The state of technological sophistication and the need for new specialised tertiary degrees in food services

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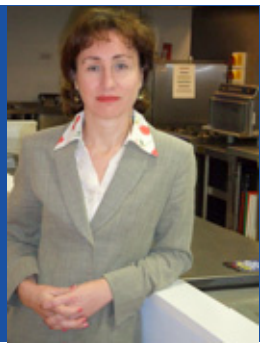
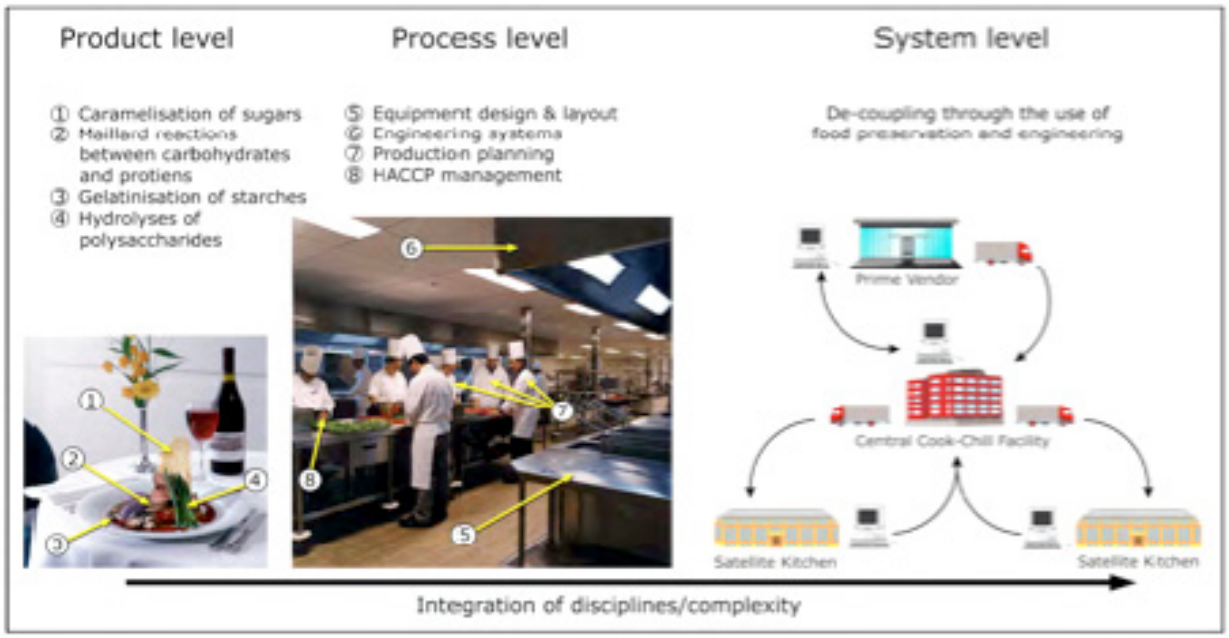


I wish to invite members of the International Chef's Circle to contribute to development of new specialised curricula in food services incorporating pathways stemming from natural science. Currently, there is a number of 'players' in tertiary education with very different educational philosophies. Degrees in gastronomy and culinary arts are typically informed by the so-called Meal Science with a focus on social/consumer interface and atmospherics of meal settings. Typically, they do not deliver strong operational and technological competencies. Degrees awarded by the numerous hotel and restaurant management schools that dominate the field do not deliver these competencies either. In general, the scope of hospitality programs is too broad.

In the health service sector the lack of specialists is partially solved by dieticians taking operational roles. Other solution often discussed is outsourcing. What would be the options for outsourcing technical expertise? In the matters of design, food service managers are advised by consultants who are usually architects specialising in food service projects and equipment suppliers' sales representatives. The latter rarely have specialist degrees in food and engineering-related subject areas. Alternatively, food production could be subcontracted altogether to a large catering company, but in this case potential profits and the level of control are reduced. Even this measure does not guarantee the 'cutting edge' operations. International contract catering giants, such as SODEXHO, ARAMARK, COMPASS and others compete with small operators mostly by their sheer size and marketing powers, not by means of technological breakthroughs.

Hospitality management graduates have limited insights into latest operational/technological concepts such as Industrial Cuisine, Molecular Gastronomy and Personalised Nutrition. At present, suppliers and governments, but not operators, drive research and development in the field. In minds of many hospitality academics, elements of natural science are associated with principles of food safety/sanitation and the role of 'hard' or equipment-based technologies as a creative tool is often overlooked. In fact, science-based innovation is critical at all levels of food production: product, process and system (please, see figure below).



New specialist degrees can be developed along two distinctive streams, technology and management. The management subjects could be those traditionally offered in hospitality management programs plus operations management. The technology stream could be built on the fundamentals of chemistry, physics, plant and animal biology. These would provide a foundation for food commodities (quality control) and ingredients functionality (product development). Engineering principles would also support non-food areas of hospitality operations such as facility management and design (engineering systems), housekeeping (equipment, chemistry of cleaning and infection control) and waste management (bio-degradation). The research-teaching cycle can be strengthened by sharing degrees with departments of science and engineering across tertiary institutions. In general, an increase in technological sophistication of food service operations would support better operational efficiency and food quality.