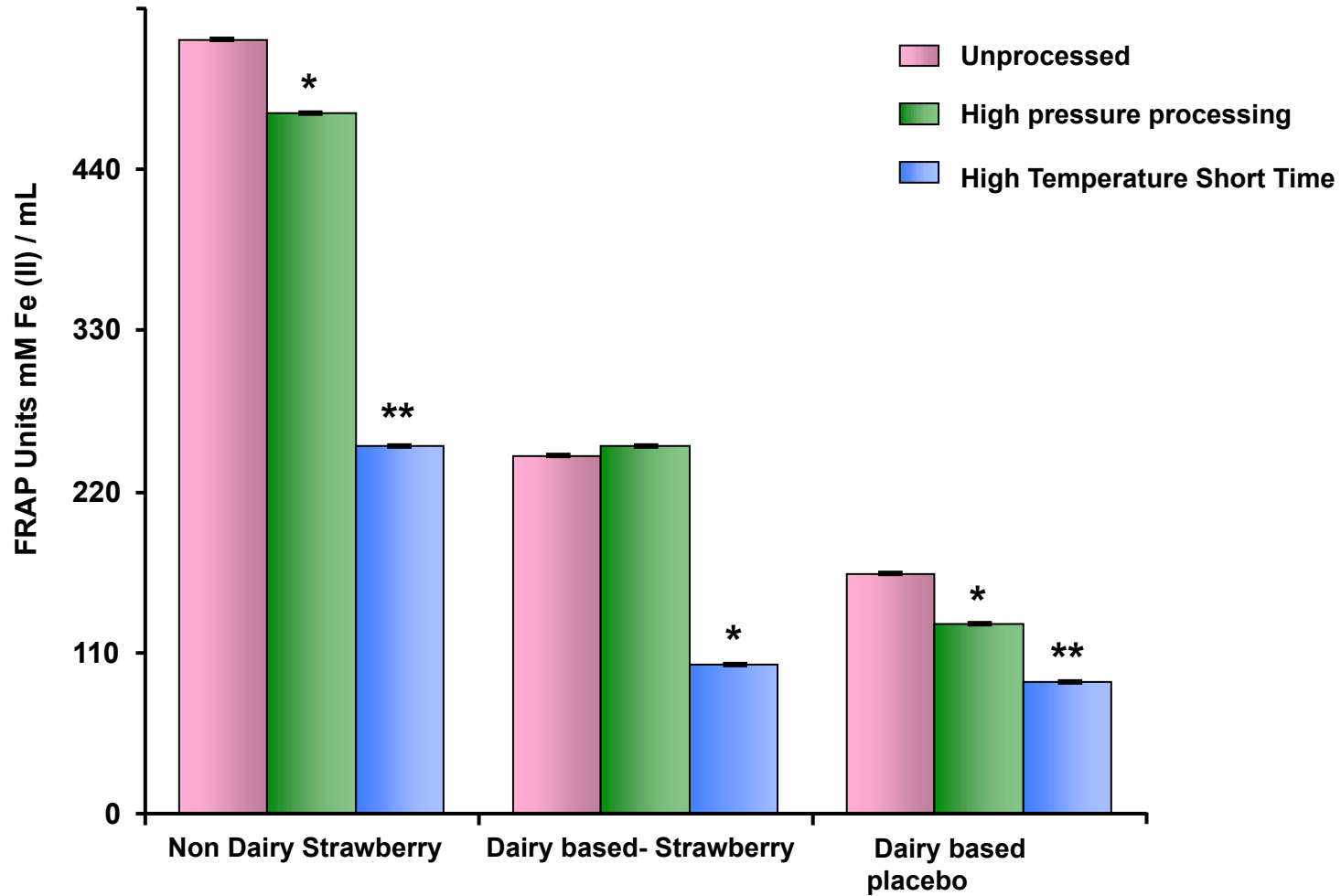
* Source: University of Leuven, Belgium, thermal processing 98 ° C/10 seconds, HPP 500MPa 90 seconds.

Effect of Processing on Oxygen Radical Absorbance Capacity (ORAC)



Analyzed by one way ANOVA (*Significant difference ($P < 0.05$); ** Significant difference ($P < 0.01$) between Unprocessed and HPP & HTST

Effect of Processing on Ferric Reducing Antioxidant Power (FRAP)



Analyzed by one way ANOVA (*Significant difference ($P < 0.05$); ** Significant difference ($P < 0.01$) between Unprocessed and HPP & HTST

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