Session 2 Nonthermal Technologies: Quality focused on nutritional and sensory issues

Keynote overview – Consumer perception on novel technologies Rosires Deliza

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Rosires Deliza is an Embrapa Senior Scientist working on sensory evaluation and consumer science. She worked at Embrapa Labex Europe, at Inra, Dijon-France. She is a Food Engineer and received her Ph.D. in Food Science from the University of Reading, UK. She lectures at the Federal Rural University of Rio de Janeiro, and at the Federal University of Rio de Janeiro. She has authored or co-authored over 100 original research papers, and book chapters. She was a member of the Board of Directors of the Brazilian Society of Food Science and Technology from 2005-2008. She received the Scientist of Rio de Janeiro Award in 2007 and 2011, which is offered to the State's Outstanding Scientists.

The growing demand worldwide for more nutritious foods, with characteristics similar to fresh products has driven research to the application and investigation of emerging technologies, aiming at delivering products that meet consumer expectations. However, the public acceptance of such technologies is a key point, and the consumer acceptance of food technologies is an issue that should be addressed in early stage of technology development. It is important to investigate how consumers form opinions about the technology before launching the product on the market. Many scientific papers are available in the literature focusing on several emerging technologies such as high hydrostatic pressure (HHP), pulsed electric fields, irradiation among others, but most of them are related to technological or to analytical (physic-chemical and/or microbiological) aspects, with only few taking into account sensory and consumer acceptance of products obtained using such technologies. Studies with Brazilian consumers were carried out to investigate their attitudes towards HHP and irradiation. Consumers demonstrated a higher intention to purchase for the HHP-pineapple juice when information on the benefits of the technology was clearly shown on the packages. Although the cajá juice was perceived as exotic forparticipants in the study (it is well known among the northeastern Brazilian consumers, but not for those who live in Rio de Janeiro), its pressurized version reflected similar results as passion fruit and pineapple, confirming that the perception of freshness has driven consumer liking. Our findings point to a positive future for HHP in fruit juice processing. However, further studies have to be carried out in different regions of the country to investigate how much consumers are willing to pay for nutritional and sensory benefits from this technology before the Brazilianfood industry adopts this technical novelty. Results from non-thermal food processing studies carried out elsewhere will also be presented.

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